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What is the Microsoft commercial marketplace?

11/22/2021 • 3 minutes to read • Edit Online

The Microsoft commercial marketplace is a catalog of solutions from our independent software vendor (ISV) partners. As an ISV member of the Microsoft Partner Network, you can create, publish, and manage your commercial marketplace offers in Partner Center. Your solutions are listed together with our Microsoft solutions, connecting you to businesses, organizations, and government agencies around the world.

The commercial marketplace is available in more than 100 countries and regions, and we manage tax payment in many of them. If you sell to established Microsoft customers, they have the added benefit of including commercial marketplace purchases in their existing Microsoft purchase agreements to receive a consolidated invoice from Microsoft.

Why sell with Microsoft?

Our goal is to help you accelerate your business in partnership with Microsoft, and to connect Microsoft customers with the best solutions that our partner ecosystem offers. To do that, we support you throughout your journey, from onboarding to publishing and growth. Take advantage of the capabilities in the commercial marketplace to grow your business.

- Expand your solution portfolio to new markets and segments.
- Generate new marketing leads and sales opportunities.
- Upsell and cross-sell your solutions as your customers move their workloads to the cloud.
- Market your solutions for specific workloads and industry scenarios to reduce sales cycles, accelerate projects, and increase deal profitability.
- Get actionable insights on your listing performance and orders to learn how to maximize campaign activities for your solution.

Partners who list with the commercial marketplace are eligible for a diverse set of free technical, marketing, and sales benefits to help grow your business:

- Get the technical resources you need to get your application ready for launch, from technical support, application design, and architecture design, to Azure credits for development and testing.
- Access free Microsoft Go-To-Market Launch Fundamentals to help you launch and promote your solution. You might also be eligible for Microsoft marketing campaigns and opportunities to be featured in the commercial marketplace.
- Reach more customers and expand your sales opportunities with the Cloud Solution Provider (CSP) program, the co-sell program, and Microsoft Sales teams.

To learn about these benefits in more detail, see Your commercial marketplace benefits.

Commercial marketplace online stores

The Microsoft commercial marketplace as discussed in this article has two main online stores:

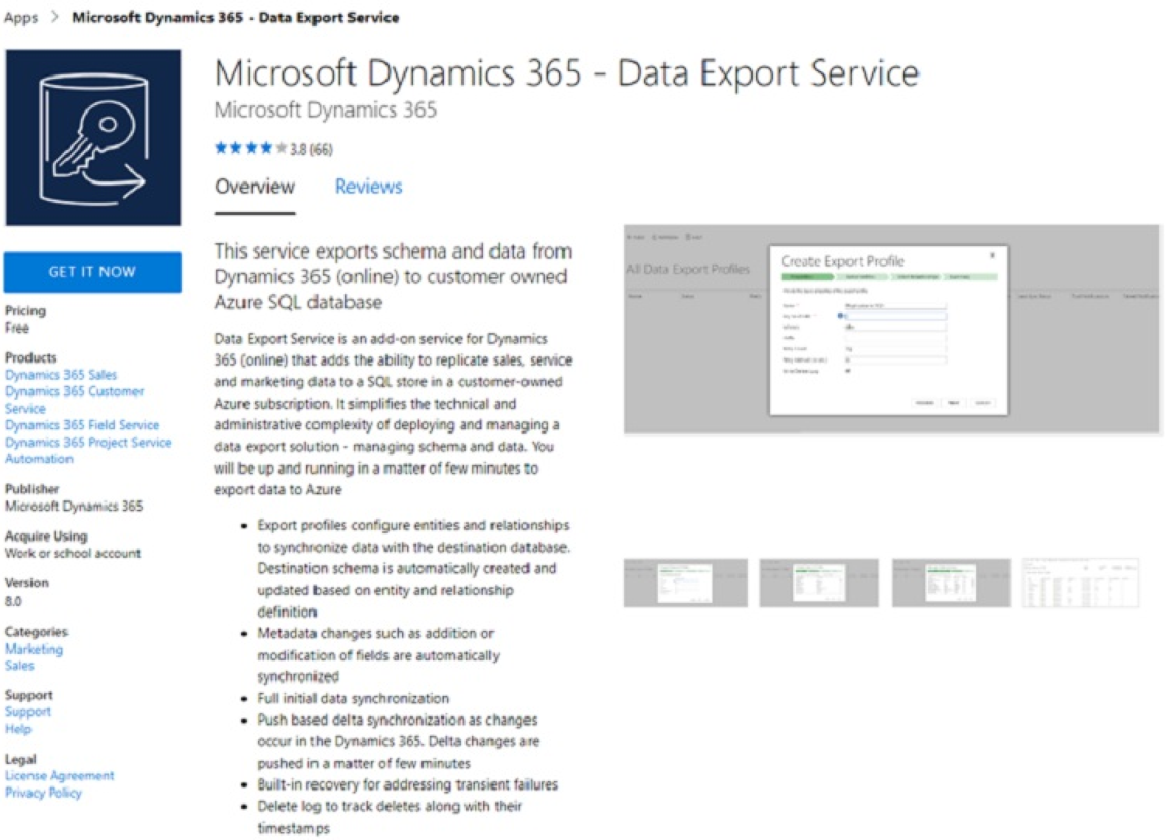
- Microsoft AppSource for business solutions
- Azure Marketplace for IT solutions

> **NOTE**
>
> Other commercial marketplace software and services can also be found in Microsoft products such as Microsoft 365, Dynamics 365, Microsoft Power Platform, and Azure. Our online stores and in-product experiences draw millions of potential customers each month. Each online store offers different scenarios to make sure your solution or service is available to the right customers.

Microsoft AppSource

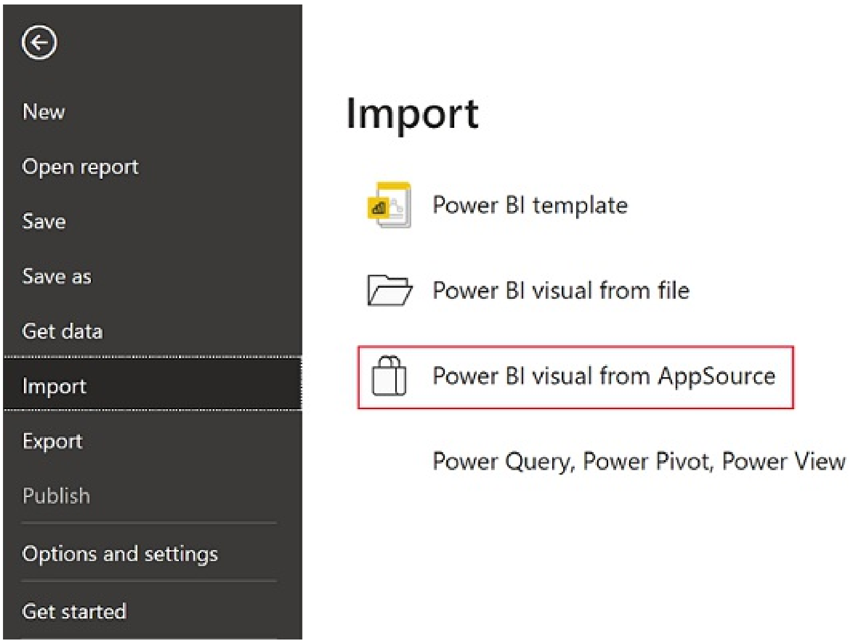
Microsoft AppSource is for business solutions, such as software as a service (SaaS) applications, and also apps that extend directly into Dynamics 365, Microsoft 365, and Microsoft Power Platform. AppSource consulting services are professional services offerings that help customers get started with or accelerate usage of Dynamics 365 and Power BI.

Here's an example of an offer listing page in AppSource:

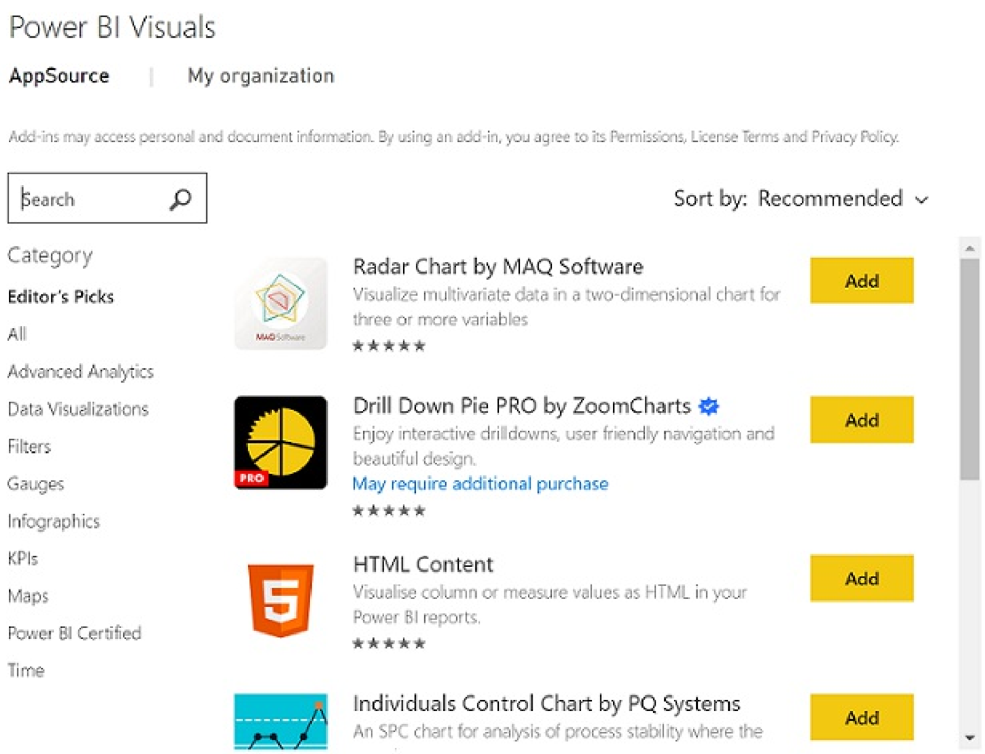


AppSource in-product experience

Customers can also access your AppSource offers through Microsoft 365, Dynamics 365, the Power Platform, and Azure. The following example shows how to access AppSource add-ins from the Power BI **File** menu.



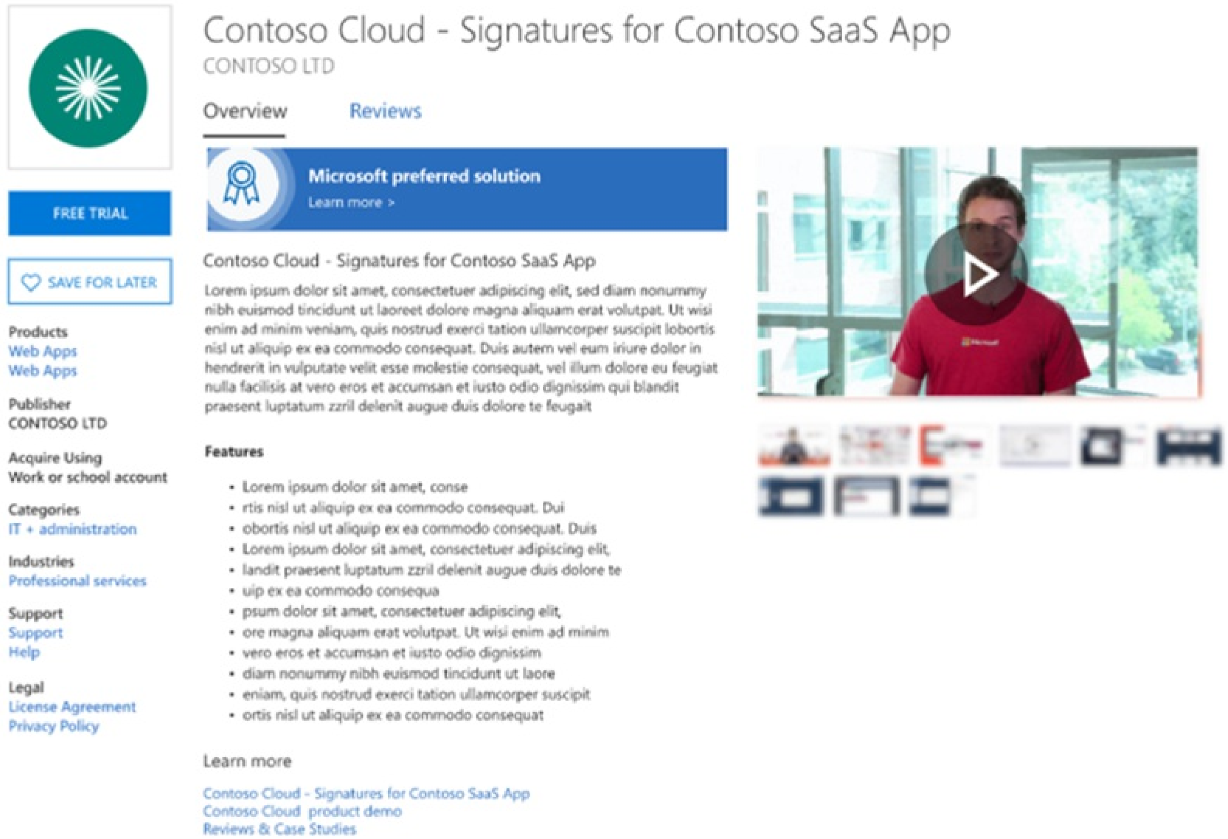
This option opens a window where the customer can search for Power BI add-ins by name or category.



Azure Marketplace

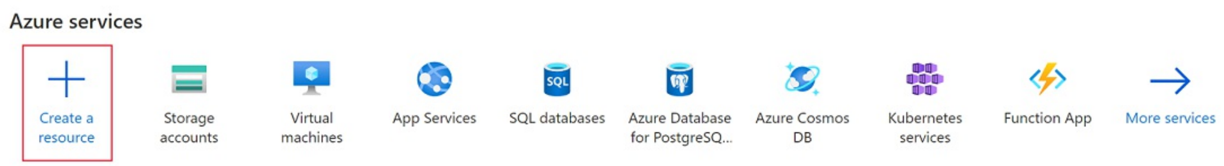
Azure Marketplace is for solutions that are built on or built for Azure and intended for IT professionals and developers. This store includes listings for consulting and managed services. Azure Marketplace consulting services are professional service offerings that help customers get started with or accelerate the use of Azure.

Here's an example of an offer listing page in Azure Marketplace:

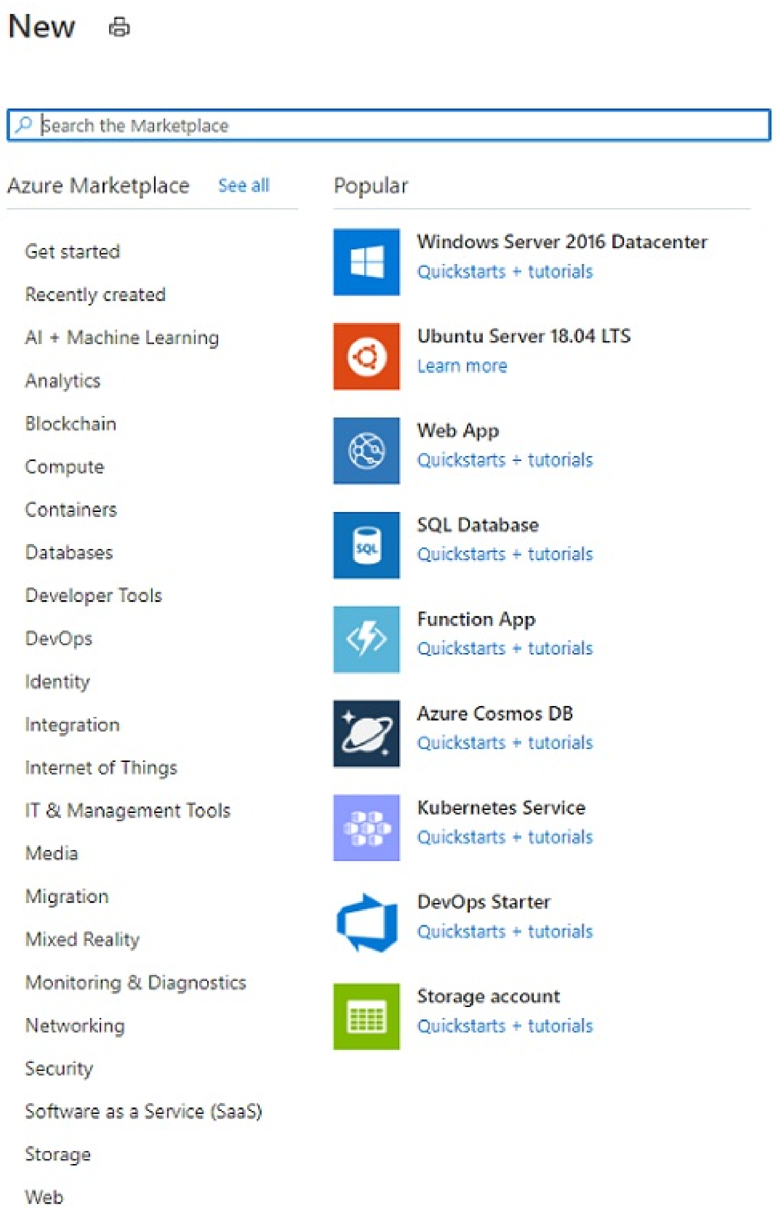


Azure Marketplace in the Azure portal

Azure customers can discover and deploy Azure Marketplace solutions through the **Create a resource** option in the Azure portal.



This option opens Azure Marketplace within the Azure portal, where they can search for solutions by name or by category.



Which store should I choose?

When you create a commercial marketplace offer in Partner Center, it may be listed on either store based on the offer type, categories, and other options you select. In the rare case that the offer is relevant to the users of both online stores, it can appear in both. To learn more, see Listing and pricing options by online store.

Next steps

- Get an Introduction to the Microsoft commercial marketplace on Microsoft Learn.
- For new Microsoft partners who are interested in publishing to the commercial marketplace, see Create a commercial marketplace account in Partner Center.
- To learn more about recent and future releases, join the conversation in the Microsoft Partner Community.

What's new in the Microsoft commercial marketplace

11/22/2021 • 3 minutes to read • Edit Online

Learn about important updates in the commercial marketplace program of Partner Center. This page is updated frequently, so be sure to check back often!

New features

CATEGORY	DESCRIPTION	DATE
Offers	Setup and maintenance of Power BI Visuals is migrating from the Office Store to the commercial marketplace this month. This FAQ provides a summary of improvements to the offer submission process. To start, see Plan a Power BI visual offer.	2021-09-21
Offers	While private plans were previously only available on the Azure portal, they are now also available on Microsoft AppSource.	2021-09-10
Analytics	Publishers of Azure application offers can view offer deployment health in the Quality of service (QoS) reports. QoS helps publishers understand the reasons for offer deployment failures and provides actionable insights for their remediation. For details, see Quality of service (QoS) dashboard.	2021-09-07
Offers	Additional properties at the plan level are now available for Azure Virtual Machine offers. See the virtual machine technical configuration properties article for more information.	2021-07-26
Fees	Microsoft has reduced its standard store service fee to 3%. See Commercial marketplace transact capabilities and Common questions about payouts and taxes, "How do I find the current Store Service Fee and the payout rate?".	2021-07-14
Offers	Publishers can publish a virtual machine (VM) that they have built on premises. To learn more, see Create a virtual machine using your own image.	2021-06-23

CATEGORY	DESCRIPTION	DATE
Customer engagement	Publishers can now respond to user reviews on Azure Marketplace or AppSource. To learn more, see Ratings & Reviews analytics dashboard in Partner Center.	2021-06-03

Tax updates

CATEGORY	DESCRIPTION	DATE
Taxation	Nigeria and Thailand are now Microsoft-managed countries in Azure Marketplace.	2021-09-13
Taxation	End-customer taxation in Australia is managed by Microsoft, except for customer purchases made through an enterprise agreement, which are managed by the publisher.	2021-07-01
Taxation	Updated tax details page country list to include the following: • Argentina • Bulgaria • Hong Kong SAR • Korea (South) • Pakistan • Palestinian Authority • Panama • Paraguay • Peru • Philippines • Saint Kitts and Nevis • Senegal • Sri Lanka • Tajikistan • Tanzania • Thailand • Trinidad and Tobago • Tunisia • Turkmenistan • Uganda • Uzbekistan • Zimbabwe	2021-07-01
Taxation	Nigeria moved from the "shared publisher/developer-managed countries" list to the "end-customer taxation with differences in Marketplaces".	2021-07-01

Documentation updates

CATEGORY	DESCRIPTION	DATE
Policy	We've created an FAQ topic to answer publisher questions about the Microsoft Publisher Agreement.	2021-09-27
Policy	We've updated the Microsoft Publisher Agreement. For change history, see Microsoft Publisher Agreement Version 8.0 – October 2021 Update.	2021-09-14
Policy	Updated certification policy for September; see change history.	2021-09-10
Offers	New article describes the quality of offer deployments reporting available on the Quality of Service dashboard.	2021-08-27
Offers	We moved the list of categories and industries from our Marketing Best Practices topic to their own page.	2021-08-20
Offers	The Commercial marketplace transact capabilities topic now includes a flowchart to help you determine the appropriate transactable offer type and pricing plan to sell your software in the commercial marketplace.	2021-08-18
Policy	Updated certification policy; see change history.	2021-08-06
Co-sell	Information added for the MACC program including, requirements, how often we update MACC status, and definitions for Enrolled, and not Enrolled. To learn more, see Azure Consumption Commitment enrollment, or Co-sell with Microsoft sales teams and partners overview.	2021-06-03
Offers	Additional information regarding VM pricing options and descriptions. To learn more see How to plan a SaaS offer for the commercial marketplace.	2021-05-25
API guidance	This topic gives publishers a single convenient location to find recent changes to the commercial marketplace, including updates to certification policy, changes to tax rules, and more. To learn more, see Align your business with our e-commerce platform.	2021-05-13

CATEGORY	DESCRIPTION	DATE
Policy	Updated certification policy; see change history.	2021-05-07

Create a commercial marketplace account in Partner Center

11/22/2021 • 6 minutes to read • Edit Online

Appropriate roles

- All Partner Center users

To publish your offers to Microsoft AppSource or Azure Marketplace, you need to create an account in the commercial marketplace program in Partner Center. This article covers how to create a commercial marketplace account to the commercial marketplace program.

> **NOTE**
> If you had an account in the Cloud Partner Portal (CPP), we moved it to Partner Center. You don't need to create a new account. For more information, see Publishers who moved from the Cloud Partner Portal.

Create an account in Partner Center

To create an account in the commercial marketplace program in Partner Center, make sure you meet the following prerequisites. We'll verify this information during the account creation process.

- You must use a work account associated with your company or organization. Personal accounts aren't supported. For more information, see Company work accounts and Partner Center.
- Know your company's legal business name, address, and primary contact. This person can be you.
- You must have authority to sign legal agreements on your company's behalf.

There are two ways to create an account:

- If you're new to Partner Center and don't have a Microsoft Partner Network (MPN) account, continue to Create a Partner Center account and enroll in the commercial marketplace.
- If you're already enrolled in the Microsoft Partner Network or a developer program, create an account directly from Partner Center. Go to Use an existing Partner Center account to enroll in the commercial marketplace.

Create a Partner Center account and enroll in the commercial marketplace

Use this method if you're new to Partner Center and are not enrolled in the Microsoft Partner Network. Complete the steps in this section to create a new Partner Center account and publisher profile.

Register on the Partner Center enrollment page

Review the information on the Welcome to Microsoft Partner Center enrollment page, and then register for an account.

Sign in with a work account

Sign in with a work account so that you can link your company's work email account domain to your new Partner Center account. After you've associated these two accounts, your company's employees can sign in to Partner Center with their work account user names and passwords.

> **NOTE**
>
> To see whether your company already has a work account, learn how to create a new work account, or learn how to set up multiple work accounts to use with Partner Center, see Company work accounts and Partner Center.

Agree to the terms and conditions

As part of the commercial marketplace registration process, you need to agree to the terms and conditions in the Microsoft Publisher Agreement. If you're new to Microsoft Partner Network, you also need to agree to the terms and conditions in the Microsoft Partner Network Agreement.

You've now created a commercial marketplace account in Partner Center. Continue to Add new publishers to the commercial marketplace.

Use an existing Partner Center account to enroll in the commercial marketplace

Follow the instructions in this section to create a commercial marketplace account if you already have an enrollment in Microsoft Partner Center. There are two types of existing enrollments that you can use to set up your commercial marketplace account. Choose the scenario that applies to you:

What if I'm already enrolled in the Microsoft Partner Network?

- Use an existing Microsoft Partner Network account to create your account.

What if I'm already enrolled in a developer program?

- Use an existing developer program enrollment to create your account.

For both enrollment types, you sign in to Partner Center with your existing credentials. Be sure to have your account and publisher profile information available.

Use an existing Microsoft Partner Network account

When you use your existing Microsoft Partner Network account to enroll in the commercial marketplace program in Partner Center, we link your company's work email account domain to your new commercial marketplace account.

You can then assign the appropriate user roles and permissions to your users, so they can have access to the commercial marketplace program in Partner Center.

Enroll in the commercial marketplace

1. Sign in to Partner Center with your Microsoft Partner Network account.

   > **NOTE**
   >
   > You must have an **account admin** or a **global admin** role to sign in to Microsoft Partner Network.

2. In the top-right, select **Settings** > **Account settings** > **Programs**.

3. Under **Commercial Marketplace**, select **Get Started**.

   Microsoft Partner Network detects your subscription and displays the **Publisher profile** pane.

4. Select the MPN ID you want to link to your publisher account and enter your company name.

5. Read the terms and conditions in the Microsoft Publisher Agreement, and then select **Accept and continue** to complete your enrollment.

> **IMPORTANT**
>
> To accept these terms, you must be authorized to act on your company's behalf.

After you're enrolled, you're taken to the commercial marketplace overview page. The commercial marketplace account is displayed in the left pane.

6. To verify that the commercial marketplace account is listed as registered, in the top-right of the page, select **Settings** > **Account settings** > **Programs**.

You've now created a commercial marketplace account in Partner Center. Continue to Add new publishers to the commercial marketplace.

Use a developer program enrollment

> **NOTE**
>
> To register for the commercial marketplace under the same account that you're signed in with, you need to have registered in Partner Center with a company account. If you registered with an individual account, your commercial marketplace enrollment will appear under a new account.
>
> Individual accounts are for developers who are working on their own. Company accounts are for organizations and businesses. Company accounts give you access to submit apps with additional functionality.
>
> To ascertain that you're authorized to set up the account for your company, we require additional verification of company accounts after you've registered. This verification can take from a few days to a couple of weeks, and it often includes a phone call to your company. Both types of accounts let you submit apps, add-ins, and services. For more information, seeAccount types, locations, and fees.

When you register for the commercial marketplace program with the same account as your developer program, you can see all of your existing program enrollments in the left pane of Partner Center.

1. Sign in to Partner Center with your existing account.
2. In the top-right, select **Settings** > **Account settings** > **Programs**.
3. Under **Commercial Marketplace**, select **Get Started**, and enter your work email address.
4. Complete the details on the **Publisher profile** page.
5. Read the terms and conditions in the Microsoft Publisher Agreement, and then select **Accept and continue** to complete your enrollment.

> **IMPORTANT**
>
> To accept these terms, you must be authorized to act on your company's behalf.

After you're enrolled, you're taken to the commercial marketplace overview page.

6. To verify that the commercial marketplace account is listed as registered, select **Settings** > **Account settings** > **Programs**.

You've now created a commercial marketplace account in Partner Center. For help with adding publishers, continue to Add new publishers to the commercial marketplace.

Publishers who moved from the Cloud Partner Portal

If you had a Cloud Partner Portal account, we moved it to Partner Center. You don't need to create a new Partner

Center account. You should have received a customized link to your new Partner Center account both in email and in a banner notification after you signed in to your existing Cloud Partner Portal account.

After you select the customized link and enabled your new Partner Center account, you can return to your account by going to the commercial marketplace dashboard in Partner Center.

The publishing agreement and company profile information transition to your new Partner Center account, along with any previously set up account payout profile information, user accounts and permissions, and active offers that were associated with your Cloud Partner Portal account.

Next steps

- Add new publishers to the commercial marketplace
- Manage your commercial marketplace account in Partner Center
- What is the Microsoft commercial marketplace?

Add new publishers to the commercial marketplace program

11/22/2021 • 2 minutes to read • Edit Online

Appropriate roles

- Owner
- Manager

An organization can have multiple publishers associated with a commercial marketplace account. A user who is part of an existing publisher account can add publishers.

> **NOTE**
>
> Before you add a new publisher, review your list of existing publishers by signing in to Partner Center and selecting **Settings** > **Account Settings**. Then in the left-nav, under **Organization profile**, select **Identifiers**. The publishers on your account are listed under **Publisher**.

Add new publishers

1. Sign in to Partner Center.
2. In the top-right, select **Settings** > **Account settings**.
3. Under **Organization Profile**, select **Identifiers**.
4. In the **Publisher** section, select **Add publisher**.
5. Choose the MPN ID that you want to associate with the publisher.
6. Update the **Publisher details** on the form.
   - **Publisher name**: The name that's displayed in the commercial marketplace with the offer.
   - **PublisherID**: An identifier that's used by Partner Center to uniquely identify the publisher. The default value for this field maps to an existing and unique Publisher ID in the system. Because the Publisher ID can't be reused, this field needs to be updated.
   - **Contact information**: Update the contact information when necessary.

After you add a publisher, to work in the context of this account, you can switch to it using the account picker in the left navigation. Once you switch to this publisher account, you can assign appropriate user roles and permissions to your users, so they can have access to the commercial marketplace program on this publisher account.

Next steps

- Manage your commercial marketplace account in Partner Center
- What is the Microsoft commercial marketplace?

Manage a commercial marketplace account in Partner Center

11/22/2021 • 10 minutes to read • Edit Online

Appropriate roles

- Owner
- Manager

Once you've created a Partner Center account, use the commercial marketplace dashboard to manage your account and offers.

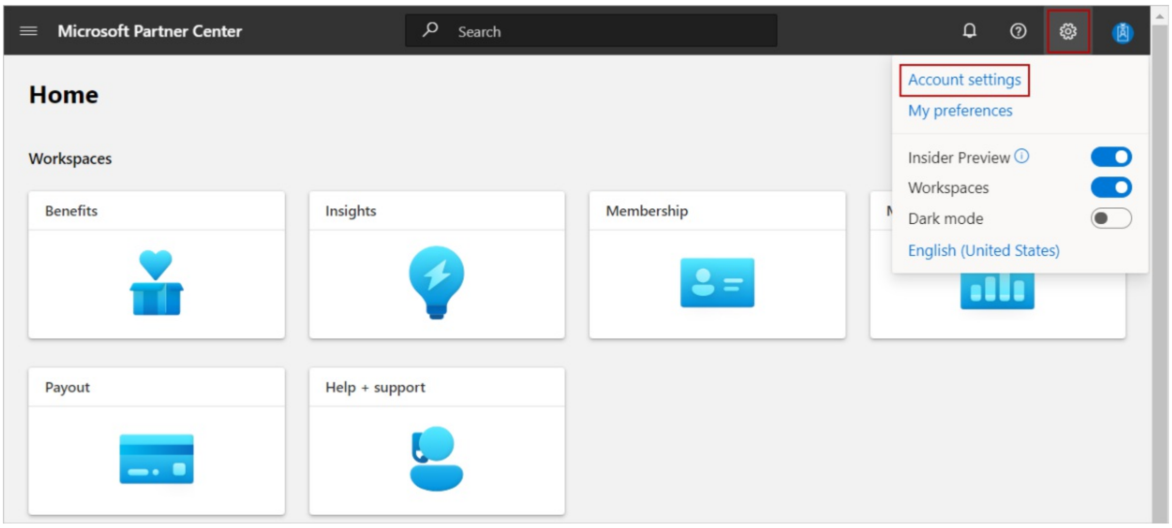
Access your account settings

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

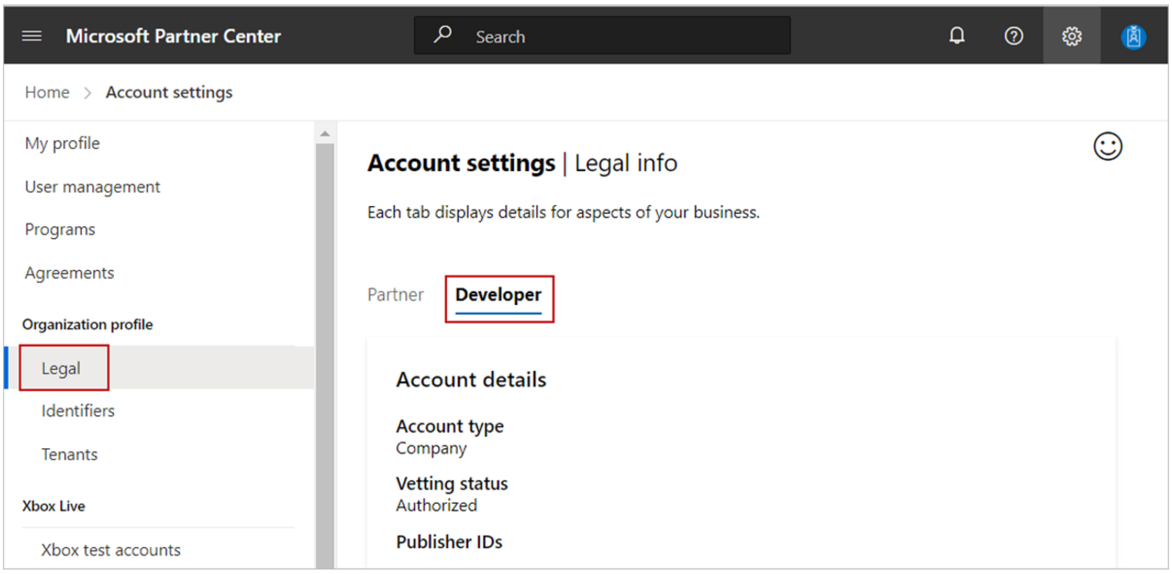
- Workspaces view
- Current view

If you have not already done so, you (or your organization's administrator) should access the account settings for your Partner Center account.

1. Sign in to the commercial marketplace dashboard in Partner Center with the account you want to access. If you're part of multiple accounts and have signed in with a different, you can switch accounts.
2. In the top-right, select **Settings** (gear icon), then **Account settings**.



3. Under **Account settings**, select **Legal**, then the **Developer** tab to view details related to your commercial marketplace account.



Account settings page

When you select **Settings** and expand **Account settings**, the default view is **Legal info**. This page can have up to three tabs, depending on the programs you have enrolled in: *Partner*, *Reseller*, and *Developer*.

The **Partner** tab, for partners enrolled in MPN, includes:

- All the legal business information such as registered legal name and address for your company
- Primary contact
- Business locations.

The **Reseller** tab, for partners doing CSP business, includes:

- Primary contact information
- Customer support profile
- Program information

The **Developer** tab, for partners enrolled in any developer program, has the following information:

- **Account details**: Account type and Account status
- **Publisher IDs**: Seller ID, User ID, Publisher ID, Azure AD tenants, and more
- **Contact info**: Publisher display name, seller contact (name, email, phone, and address) and Company approver (name, email, phone)

Account settings - Developer tab

The following information describes the information on the Developer tab.

Account details

In the *Account details* section of the *Developer* tab, you can see basic info, such as your **Account type** (Company or Individual) and the **Verification status** of your account. During your account verification process, these settings will display each step required, including email verification, employment verification, and business verification.

Publisher IDs

In the Publisher IDs section, you can see your **Symantec ID** (if applicable), **Seller ID**, **User ID**, **MPN ID**, and **Azure AD tenants**. These values are assigned by Microsoft to uniquely identify your developer account and can't be edited.

If you don't have a Symantec ID, you can select the link to request one.

Contact info

In the *Contact info* section, you can see your **Publisher display name**, **Seller contact info** (the contact name, email, phone number, and address for the company seller), and the **Company approver** (the name, email, and phone number of the individual with authority to approve decisions for the company).

You can also select the **Update** link to change your contact info, such as publisher display name and email address.

Account settings identifiers

Under **Account settings** > **Organization profile**, select **Identifiers** to see the following information:

- **MPN IDs**: Any MPN IDs associated with your account
- **CSP**: MPN IDs associated with the CSP program for this account.
- **Publisher**: Seller IDs associated with your account
- **Tracking GUIDs**: Any tracking GUIDs associated with your account

Tracking GUIDs

Globally Unique Identifiers (GUIDs) are unique reference numbers (with 32 hexadecimal digits) that can be used for tracking your Azure usage.

To create GUIDs for tracking, you should use a GUID generator. The Azure Storage team has created a GUID generator form that will email you a GUID of the correct format and can be reused across the different tracking systems.

We recommend that you create a unique GUID for every offer and distribution channel for each product. You can opt to use a single GUID for the product's multiple distribution channels if you do not want reporting to be split.

If you deploy a product by using a template and it is available on both Azure Marketplace and GitHub, you can create and register two distinct GUIDs:

- Product A in Azure Marketplace
- Product A on GitHub

Reporting is done by the partner value (Microsoft Partner ID) and the GUIDs. You can also track GUIDs at a more granular level aligning to each plan within your offer.

For more information, see the Tracking Azure customer usage with GUIDs FAQ).

Agreements

The **Agreements** page lets you view a list of the publishing agreements that you've authorized. These agreements are listed according to name and version number, including the date it was accepted and the name of the user that accepted the agreement.

To access the Agreements page:

1. Sign in to Partner Center.
2. In the top-right, select **Settings** > **Account settings**.
3. Under **Account settings**, select **Agreements**.

Actions needed may appear at the top of this page if there are agreement updates that need your attention. To accept an updated agreement, first read the linked Agreement Version, then select **Accept agreement**.

Set up a payout profile

To have a transactable offer in Azure Marketplace, a Tax profile and Payment profile must be submitted and validated in Partner Center. A Tax profile needs to be submitted first before a Payout profile can be created. A Tax profile submission can take up to 48 hours to validate.

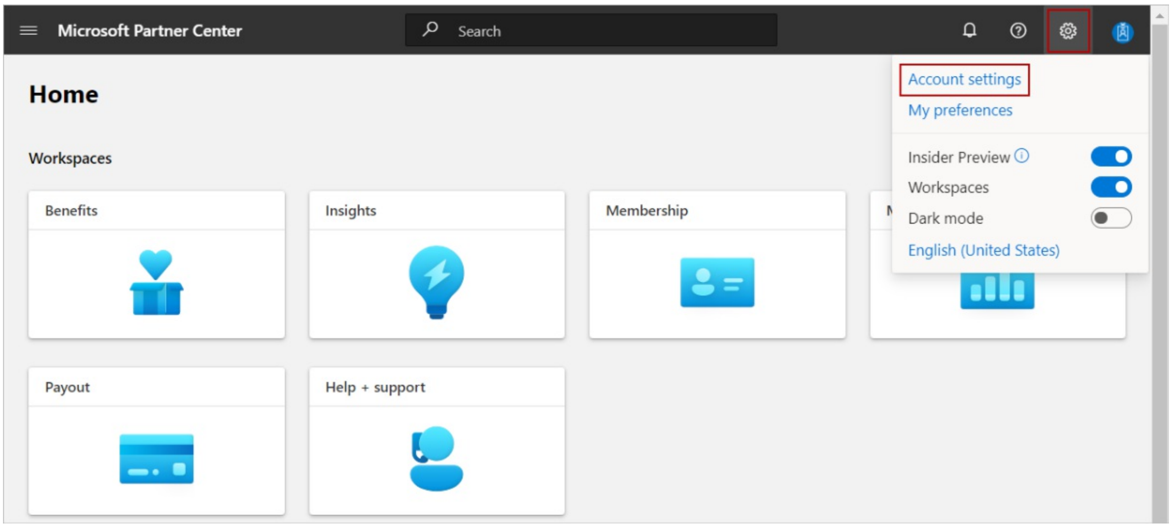
A payout profile is the bank account to which proceeds are sent from your sales. This bank account must be in the same country or region where you registered your Partner Center account. For more information about a payout profile, see Set up your payout account and tax forms.

To set up your payout profile

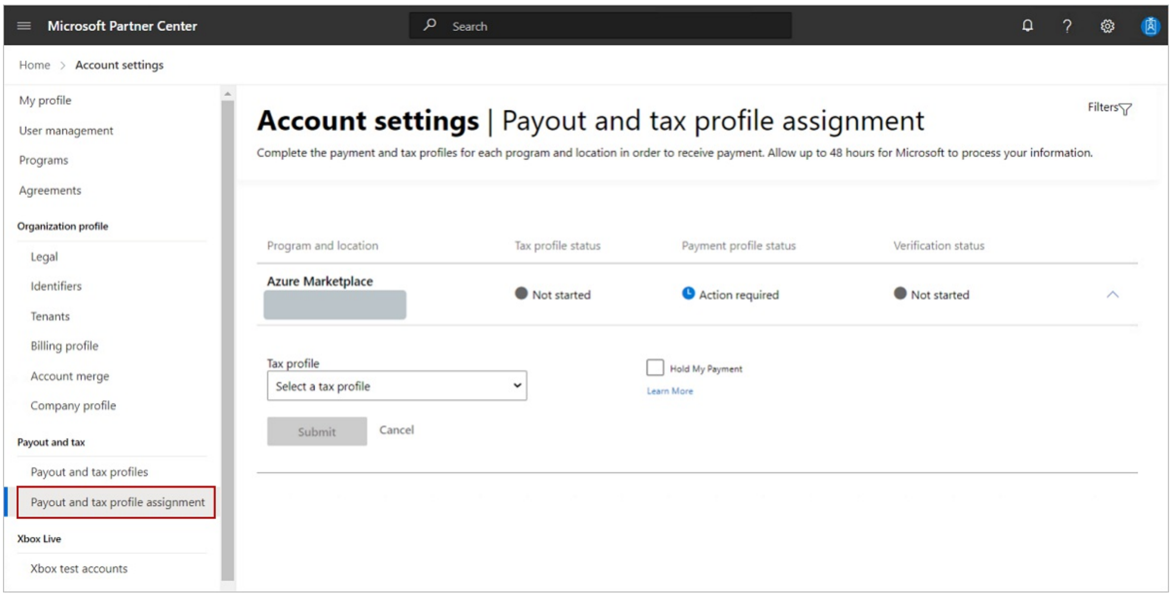
- Workspaces view
- Current view

1. Sign in to the commercial marketplace dashboard in Partner Center with the account you want to access.

2. In the top-right, select **Settings** (gear icon), and then select **Account settings**.



3. In the left menu, under **Payout and tax**, select **Payout and tax profile assignment**.



> **NOTE**
>
> In you don't see the **Payout and tax** section in the left menu, contact your global admin or account admin for permissions.

4. For more information about setting up your payout profile, see Set up your payout account and tax forms.

IMPORTANT

Changing your payout account can delay your payments by up to one payment cycle. This delay occurs because we need to verify the account change, just as we do when first setting up the payout account. You'll still get paid for the full amount after your account has been verified; any payments due for the current payment cycle will be added to the next one.

Tax profile

Review your current tax profile status, confirming the correct **Entity type** and **Tax Certificate Information** is displayed. Select **Edit** to update or complete any required forms.

In order to establish your tax status, you must specify your country or region of residence and citizenship and complete the appropriate tax forms associated with your country or region.

Regardless of your country or region of residence or citizenship, you must fill out United States tax forms to sell any offers through Microsoft. Partners who satisfy certain United States residency requirements must fill out an IRS W-9 form. Other partners outside the United States must fill out an IRS W-8 form. You can fill out these forms online as you complete your tax profile.

A United States Individual Taxpayer Identification Number (or ITIN) is not required to receive payments from Microsoft or to claim tax treaty benefits.

You can complete and submit your tax forms electronically in Partner Center; in most cases, you don't need to print and mail any forms.

Different countries and regions have different tax requirements. The exact amount that you must pay in taxes depends on the countries and regions where you sell your offers. Microsoft remits sales and uses tax on your behalf in some countries and regions. These countries and regions will be identified in the process of listing your offer. In other countries and regions, depending on where you are registered, you may need to remit sales and use tax for your sales directly to the local taxing authority. In addition, the sales proceeds you receive may be taxable as income. We strongly encourage you to contact the relevant authority for your country or region that can best help you determine the right tax info for your Microsoft sales transactions.

For more information about a tax profile, see Create and manage incentives payout and tax profiles in Partner Center and Set up your payout account and tax forms.

Withholding rates

The info you submit in your tax forms determines the appropriate tax withholding rate. The withholding rate applies only to sales that you make into the United States; sales made into non-US locations are not subject to withholding. The withholding rates vary, but for most developers registering outside the United States, the default rate is 30%. You have the option of reducing this rate if your country or region has agreed to an income tax treaty with the United States.

Tax treaty benefits

If you are outside the United States, you may be able to take advantage of tax treaty benefits. These benefits vary from country/region to country/region, and may let you reduce the amount of taxes that Microsoft withholds. You can claim tax treaty benefits by completing Part II of the W-8BEN form. We recommend that you communicate with the appropriate resources in your country or region to determine whether these benefits apply to you.

Learn more about tax details for Windows app/game developers and Azure Marketplace publishers.

Payout hold status

By default, Microsoft sends payments on a monthly basis. However, you can optionally put your payouts on hold, which will prevent the sending of payments to your account. If you choose to put your payouts on hold, we'll continue to record any revenue that you earn and provide the details in your **Payout summary**. However, we won't send any payments to your account until you remove the hold.

To place your payments on hold:

1. Go to **Account settings**.
2. In the left-nav expand **Payout and tax** and select **Payout and tax profiles**.
3. Select the program for which you want to hold payments, and then select the **Hold my Payment** check box.

You can change your payout hold status at any time, but be aware that your decision will impact the next monthly payout. For example, if you want to hold April's payout, make sure to set your payout hold status to **On** before the end of March.

After you set your payout hold status to **On**, all payouts will be on hold until you toggle the slider back to **Off**. When you do so, you'll be included during the next monthly payout cycle (provided any applicable payment thresholds have been met). For example, if you've had your payouts on hold, but would like to have a payout generated in June, then make sure to toggle the payout hold status to **Off** before the end of May.

> **NOTE**
>
> Your **Payout hold status** selection applies to **all** revenue sources that are paid through Microsoft Partner Center, including Azure Marketplace, Microsoft AppSource, Microsoft Store, advertising, and so on.). You cannot select different hold statuses for each revenue source.

Devices

The device management settings apply only to universal windows platform (UWP) publishing. Learn more.

Create a billing profile

If you are publishing a Dynamics 365 for Customer Engagement & Power Apps or Dynamics 365 for Operations offer, you need to complete your *billing profile*.

The billing address is pre-populated from your legal entity, and you can update this address later. The TAX and VAT ID fields are required for some countries and optional for others. The country/region name and company name cannot be edited.

1. In the top-right, select **Settings** (gear icon), and then select **Account settings**.
2. Then in the left-nav expand **Organization profile** and select **Billing profile**.

Multi-user account management

Partner Center uses Azure Active Directory (Azure AD) for multi-user account access and management. Your organization's Azure AD is automatically associated with your Partner Center account as part of the enrollment process.

Next steps

- Add and manage users

Switch accounts in Partner Center

11/22/2021 • 2 minutes to read • Edit Online

Appropriate roles

- Owner
- Manager

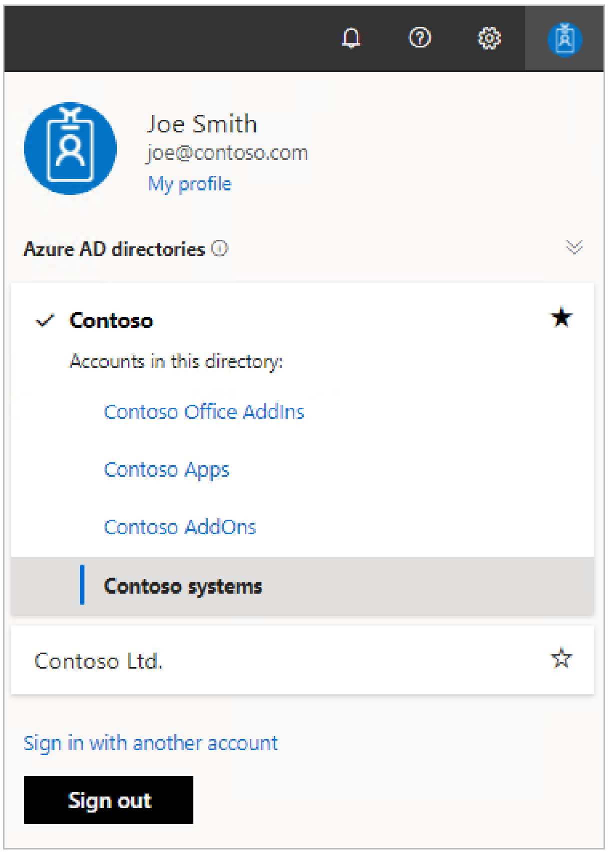
You can be part of more than one account. This article describes how to see if you are part of multiple accounts and how to switch between them.

View and switch accounts

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

You can check to see if you are part of multiple accounts by the presence of the *account picker*. In the top-right, select the your account icon as seen highlighted in the following screenshot.



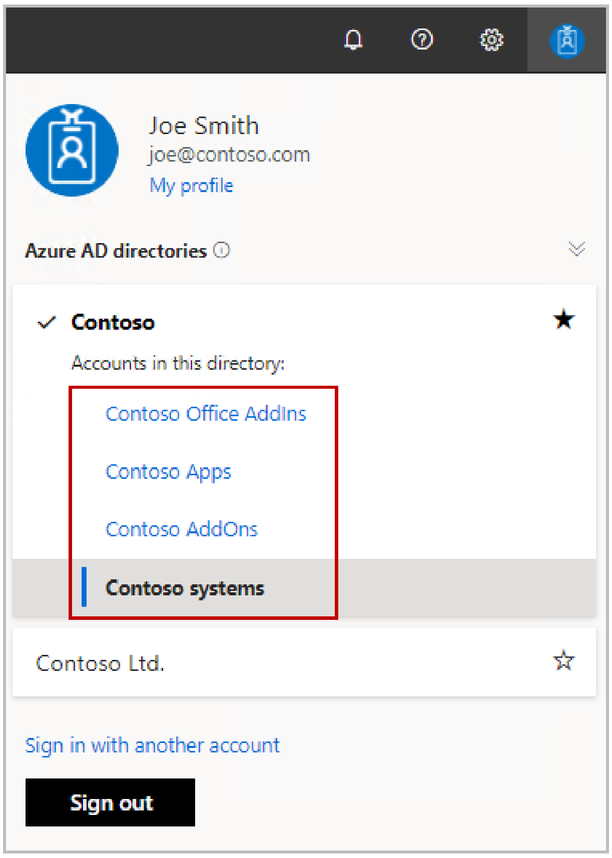
If you don't see the *account picker*, you are part of one account only. You can find the details of this account on the **Account settings** > **Organization profile** > **Legal** > **Developer** tab in Partner Center.

You can then select any of account on the list to switch to that account. After you switch, everything in Partner

Center appears in the context of that account.

> **NOTE**
>
> Partner Center uses Azure Active Directory (Azure AD) for multi-user account access and management. Your organization's Azure AD is automatically associated with your Partner Center account as part of the enrollment process.

In the following example, the signed-in user is part of the four highlighted accounts. The user can switch between them by clicking on an account.



Next steps

- Add and manage users for the commercial marketplace

Manage tenants in the commercial marketplace

11/22/2021 • 2 minutes to read • Edit Online

Appropriate roles

- Manager

An Azure Active Directory (AD) tenant, also referred to as your *work account* throughout this documentation, is a representation of your organization set up in the Azure portal and helps you to manage a specific instance of Microsoft cloud services for your internal and external users. If your organization subscribed to a Microsoft cloud service, such as Azure, Microsoft Intune, or Microsoft 365, an Azure AD tenant was established for you.

You can set up multiple tenants to use with Partner Center. You may want to do this if your company has multiple tenants (for example, contoso.com, contoso.uk, and so on) you can link the additional tenants here. This association would allow you to add and manage users from the additional tenants on your commercial marketplace account.

Any user with the Manager role in the Partner Center account will have the option to add and remove Azure AD tenants from the account.

Add an existing tenant

To associate another Azure AD tenant with your Partner Center account:

1. In the top-right of Partner Center, select **Settings** > **Account settings**.
2. Under **Organization profile**, select **Tenants**. The current tenant associations are shown.
3. On the **Developer** tab, select **Associate**.
4. Enter your Azure AD credentials for the tenant that you want to associate.
5. Review the organization and domain name for your Azure AD tenant. To complete the association, select **Confirm**.

If the association is successful, you will then be ready to add and manage account users in the Users section in Partner Center. To learn about adding users, see Manage users.

Create a new tenant

To create a brand new Azure AD tenant with your Partner Center account:

1. In the top-right of Partner Center, select **Settings** > **Account settings**.
2. Under **Organization profile**, select **Tenants**. The current tenant associations are shown.
3. On the Developer tab, select **Create**.
4. Enter the directory information for your new Azure AD:
   - **Domain name**: The unique name that we'll use for your Azure AD domain, along with ".onmicrosoft.com". For example, if you entered "example", your Azure AD domain would be "example.onmicrosoft.com".
   - **Contact email**: An email address where we can contact you about your account if necessary.
   - **Global administrator user account info**: The first name, last name, username, and password that you want to use for the new global administrator account.
5. Select Create to confirm the new domain and account info.
6. Sign in with your new Azure AD global administrator username and password to begin adding and

managing users.

For more information about creating new tenants inside your Azure portal, instead of the Partner Center portal, see the article Create a new tenant in Azure Active Directory.

Remove a tenant

To remove a tenant from your Partner Center account, find its name on the **Tenants** page (in **Account settings**), then select **Remove**. You'll be prompted to confirm that you want to remove the tenant. After you do so, no users in that tenant will be able to sign into the Partner Center account, and any permissions you have configured for those users will be removed.

> **TIP**
>
> You can't remove a tenant if you are currently signed into Partner Center using an account in the same tenant. To remove a tenant, you must sign into Partner Center as a **Manager** for another tenant that is associated with the account. If there is only one tenant associated with the account, that tenant can only be removed after signing in with the Microsoft account that opened the account.

Company work accounts and Partner Center

11/22/2021 • 2 minutes to read • Edit Online

Partner Center uses company work accounts, also known as Azure Active Directory (AD) tenants, to manage account access for multiple users, control permissions, host groups and applications, and maintain profile data. By linking your company's work email account domain to your Partner Center account, employees of your company can sign in to Partner Center to manage marketplace offers using their own work account usernames and passwords.

Check whether your company already has a work account

If your company has subscribed to a Microsoft cloud service such as Azure, Microsoft Intune, or Microsoft 365, then you already have a work email account domain (also referred to as an Azure Active Directory tenant) that can be used with Partner Center.

Follow these steps to check:

1. Sign in to the Azure admin portal at https://portal.azure.com.
2. Select **Azure Active Directory** from the left-navigation menu and then select **Custom Domain Names**.
3. If you already have a work account, your domain name will be listed.

If your company doesn't already have a work account, one will be created for you during the Partner Center enrollment process.

Set up multiple work accounts

Before deciding to use an existing work account, consider how many users in the work account will need to access Partner Center. If you have users in the work account who won't need to access Partner Center, you may want to consider creating multiple work accounts, so that only those users who will need to access Partner Center are represented on a particular account.

Create a new work account

To create a new work account for your company, follow the steps below. You may need to request assistance from whoever has administrative permissions on your company's Microsoft Azure account.

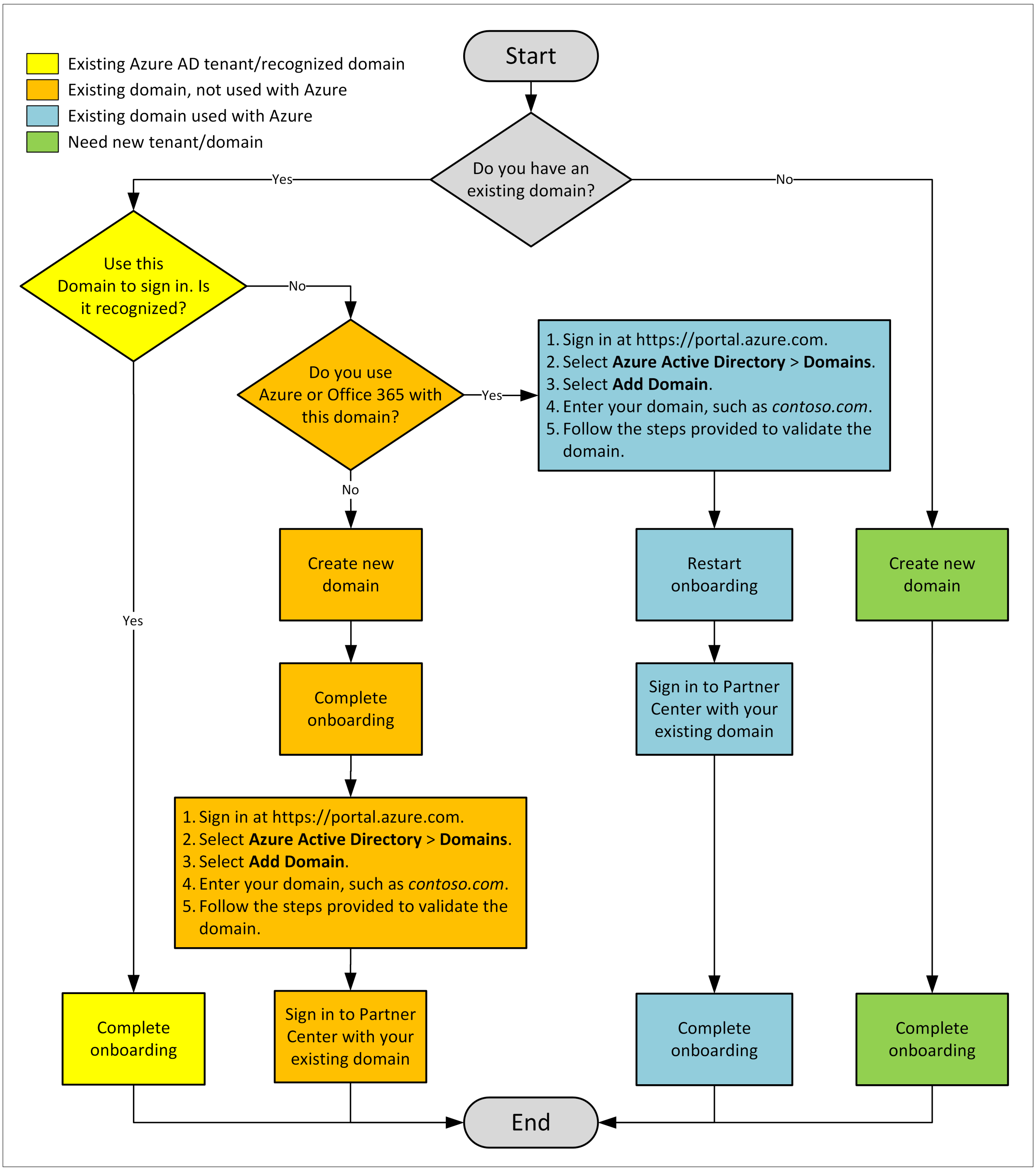
1. Sign in to the Microsoft Azure portal.
2. From the left navigation menu, select the **Azure Active Directory** > **Users**.
3. Select **New user** and create a new Azure work account by entering a name and work email address. Ensure the **Directory role** is set as per the User requirement and select the **Show Password** checkbox at the bottom to view and make a note of the auto-generated password.
4. Complete the other required fields and select **Create** to save the new user.

The email address for the user account must be a verified domain name in your directory. You can list all the verified domains in your directory by selecting **Azure Active Directory** > **Custom domain names** in the left-navigation menu.

To learn more about adding custom domains in Azure Active Directory, see Add or associate a domain in Azure AD.

Troubleshoot work email sign-in

If you're having trouble signing in to your work account (also known as your Azure AD tenant), find the scenario on the diagram below that best matches your situation and follow the recommended steps.



Next steps

- Manage your commercial marketplace account in Partner Center

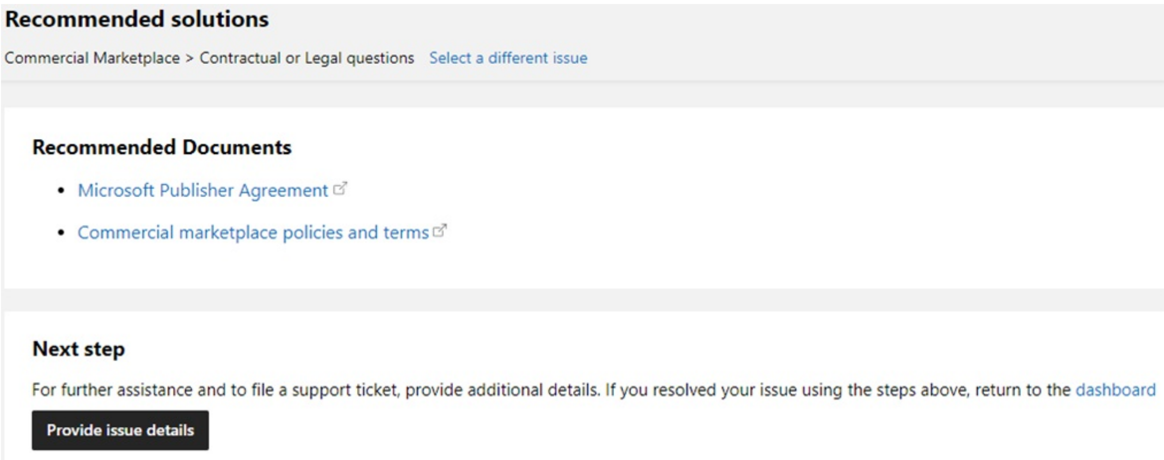
Notifying Microsoft regarding the Publisher Agreement

11/22/2021 • 2 minutes to read • Edit Online

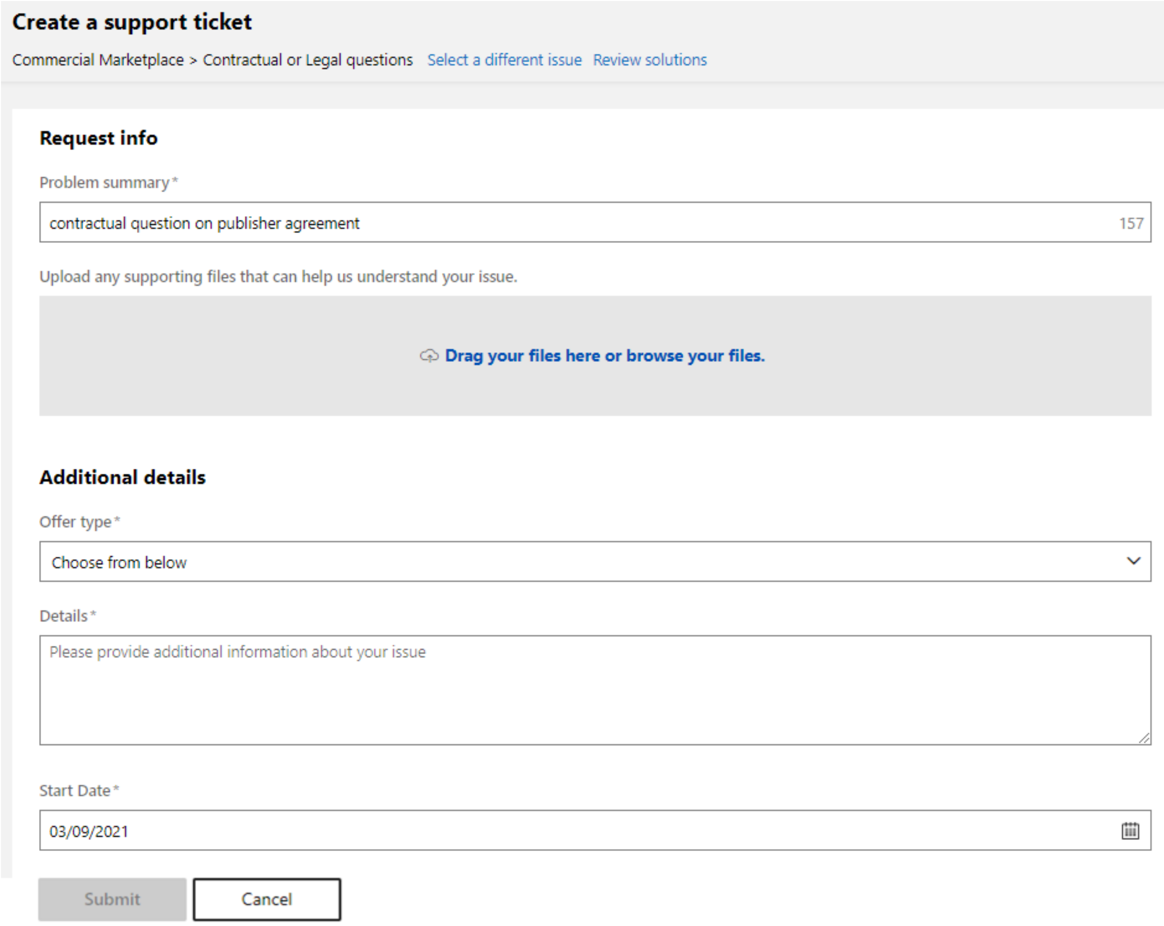
Use a support ticket to submit legal notices to Microsoft regarding the Microsoft Publisher Agreement to ensure proper action and tracking.

Submit notice regarding the Publisher Agreement

1. Go to the Contractual or legal questions section of Partner Center support.
2. Select **Provide issue details** (if necessary, sign in to Partner Center first).



3. Edit the **Problem summary** if desired, up to 200 characters.
4. Use the **Drag your files here or browse your files** link to attach applicable files to this support request.



5. Provide **Additional details**:

   - **Offer type** (choose “Not sure” if this notice is not specific to any particular offer type)
   - **Details** of the notice
   - The **Start date** of your notice (if it has an effective date later than today)
   - Your **Contact information** and preferences

   This support request page also provides guidance on how to find your Publisher ID and Seller ID.

6. When you've provided all the required information, select **Submit** to create your support ticket and send the notice to Microsoft.

Next steps

- A support agent will contact you if we have questions.
- Review the Microsoft Publisher Agreement.

Add and manage users for the commercial marketplace

11/22/2021 • 4 minutes to read • Edit Online

Appropriate roles

- Owner
- Manager

The **Users** section of Partner Center (under **Account Settings**) lets you use Azure AD to manage the users, groups, and Azure AD applications that have access to your Partner Center account. Your account must have Manager-level permissions for the work account (Azure AD tenant) in which you want to add or edit users. To manage users within a different work account / tenant, you will need to sign out and then sign back in as a user with **Manager** permissions on that work account / tenant.

After you are signed in with your work account (Azure AD tenant), you can add and manage users.

Add existing users

To add users to your Partner Center account that already exist in your company's work account (Azure AD tenant):

1. Go to **Users** (under **Account settings**) and select **Add users**.
2. Select one or more users from the list that appears. You can use the search box to search for specific users. *If you select more than one user to add to your Partner Center account, you must assign them the same role or set of custom permissions. To add multiple users with different roles/permissions, repeat these steps for each role or set of custom permissions.
3. When you are finished choosing users, select **Add selected**.
4. In the **Roles** section, specify the role(s) or customized permissions for the selected user(s).
5. Select **Save**.

Create new users

To create brand new user accounts, you must have an account with Global administrator permissions.

1. Go to **Users** (under **Account settings**), select **Add users**, then choose **Create new users**.
2. Enter a first name, last name, and username for each new user.
3. If you want the new user to have a global administrator account in your organization's directory, check the box labeled **Make this user a Global administrator in your Azure AD, with full control over all directory resources**. This will give the user full access to all administrative features in your company's Azure AD. They'll be able to add and manage users in your organization's work account (Azure AD tenant), though not in Partner Center, unless you grant the account the appropriate role/permissions.
4. If you checked the box to **Make this user a Global administrator**, you'll need to provide a *Password recovery email* for the user to recover their password if necessary.
5. In the **Group membership** section, select any groups to which you want the new user to belong.
6. In the **Roles** section, specify the role(s) or customized permissions for the user.
7. Select **Save**.

Creating a new user in Partner Center will also create an account for that user in the work account (Azure AD tenant) to which you are signed in. Making changes to a user's name in Partner Center will make the same changes in your organization's work account (Azure AD tenant).

Invite new users by email

To invite users that are not currently a part of your company work account (Azure AD tenant) via email, you must have an account with Global administrator permissions.

1. Go to **Users** (under **Account settings**), select **Add users**, then choose **Invite users by email**.
2. Enter one or more email addresses (up to 10), separated by commas or semicolons.
3. In the **Roles** section, specify the role(s) or customized permissions for the user.
4. Select **Save**.

The users you invited will get an email invitation to join your Partner Center account. A new guest-user account will be created in your work account (Azure AD tenant). Each user will need to accept their invitation before they can access your account.

If you need to resend an invitation, visit the *Users* page, find the invitation in the list of users, select their email address (or the text that says *Invitation pending*). Then, at the bottom of the page, select **Resend invitation**.

If your organization uses directory integration to sync the on-premises directory service with your Azure AD, you won't be able to create new users, groups, or Azure AD applications in Partner Center. You (or another admin in your on-premises directory) will need to create them directly in the on-premises directory before you'll be able to see and add them in Partner Center.

Remove a user

To remove a user from your work account (Azure AD tenant), go to **Users** (under **Account settings**), select the user that you would like to remove using the checkbox in the far right column, then choose **Remove** from the available actions. A pop-up window will appear for you to confirm that you want to remove the selected user(s).

Change a user password

If one of your users needs to change their password, they can do so themselves if you provided a *Password recovery email* when creating the user account. You can also update a user's password by following the steps below. To change a user's password in your company work account (Azure AD tenant), you must be signed in on an account with Global administrator permissions. This will change the user's password in your Azure AD tenant, along with the password they use to access Partner Center.

1. From the **Users** page (under **Account settings**), select the name of the user account that you want to edit.
2. Select the **Reset password** button at the bottom of the page.
3. A confirmation page will appear to show the login information for the user, including a temporary password. Be sure to print or copy this info and provide it to the user, as you won't be able to access the temporary password after you leave this page.

Assign user roles and permissions

11/22/2021 • 2 minutes to read • Edit Online

Appropriate roles

- Owner
- Manager

In order to access capabilities related to marketplace or your developer account you need to have one or more of the following roles assigned to yourself. Each role has a specific set of permissions to perform certain functions within the account.

ROLE	DESCRIPTION
Owner	When a publisher account is created, an ownership role is assigned to the partner. Permission details: ✔ Complete ownership of the account. ✔ Add an type of users ✔ May complete payout and tax information ✔ View feedback reports and summaries ✔ Enroll the publisher account into any other developer programs
Manager	✔ Manage publisher account users, roles, and permissions ✔ Manage tenants ✗ Access tax and payout settings
Developer	✔ Upload package ✔ Submit apps and add-ons ✔ View usage reports for telemetry details ✗ Access financial information or account settings
Business contributor	✔ Access financial information ✔ Set pricing details ✗ Create or submit new apps and add-ons
Financial contributor	✔ View payout reports ✔ Manage payout and tax profiles ✗ Make changes to apps or settings
Marketer	✔ Respond to customer reviews ✔ View non-financial reports ✗ Make changes to apps or settings

NOTE

For the Commercial Marketplace program, the Global admin, Business Contributor, Financial Contributor, and Marketer roles are not used. Assigning these roles to users has no effect. Only the Manager and Developer roles grant permissions to users.

For more information about managing roles and permissions in other areas of Partner Center, such as Azure Active Directory (AD), Cloud Solution Provider (CSP), Control Panel Vendor (CPV), Guest users, or Microsoft Partner Network (MPN), see Assign users roles and permissions in Partner Center.

> **NOTE**
>
> Any user management, role assignment activities done on these lines will be in context of the account you are on. Refer to section on switching between seller if you need to manage a different account.

Manage groups for the commercial marketplace

11/22/2021 • 2 minutes to read • Edit Online

Groups allow you to control multiple user roles and permissions all together.

Add an existing group

To add a group that already exists in your organization's work account (Azure AD tenant) to your Partner Center account:

1. From the **Users** page (under **Account settings**), select **Add groups**.
2. Select one or more groups from the list that appears. You can use the search box to search for specific groups. If you select more than one group to add to your Partner Center account, you must assign them the same role or set of custom permissions. To add multiple groups with different roles/permissions, repeat these steps for each role or set of custom permissions.
3. When you are finished choosing groups, select **Add selected**.
4. In the **Roles** section, specify the role(s) or customized permissions for the selected group(s). All members of the group will be able to access your Partner Center account with the permissions you apply to the group, regardless of the roles and permissions associated with their individual account.
5. Select **Save**.

When you add an existing group, every user who is a member of that group will be able to access your Partner Center account, with the permissions associated with the group's assigned role.

Add a new group

To add a brand-new group to your Partner Center account:

1. From the **Users** page (under **Account settings**), select **Add groups**.
2. On the next page, select **New group**.
3. Enter the display name for the new group.
4. Specify the role(s) or customized permissions for the group. All members of the group will be able to access your Partner Center account with the permissions you apply here, regardless of the roles/permissions associated with their individual account.
5. Select user(s) for the new group from the list that appears. You can use the search box to search for specific users.
6. When you are finished selecting users, select **Add selected** to add them to the new group.
7. Select **Save**.

This new group will be created in your organization's work account (Azure AD tenant) as well, not just in your Partner Center account.

Remove a group

To remove a group from your work account (Azure AD tenant):

1. Go to **Users** (under **Account settings**).
2. Select the group that you would like to remove using the checkbox in the far right column.
3. Choose **Remove** from the available actions. A pop-up window will appear for you to confirm that you want to remove the selected group(s).

Add and manage Azure AD applications

11/22/2021 • 3 minutes to read • Edit Online

Appropriate roles

- Owner
- Manager

You can allow applications or services that are part of your company's Azure Active Directory (Azure AD) to access your Partner Center account.

Add existing Azure AD applications

To add applications that already exist in your company's Azure Active Directory:

1. From the **Users** page (under **Account settings**), select **Add Azure AD applications**.
2. Select one or more Azure AD applications from the list that appears. You can use the search box to search for specific Azure AD applications. If you select more than one Azure AD application to add to your Partner Center account, you must assign them the same role or set of custom permissions. To add multiple Azure AD applications with different roles/permissions, repeat these steps for each role or set of custom permissions.
3. When you are finished selecting Azure AD applications, select **Add selected**.
4. In the **Roles** section, specify the role(s) or customized permissions for the selected Azure AD application(s).
5. Select **Save**.

Add new Azure AD applications

If you want to grant Partner Center access to a brand-new Azure AD application account, you can create one in the **Users** section. This will create a new account in your company work account (Azure AD tenant), not just in your Partner Center account. If you are primarily using this Azure AD application for Partner Center authentication, and don't need users to access it directly, you can enter any valid address for the **Reply URL** and **App ID URI**, as long as those values are not used by any other Azure AD application in your directory.

1. From the **Users** page (under **Account settings**), select **Add Azure AD applications**.
2. On the next page, select **New Azure AD application**.
3. Enter the **Reply URL** for the new Azure AD application. This is the URL where users can sign in and use your Azure AD application (sometimes also known as the App URL or Sign-On URL). The *Reply URL* can't be longer than 256 characters and must be unique within your directory.
4. Enter the **App ID URI** for the new Azure AD application. This is a logical identifier for the Azure AD application that is presented when a single sign-on request is sent to Azure AD. The *App ID URI* must be unique for each Azure AD application in your directory. This ID can't be longer than 256 characters. For more info about the App ID URI, see Integrating applications with Azure Active Directory.
5. In the **Roles** section, specify the role(s) or customized permissions for the Azure AD application.
6. Select **Save**.

After you add or create an Azure AD application, you can return to the **Users** section and select the application name to review settings for the application, including the Tenant ID, Client ID, Reply URL, and App ID URI.

Remove an Azure AD application

To remove an application from your work account (Azure AD tenant), go to **Users** (under **Account settings**), select the application that you would like to remove using the checkbox in the far right column, then choose **Remove** from the available actions. A pop-up window will appear for you to confirm that you want to remove the selected application(s).

Manage keys for an Azure AD application

If your Azure AD application reads and writes data in Microsoft Azure AD, it will need a key. You can create keys for an Azure AD application by editing its information in Partner Center. You can also remove keys that are no longer needed.

1. From the **Users** page (under **Account settings**), select the name of the Azure AD application. You'll see all of the active keys for the Azure AD application, including the date on which the key was created and when it will expire 50.
2. To remove a key that is no longer needed, select **Remove**.
3. To add a new key, select **Add new key**.
4. You will see a screen showing the **Client ID** and **Key values**. Be sure to print or copy this information, as you won't be able to access it again after you leave this page.
5. If you want to create more keys, select **Add another key**.

Introduction to listing options

11/22/2021 • 6 minutes to read • Edit Online

When you create an offer type, you choose one or more listing options. These options determine the buttons that customers see on the offer listing page in the online stores. The listing options include **Free Trial**, **Test Drive**, **Contact Me**, and **Get It Now**.

This table shows which listing options are available for each offer type:

OFFER TYPE	FREE TRIAL	TEST DRIVE	CONTACT ME	GET IT NOW *
Azure Application (Managed app)		✔		✔
Azure Application (Solution template)				✔
Azure Container				✔
Azure Virtual Machine	✔	✔		✔
Consulting service			✔	
Dynamics 365 Business Central	✔	✔	✔	✔
Dynamics 365 Customer Engagement & Power Apps	✔	✔	✔	✔
Dynamics 365 for Operations	✔	✔	✔	✔
IoT Edge module				✔
Managed Service				✔
Power BI App				✔
Software as a service	✔	✔	✔	✔

* The **Get It Now** listing option includes Get It Now (Free), bring your own license (BYOL), Subscription, and Usage-based pricing. For more information, see Get It Now.

Change the offer type

Changing your offer type may require a simple edit and republish, or it may require you to create a new offer, as listed here.

TO CHANGE FROM	TO	DO THIS
Contact Me	Trial	Republish the offer.
Contact Me	Transact	For SaaS offers, update the listing option and republish. For all other offer types, create a new offer.
Trial	Transact	For SaaS offers, update the listing option and republish. For all other offer types, create a new offer.

To add a Test Drive to any offer, republish the offer.

Free Trial

Use the commercial marketplace to enhance discoverability and automate provisioning of your solution's trial experience. This enables prospective customers to use your software as a service (SaaS), infrastructure as a service (IaaS), or Microsoft in-app experience at no cost from 30 days to six months, depending on the offer type.

Customers use the **Free Trial** button on your offer's listing page to try your offer. If you provide a free trial on multiple plans within the same offer, customers can switch to a free trial on another plan, but the trial period doesn't restart.

For virtual machine offers, customers are charged Azure infrastructure costs for using the offer during a trial period. Upon expiration of the trial period, customers are automatically charged for the last plan they tried based on standard rates unless they cancel before the end of the trial period.

Test Drive

Customers use the **Test Drive** button on your offer's listing page to get access to a preconfigured environment for a fixed number of hours. To learn more about test drives, see What is a test drive?.

> **TIP**
> The Test Drive option is different from the Free Trial. You can offer Test Drive, Free Trial, or both. They both provide your customers with your solution for a fixed time period. However, the Test Drive also includes a hands-on, self-guided tour of your product's key features and benefits being demonstrated in a real-world implementation scenario.

Contact Me

This option is a simple listing of your application or service. Customers use the **Contact Me** button on your offer's listing page to request that you connect with them about your offer.

Get It Now

This listing option includes transactable offers (subscriptions or user-based pricing), bring your own license (BYOL) offers, and **Get It Now (Free)**. Transactable offers are sold through the commercial marketplace. Microsoft is responsible for billing and collections. Customers use the **Get It Now** button to get the offer.

This table shows which offer types support the pricing options that are included with the **Get It Now** listing option.

OFFER TYPE	GET IT NOW (FREE)	BYOL	SUBSCRIPTION	USAGE-BASED PRICING
Azure Application (Managed app)			✔	✔
Azure Application (Solution template)	✔			
Consulting service				
Azure Container	✔[1]	✔[1]		
Dynamics 365 business central	✔			
Dynamics 365 Customer Engagement & Power Apps	✔			
Dynamics 365 for operations	✔			
IoT Edge module	✔[1]	✔[1]		
Managed Service		✔		
Power BI App	✔			
Azure Virtual Machine		✔		✔[2]
Software as a service	✔		✔	✔

[1] The **Pricing model** column of the **Plan overview** tab shows **Free** or **BYOL**, but it's not selectable.

[2] Priced per hour and billed monthly.

Get It Now (Free)

Use this listing option to offer your application for free. Customers use the **Get It Now** button to get your free offer.

> **NOTE**
>
> Get It Now (Free) offers aren't eligible for Marketplace Rewards benefits for transactable offers. Because there's no transaction through the storefront, these are categorized as **Trial**. See Marketplace Rewards.

Bring Your Own License (BYOL)

Use this listing option to let customers deploy your offer using a license purchased outside the commercial marketplace. This option is ideal for on-premises-to-cloud migrations. Customers use the **Get It Now** button to purchase your offer using a license they pre-purchased from you.

> **NOTE**
>
> BYOL offers aren't eligible for Marketplace Rewards benefits for transactable offers. Because these require a customer to acquire the license from the partner and there's no transaction through the commercial marketplace storefront, these are categorized as **List**. See Marketplace Rewards.

Subscription

You can charge a flat fee for these offer types:

- Azure Application (Managed app) offers support for monthly subscriptions.
- SaaS offers support for both monthly and annual subscriptions.

Usage-based pricing

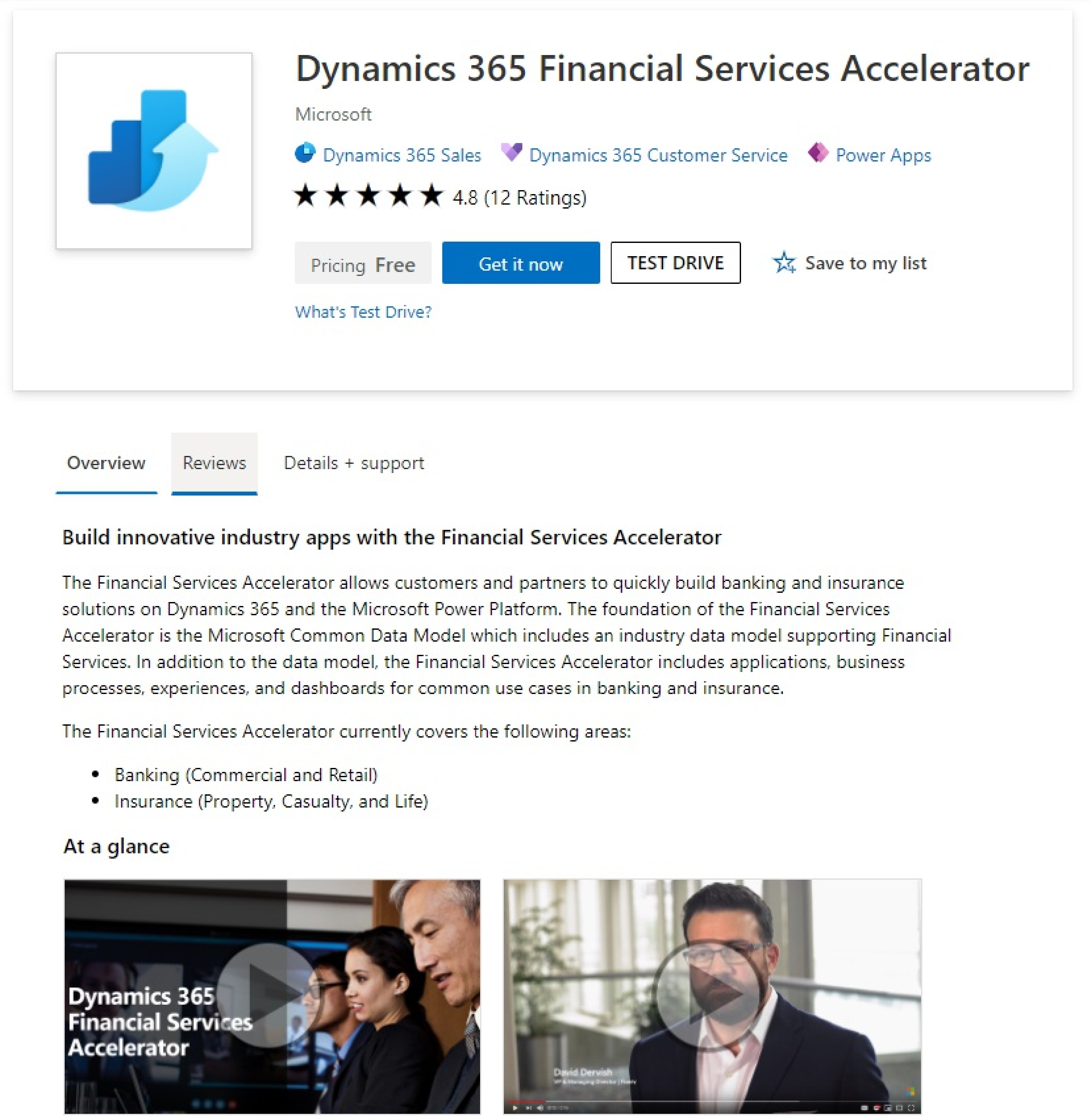
The following offer types support usage-based pricing:

- Azure Application (Managed app) offer support for metered billing. For more information, see Managed application metered billing.
- SaaS offers support for Metered billing and per user (per seat) pricing. For more information about metered billing, see Metered billing for SaaS using the commercial marketplace metering service.
- Azure virtual machine offers support for **Per core**, **Per core size**, and **Per market and core size** pricing. These options are priced per hour and billed monthly.

When you create a transactable offer, it's important to understand the pricing, billing, invoicing, and payout considerations before you select an offer type and create your offer. To learn more, see Commercial marketplace online stores.

Sample offer

After your offer is published, the listing options you chose appear as buttons in the upper-left corner of the listing page in the online store. For example, the following image shows an offer listing page in the Microsoft AppSource online store with the **Get It Now** and **Test Drive** buttons:



Listing and pricing options by online store

Based on various criteria, we determine whether your offer is listed on Azure Marketplace, Microsoft AppSource, or both online stores. For more information about the differences between the two online stores, see Commercial marketplace online stores.

The following table shows the options that are available for different offer types and add-ins, and which online stores your offer can be listed on.

OFFER TYPES AND ADD-INS	CONTACT ME	FREE TRIAL	GET IT NOW (FREE)	BYOL	GET IT NOW (TRANSACT)
Azure Virtual Machine				Azure Marketplace	Azure Marketplace
Azure Application			Azure Marketplace	Azure Marketplace	Azure Marketplace
Azure Container			Azure Marketplace	Azure Marketplace	

OFFER TYPES AND ADD-INS	CONTACT ME	FREE TRIAL	GET IT NOW (FREE)	BYOL	GET IT NOW (TRANSACT)
IoT Edge module			Azure Marketplace	Azure Marketplace	
Managed service				Azure Marketplace	
Consulting service	Both online stores				
SaaS	Both online stores	Both online stores	Both online stores		Both online stores *
Microsoft 365 App	AppSource	AppSource			AppSource **
Dynamics 365 Business Central	AppSource	AppSource			
Dynamics 365 for Customer Engagements & Power Apps	AppSource	AppSource			
Dynamics 365 Operations	AppSource	AppSource			
Power BI App			AppSource		

* SaaS transactable offers in AppSource only accept credit cards at this time.

** Microsoft 365 add-ins are free to install and can be monetized using an SaaS offer. For more information, see Monetize your app through the commercial marketplace.

Marketplace Rewards

Your Marketplace Rewards benefits depend on the listing option you choose. To learn more, see Your commercial marketplace benefits.

If your offer is transactable, you will earn benefits as you increase your billed sales.

Non-transactable offers earn benefits based on whether or not a free trial is attached.

Next steps

To choose an offer type to create, see Publishing guide by offer type.

Commercial marketplace transact capabilities

11/22/2021 • 10 minutes to read • Edit Online

This article describes pricing, billing, invoicing and payout considerations for *transactable* offers sold through the commercial marketplace. For information about publishing non-transactable (free or BYOL) offers, see Introduction to listing options.

> **TIP**
>
> To see the customer's view of purchasing in the commercial marketplace, see Azure Marketplace purchasing. For SaaS offers, see Purchase SaaS apps on Microsoft AppSource.

Transactions by listing option

Either the publisher or Microsoft is responsible for managing software license transactions for offers in the commercial marketplace. The listing option you choose for your offer determines who manages the transaction. For availability and explanations of each publishing option, see Introduction to listing options.

Transact publishing option

Choosing to sell through Microsoft takes advantage of Microsoft commerce capabilities and provides an end-to-end experience from discovery and evaluation to purchase and implementation. A *transactable* offer is one in which Microsoft facilitates the exchange of money for a software license on the publisher's behalf. Transact offers are billed against an existing Microsoft subscription or credit card, allowing Microsoft to host cloud marketplace transactions on behalf of the publisher.

You choose the transact option when you create a new offer in Partner Center. This option will appear only if transact is available for your offer type.

Transact overview

When using the transact option, Microsoft enables the sale of third-party software and deployment of some offer types to the customer's Azure subscription. The publisher must consider the billing of infrastructure fees and your own software licensing fees when selecting a pricing model for an offer.

The transact publishing option is currently supported for the following offer types:

OFFER TYPE	BILLING CADENCE	METERED BILLING	PRICING MODEL
Azure Application (Managed application)	Monthly	Yes	Usage-based
Azure Virtual Machine	Monthly*	No	Usage-based, BYOL
Software as a service (SaaS)	Monthly and annual	Yes	Flat rate, per user, usage-based.

* Azure Virtual Machine offers support usage-based billing plans. These plans are billed monthly for hourly use of the subscription based on per core, per core size, or per market and core size usage.

Metered billing

The *Marketplace metering service* lets you specify pay-as-you-go (consumption-based) charges in addition to monthly or annual charges included in the contract (entitlement). You can charge usage costs for marketplace metering service dimensions that you specify such as bandwidth, tickets, or emails processed. For more information about metered billing for SaaS offers, see Metered billing for SaaS using the commercial marketplace metering service. For more information about metered billing for Azure Application offers, see Managed application metered billing.

Billing infrastructure costs

For **virtual machines** and **Azure applications**, Azure infrastructure usage fees are billed to the customer's Azure subscription. Infrastructure usage fees are priced and presented separately from the software provider's licensing fees on the customer's invoice.

For **SaaS Apps**, the publisher must account for Azure infrastructure usage fees and software licensing fees as a single cost item. It is represented as a flat fee to the customer. The Azure infrastructure usage is managed and billed to the publisher directly. Actual infrastructure usage fees are not seen by the customer. Publishers typically opt to bundle Azure infrastructure usage fees into their software license pricing. Software licensing fees aren't metered or based on user consumption.

Pricing models

Depending on the transaction option used, subscription charges are as follows:

- **Subscription pricing**: Software license fees are presented as a monthly or annual, recurring subscription fee billed as a flat rate or per-seat. Recurrent subscription fees are not prorated for mid-term customer cancellations, or unused services. Recurrent subscription fees may be prorated if the customer upgrades or downgrades their subscription in the middle of the subscription term.
- **Usage-based pricing**: For Azure Virtual Machine offers, customers are charged based on the extent of their use of the offer. For Virtual Machine images, customers are charged an hourly Azure Marketplace fee, as set by the publisher, for use of virtual machines deployed from the VM images. The hourly fee may be uniform or varied across virtual machine sizes. Partial hours are charged by the minute. Plans are billed monthly.
- **Metered pricing**: For Azure Application offers and SaaS offers, publishers can use the Marketplace metering service to bill for consumption based on the custom meter dimensions they configure. These changes are in addition to monthly or annual charges included in the contract (entitlement). Examples of custom meter dimensions are bandwidth, tickets, or emails processed. Publishers can define one or more metered dimensions for each plan but a maximum of 30 per offer. Publishers are responsible for tracking individual customer usage, with each meter defined in the offer. Events should be reported to Microsoft within an hour of occurrence. Microsoft charges customers based on the usage information reported by publishers for the applicable billing period.

> **NOTE**
> Offers that are billed according to consumption after a solution has been used are not eligible for refunds.

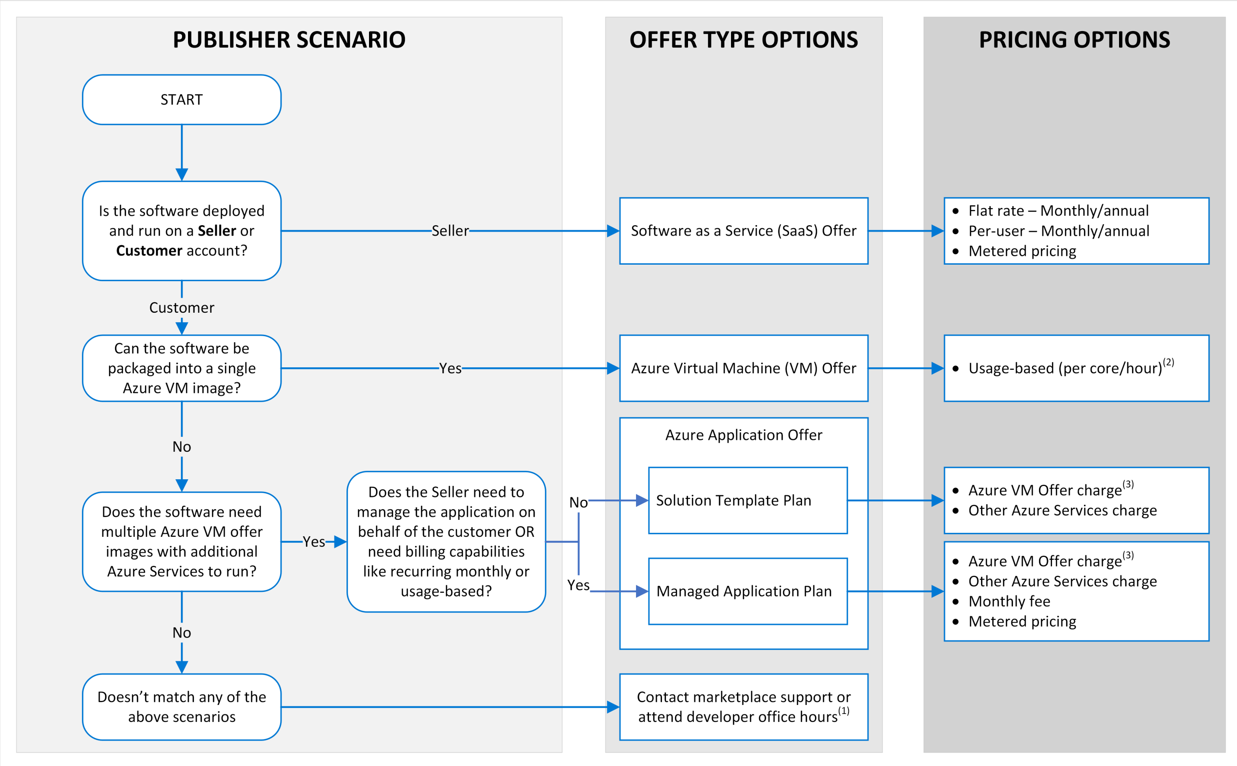
Publishers who want to change the usage fees associated with an offer, should first remove the offer (or the specific plan within the offer) from the commercial marketplace. Removal should be done in accordance with the requirements of the Microsoft Publisher Agreement. Then the publisher can publish a new offer (or plan within an offer) that includes the new usage fees. For information, about removing an offer or plan, see Stop distribution of an offer or plan.

Determine offer type and pricing plan

Use this flowchart to determine the appropriate *transactable* offer type and pricing plan to sell your software in the commercial marketplace. This chart assumes you, the publisher, have a clear understanding of your software delivery and licensing/billing models.

Generally, SaaS offers are a good fit if your customers just want to subscribe to your service and use it online. With SaaS, the publisher (you) host the software in your cloud infrastructure, managing technical infrastructure, app software, and data management responsibilities.

Virtual Machine and Azure Application offers are a good fit if you want customers to deploy, manage, and run your packaged app or service (as a VM Image and/or other Azure services in the ARM template) in their own cloud infrastructure.



[1] Contact Microsoft Office Hours or support.

[2] VM offer images can be included in the Azure App offer to increase pricing flexibility.

[3] Customer pays the infrastructure costs since Azure services are deployed on the customer tenant for VM and Azure App offers.

Usage-based and subscription pricing

When publishing an offer as a usage-based or subscription transaction, Microsoft provides the technology and services to process software license purchases, returns, and charge-backs. In this scenario, the publisher authorizes Microsoft to act as an agent for these purposes. The publisher allows Microsoft to facilitate the software licensing transaction. The publisher, however, retains the designation as the seller, provider, distributor, and licensor.

Microsoft enables customers to order, license, and use your software, subject to the terms and conditions of both Microsoft's commercial marketplace and your end-user licensing agreement. You must either provide your own end-user licensing agreement or select the Standard Contract when creating the offer.

Free software trials

For transact publishing scenarios, you can make a software license available free for 30 to 120 days, depending on the subscription. Customers will be charged for applicable Azure infrastructure usage.

Examples of pricing and store fees

Usage-based

Usage-based pricing has the following cost structure:

YOUR LICENSE COST	$1.00 PER HOUR
Azure usage cost (D1/1-Core)	$0.14 per hour
Customer is billed by Microsoft	*$1.14 per hour*

In this scenario, Microsoft bills $1.14 per hour for use of your published VM image.

MICROSOFT BILLS	$1.14 PER HOUR
Microsoft pays you 97% of your license cost	$0.97 per hour
Microsoft keeps 3% of your license cost	$0.03 per hour
Microsoft keeps 100% of the Azure usage cost	$0.14 per hour

Bring Your Own License (BYOL)

BYOL has the following cost structure:

YOUR LICENSE COST	LICENSE FEE NEGOTIATED AND BILLED BY YOU
Azure usage cost (D1/1-Core)	$0.14 per hour
Customer is billed by Microsoft	*$0.14 per hour*

In this scenario, Microsoft bills $0.14 per hour for use of your published VM image.

MICROSOFT BILLS	$0.14 PER HOUR
Microsoft keeps the Azure usage cost	$0.14 per hour
Microsoft keeps 0% of your license cost	$0.00 per hour

SaaS app subscription

SaaS subscriptions can be priced at a flat rate or per user on a monthly or annual basis. If you enable the **Sell through Microsoft** option for a SaaS offer, you have the following cost structure:

YOUR LICENSE COST	$100.00 PER MONTH
Azure usage cost (D1/1-Core)	Billed directly to the publisher, not the customer
Customer is billed by Microsoft	*$100.00 per month (publisher must account for any incurred or pass-through infrastructure costs in the license fee)*

In this scenario, Microsoft bills $100.00 for your software license and pays out $97.00.

MICROSOFT BILLS	$100.00 PER MONTH
Microsoft pays you 97% of your license cost	$97.00 per month
Microsoft keeps 3% of your license cost	$3.00 per month

Commercial marketplace service fees

We charge a 3% standard store service fee when customers purchase your transact offer from the commercial marketplace.

Customer invoicing, payment, billing, and collections

Invoicing and payment: You can use the customer's preferred invoicing method to deliver subscription or PAYGO software license fees.

Enterprise Agreement: If the customer's preferred invoicing method is the Microsoft Enterprise Agreement, your software license fees will be billed using this invoicing method as an itemized cost, separate from any Azure-specific usage costs.

Credit cards and monthly invoice: Customers can pay using a credit card and a monthly invoice. In this case, your software license fees will be billed just like the Enterprise Agreement scenario, as an itemized cost, separate from any Azure-specific usage costs.

Free credits and monetary commitment: Some customers choose to prepay Azure with a monetary commitment in the Enterprise Agreement or have been provided free credits to use for Azure usage. Although these credits can be used to pay for Azure usage, they can't be used to pay for publisher software license fees.

Billing and collections: Publisher software license billing is presented using the customer-selected method of invoicing and follows the invoicing timeline. Customers without an Enterprise Agreement in place are billed monthly for marketplace software licenses. Customers with an Enterprise Agreement are billed monthly via an invoice that is presented quarterly.

When subscription or Pay-as-You-Go (also called usage-based) pricing models are selected, Microsoft acts as the agent of the publisher and is responsible for all aspects of billing, payment, and collection.

Publisher payout and reporting

Any software licensing fees collected by Microsoft as an agent are subject to a 3% store service fee unless otherwise specified and are deducted at the time of publisher payout.

Customers typically purchase using the Enterprise Agreement or a credit-card enabled pay-as-you-go agreement. The agreement type determines billing, invoicing, collection, and payout timing.

> **NOTE**
>
> All reporting and insights for the transact publishing option are available via the Analytics section of Partner Center.

Billing questions and support

For more information and legal policies, see the Microsoft Publisher Agreement. For help with billing questions, contact commercial marketplace publisher support.

Transact requirements

This section covers transact requirements for different offer types.

Requirements for all offer types

- A Microsoft account and financial information are required for the transact publishing option, regardless of

the offer's pricing model.
- Mandatory financial information includes payout account and tax profile.

For more information on setting up these accounts, see Manage your commercial marketplace account in Partner Center.

Requirements for specific offer types

The ability to transact through Microsoft is available for the following commercial marketplace offer types only. This list provides the requirements for making these offer types transactable in the commercial marketplace.

- **Azure application (solution template and managed application plans**: In some cases, Azure infrastructure usage fees are passed to the customer separately from software license fees, but on the same billing statement. However, if you configure a managed app plan for ISV infrastructure charges, the Azure resources are billed to the publisher, and the customer receives a flat fee that includes the cost of infrastructure, software licenses, and management services.

- **Azure Virtual Machine**: Select from free, BYOL, or usage-based pricing models. On the customer's Azure bill, Microsoft presents the publisher software license fees separately from the underlying Azure infrastructure fees. Azure infrastructure fees are driven by use of the publisher's software.

- **SaaS application**: Must be a multitenant solution, use Azure Active Directory for authentication, and integrate with the SaaS Fulfillment APIs. Azure infrastructure usage is managed and billed directly to you (the publisher), so you must account for Azure infrastructure usage fees and software licensing fees as a single cost item. For detailed guidance, see How to plan a SaaS offer for the commercial marketplace.

Private plans

You can create a private plan for an offer, complete with negotiated, deal-specific pricing, or custom configurations.

Private plans enable you to provide higher or lower pricing to specific customers than the publicly available plan. Private plans can be used to discount or add a premium to an offer. Private plans can be made available to one or more customers by listing their Azure subscription at the plan-level.

Next steps

- For listing and pricing options by online store, see Introduction to listing options.
- Publishing guide by offer type.
- Plans and pricing for commercial marketplace offers

ISV app license management

11/22/2021 • 4 minutes to read • Edit Online

Applies to the following offer type:

- Dynamics 365 for Customer Engagement & Power Apps

ISV app license management enables independent software vendors (ISVs) who build solutions using Dynamics 365 suite of products to manage and enforce licenses for their solutions using systems provided by Microsoft. By adopting this approach you can:

- Enable your customers to assign and unassign your solution's licenses using familiar tools such as Microsoft 365 Admin Center, which they use to manage Office and Dynamics licenses.
- Have the Power Platform enforce your licenses at runtime to ensure that only licensed users can access your solution.
- Save yourself the effort of building and maintaining your own license management and enforcement system.

> **NOTE**
> ISV app license management is only available to ISVs participating in the ISV Connect program. Microsoft is not involved in the sale of licenses.

Prerequisites

To manage your ISV app licenses, you need to comply with the following pre-requisites.

1. Have a valid Microsoft Partner Network account.
2. Be signed up for commercial marketplace program. For more information, see Create a commercial marketplace account in Partner Center.
3. Be signed up for the ISV Connect program. For more information, see Microsoft Business Applications Independent Software Vendor (ISV) Connect Program onboarding guide.
4. Your developer team has the development environments and tools required to create Dataverse solutions. Your Dataverse solution must include model-driven applications (currently these are the only type of solution components that are supported through the license management feature).

High-level process

This table illustrates the high-level process to manage ISV app licenses:

STEP	DETAILS
Step 1: Create offer	The ISV creates an offer in Partner Center and chooses to manage licenses for this offer through Microsoft. This includes defining one or more licensing plans for the offer. For more information, see Create a Dynamics 365 for Customer Engagement & Power Apps offer on Microsoft AppSource.

STEP	DETAILS
Step 2: Update package	The ISV creates a solution package for the offer that includes license plan information as metadata, and uploads it to Partner Center for publication to Microsoft AppSource. To learn more, see Adding license metadata to your solution.
Step 3: Purchase licenses	Customers discover the ISV's offer in AppSource or directly on the ISV's website. Customers purchase licenses for the plans they want directly from the ISV (these offers are not purchasable through AppSource at this time).
Step 4: Register deal	The ISV registers the purchase with Microsoft in Partner Center. As part of deal registration, the ISV will specify the type and quantity of each licensing plan purchased by the customer.
Step 5: Manage licenses	The license plans will appear in Microsoft 365 Admin Center for the customer to assign to users or groups in their organization. The customer can also install the application in their tenant via the Power Platform Admin Center.
Step 6: Perform license check	When a user within the customer's organization tries to run an application, Microsoft checks to ensure that user has a license before permitting them to run it. If they don't have a license, the user sees a message explaining that they need to contact an administrator for a license.
Step 7: View reports	ISVs can view information on provisioned and assigned licenses over a period of time and by geography.

Enabling app license management through Microsoft

When creating an offer, there are two check boxes on the Offer setup tab used to enable ISV app license management on an offer.

Enable app license management through Microsoft check box

Here's how it works:

- After you select the **Enable app license management through Microsoft** box, you can define licensing plans for your offer.
- Customers will see a **Get it now** button on the offer listing page in AppSource. Customers can select this button to contact you to purchase licenses for the app.

Allow customers to install my app even if licenses are not assigned check box

After you select the first box, the **Allow customers to install my app even if licenses are not assigned** box appears. This option is useful if you are employing a "freemium" licensing strategy whereby you want to offer some basic features of your solution for free to all users and charge for premium features. Conversely, if you want to ensure that only tenants who currently own licenses for your product can download it from AppSource, then don't select this option.

> **NOTE**
>
> If you choose this option, you need to configure your solution package to not require a license.

Here's how it works:

- All AppSource users see the **Get it now** button on the offer listing page along with the **Contact me** button and will be permitted to download and install your offer.
- If you do not select this option, then AppSource checks that the user's tenant has at least one license for your solution before showing the **Get it now** button. If there is no license in the user's tenant then only the **Contact Me** button is shown.

For details about configuring an offer, see How to create a Dynamics 365 for Customer Engagement & Power App offer.

Offer listing page on AppSource

After your offer is published, the options you chose will drive which buttons appear to a user. This screenshot shows an offer listing page on AppSource with the **Get it now** and **Contact me** buttons.

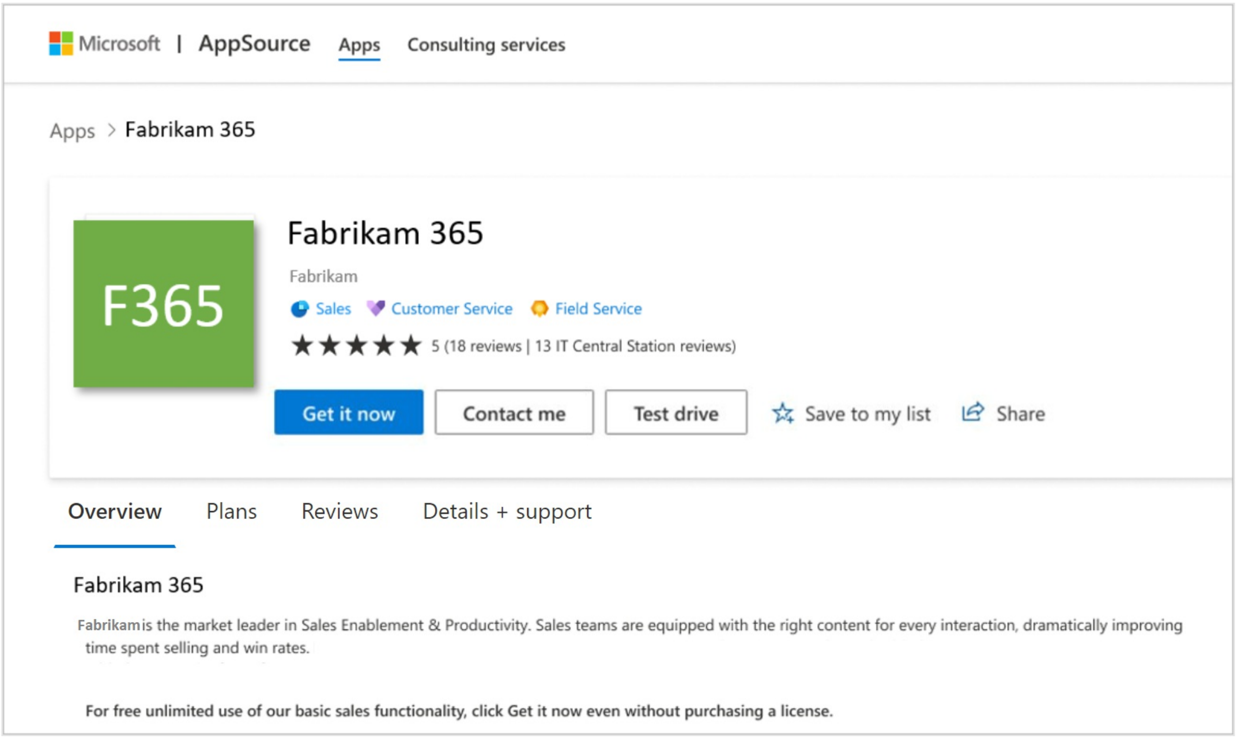


Figure 1: Offer listing page on Microsoft AppSource

Next steps

- Plan a Dynamics 365 offer
- How to create a Dynamics 365 for Customer Engagement & Power App offer

Private plans in the Microsoft commercial marketplace

11/22/2021 • 3 minutes to read • Edit Online

Publishers use private plans so they are only visible to targeted customers. This article discusses the options and benefits of private plans.

TIP
To see the customer's view of private plans in the commercial marketplace, see Private plans in Azure Marketplace or Private plans in Microsoft AppSource.

Unlock enterprise deals with private plans

Private plans let publishers offer private, customized solutions to targeted customers with capabilities that enterprises require:

- *Negotiated pricing* lets publishers extend discounts and off-list pricing from publicly available offers.
- *Private terms and conditions* enable publishers to tailor terms and conditions to a specific customer.
- *Specialized configurations* let publishers tailor their Virtual Machines, Azure Applications, and software as a service (SaaS) to an individual customer's needs. This option also enables publishers to provide preview access to new product features, before launching them to all customers.

Private plans let publishers take advantage of the scale and global availability of a public marketplace, with the flexibility and control needed to negotiate and deliver custom deals and configurations. Enterprises can now buy and sell in ways they expect.

Create private plans

For *new or existing offers with plans*, publishers can easily create new, private variations by creating new plans (formerly known as SKUs) and marking them as private. Each offer can have up to 45 private plans.

Private plans are available for the following offer types:

- Azure Virtual Machine
- Azure Application (implemented as solution templates or managed applications)
- Managed Service
- SaaS offers

Private plans are components of an offer and are only visible and purchasable by the targeted customers. Private plans are visible and purchasable only by the targeted customers. Private plans can be made available to customers in both Azure Global and Azure Government.

Private plans can reuse the base images and/or offer metadata already published for a public plan. This option lets publishers create multiple private variations of a public offer without having to publish multiple versions of the same base image and offer metadata. For Azure Virtual Machine and Azure application offers only, when a private plan shares a base image with a public plan, any changes to the offer's base image will propagate across all public and private plans using that base image.

For *new offers that only include private plans*, publishers can create their offers as any other offer, and then mark the plans as private. The offers that only have private plans will not be discoverable or accessible in the Azure portal or Microsoft AppSource by customers who are not associated with the offer.

> **NOTE**
>
> An offer that contains only private plans will not be visible in the public Azure Marketplace.

Target customers with private plans

For both new and existing private plans, publishers can target customers using subscription identifiers. For Azure Application and Managed Service offers, publishers can constrain availability of a private plan to individual Azure subscription IDs. For SaaS offers, publishers can associate Azure Active Directory tenant IDs to constrain the availability of a private plan. For Virtual Machine offers, publishers can assign the audience that will have access to a private plan using Azure tenant IDs, subscription IDs, or both. For any of these offer types, up to 10 IDs can be added manually or a CSV spreadsheet can be imported if more than 10 IDs are required.

Once an offer has been certified and published, customers can be updated or removed from the plan by using the Sync Private Audiences feature. This capability enables publishers to quickly and easily update the list of customers to which the private plan is presented without certifying or publishing the offer again.

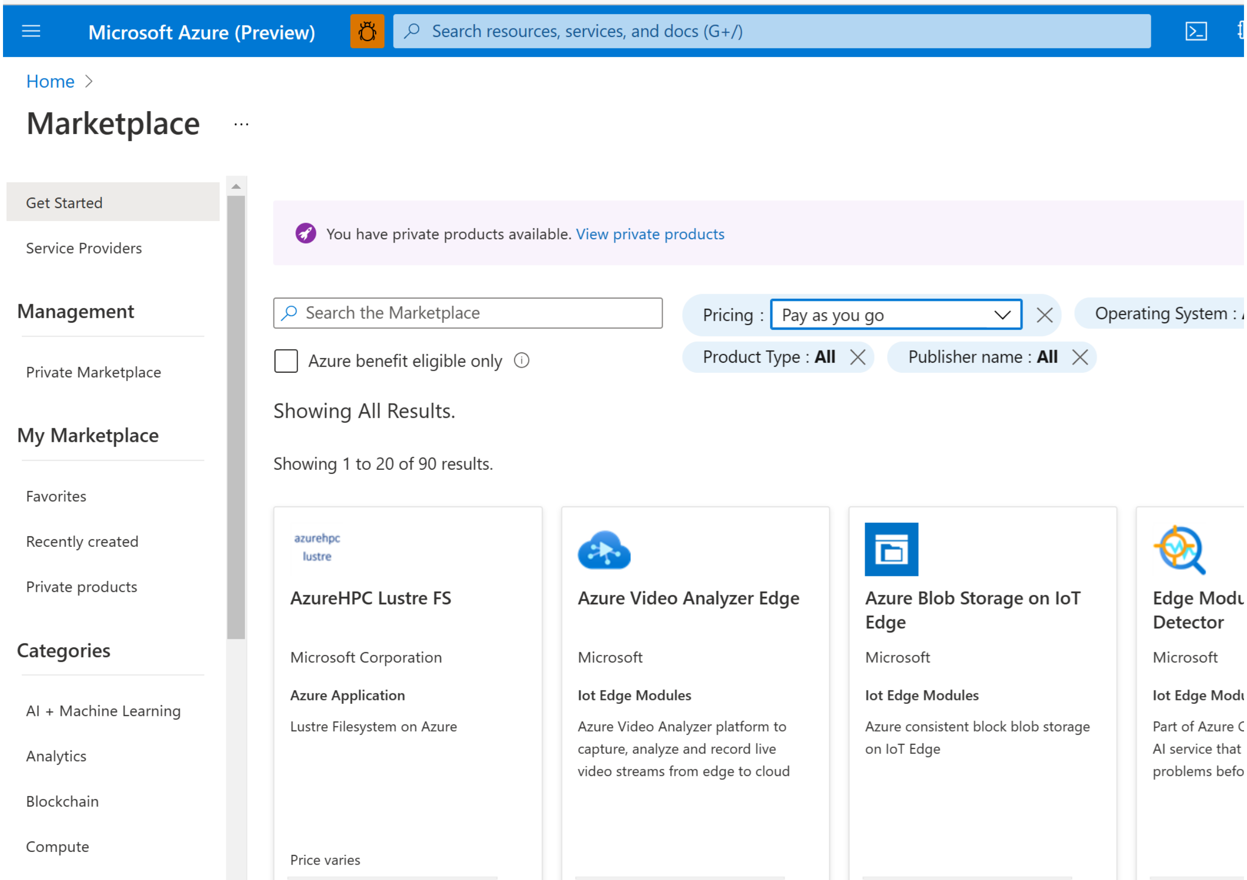
Deploying a private plan

Once signed into the Azure portal, customers can follow these steps to select your private plans.

1. Sign in to the Azure portal.
2. Under **Azure services**, select **Create a resource**.
3. On the **New** page, next to **Azure Marketplace**, select **See all**. The Marketplace page appears.
4. In the left navigation, select **Private products**.

> **NOTE**
>
> Private plans are only discoverable in the Azure portal or Microsoft AppSource. They are not visible in Azure Marketplace. To learn more about publishing to the different commercial marketplace online stores, see Introduction to listing options.

Private plans will also appear in search results and can be deployed via command line and Azure Resource Manager templates, like any other offers.



NOTE

Private plans are not supported with subscriptions established through a reseller of the Cloud Solution Provider (CSP) program.

Plans and pricing for commercial marketplace offers

11/22/2021 • 10 minutes to read • Edit Online

A plan defines an offer's scope and limits, and the associated pricing when applicable. For example, depending on the offer type, you can select regional markets and choose whether a plan is visible to the public or only to a private audience. Some offer types support recurring subscriptions, some support usage-based pricing, and some let a customer purchase the offer with a license they have purchased directly from the publisher. This gives you the flexibility to provide your customers with different technical and pricing options, when applicable.

You can create up to 100 plans for each offer that supports plans, and up to 45 of those plans can be private. You can create paid plans only for Azure virtual machine offers, Azure application offers (managed applications), and software as a service (SaaS) offers. When you choose to sell any of these offers through Microsoft (transactable offers), you are required to create at least one plan. You can create plans for some of the other offer types, but the plans for those offer types do not include pricing options.

> **TIP**
> A transactable offer is one in which Microsoft facilitates the exchange of money for a software license on the publisher's behalf.

Plans by offer type

The following table shows the plan options for each offer type. The following sections will explain more about these options.

OFFER TYPE	PLANS WITH PRICING OPTIONS	PLANS WITHOUT PRICING OPTIONS	PRIVATE AUDIENCE OPTION
Azure managed application	✔		✔
Azure solution template		✔	✔
Azure container		✔ (BYOL)	
IoT Edge module		✔	
Managed service		✔ (BYOL)	✔
Software as a service	✔		✔
Azure virtual machine	✔		✔

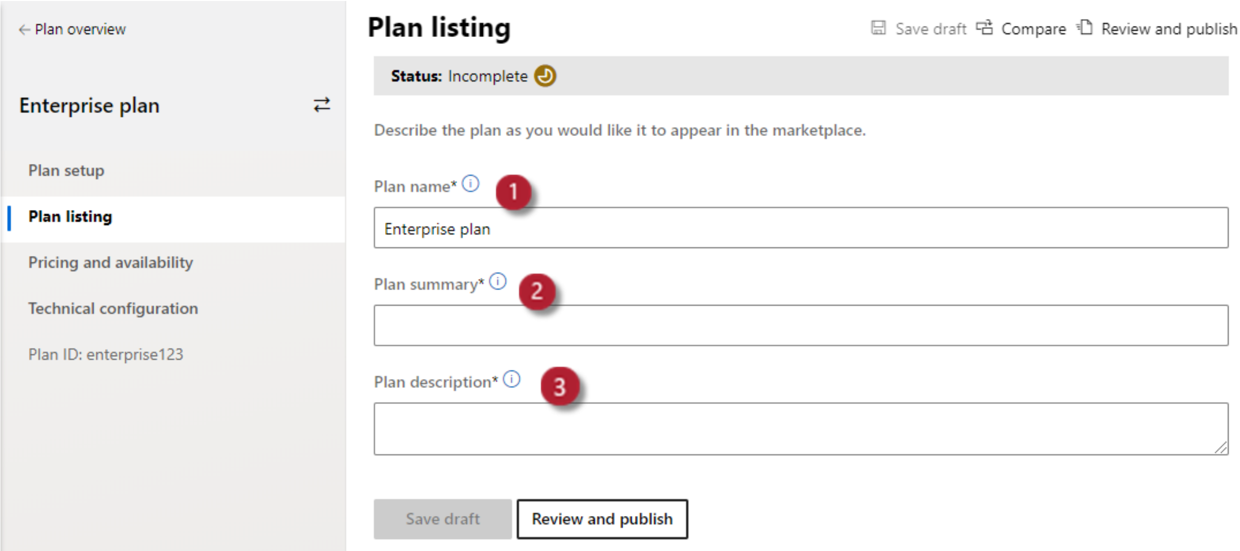
Plans are not supported for the following offer types:

- Consulting service
- Dynamics 365 Business Central
- Dynamics 365 Customer Engagement & Power Apps
- Dynamics 365 for Operations

- Power BI app

Plan information

Each offer type requires different information when you create a new plan. You can find links to offer-specific articles in Publishing guide by offer type. Once you create a new plan in the **Plan overview** page, you will see different tabs, such as **Plan listing** or **Pricing and availability** to configure different details for your plan. Each tab will show a status of incomplete or complete as you work through these fields.



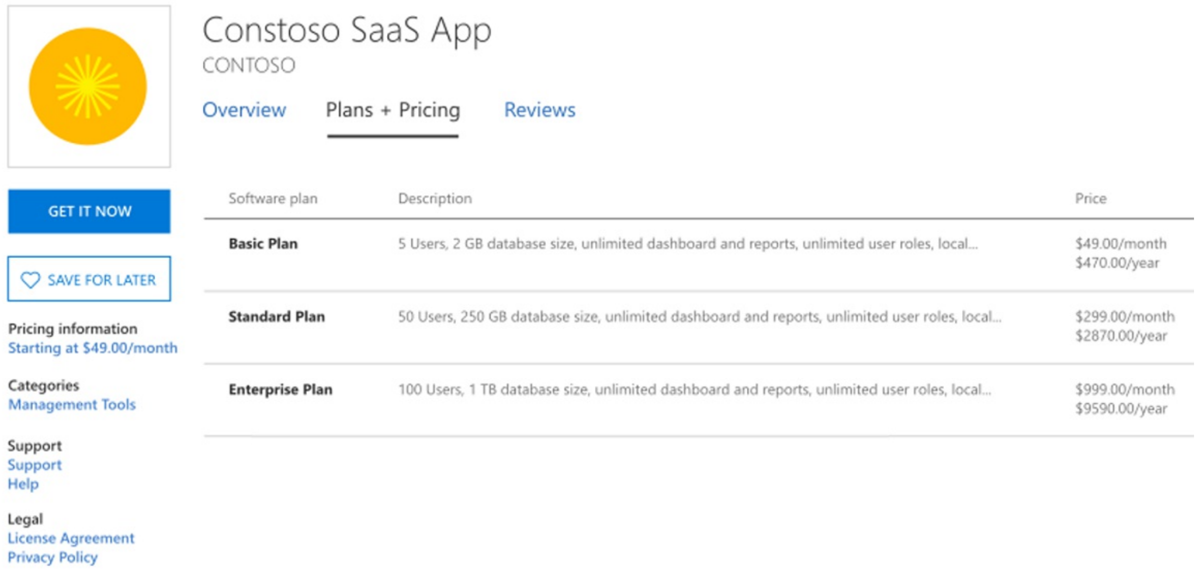
There are a few common details to complete for a new plan:

- **Plan ID**: Create a unique ID for each plan in this offer. Use a maximum of 50 characters: only lowercase, alphanumeric characters, dashes, and underscores. This ID will be visible to customers in the product URL and Azure Resource Manager templates (if applicable). You can't change this ID after you publish the offer.
- **Plan Name**: (Callout 1 in the image above.) Create a unique name for each plan in this offer. Use a maximum of 50 characters. The plan name is used to differentiate software plans that may be a part of the same offer (for example, Offer name: Standard plan, and Enterprise plan). Customers will see this name when deciding which plan to select within your offer.
- **Plan summary**: (Callout 2 in the image above.) This summary appears in Azure Marketplace search results and can contain up to 100 characters.

> **NOTE**
>
> This field doesn't apply to SaaS offers.

- **Plan description**: (Callout 3 in the image above.) Add a plan description that explains what makes this plan unique from other plans for your offer. Use a maximum of 500 characters. This content will appear to your customers on the offer listing page(s) as they browse through and select a plan for your offer.

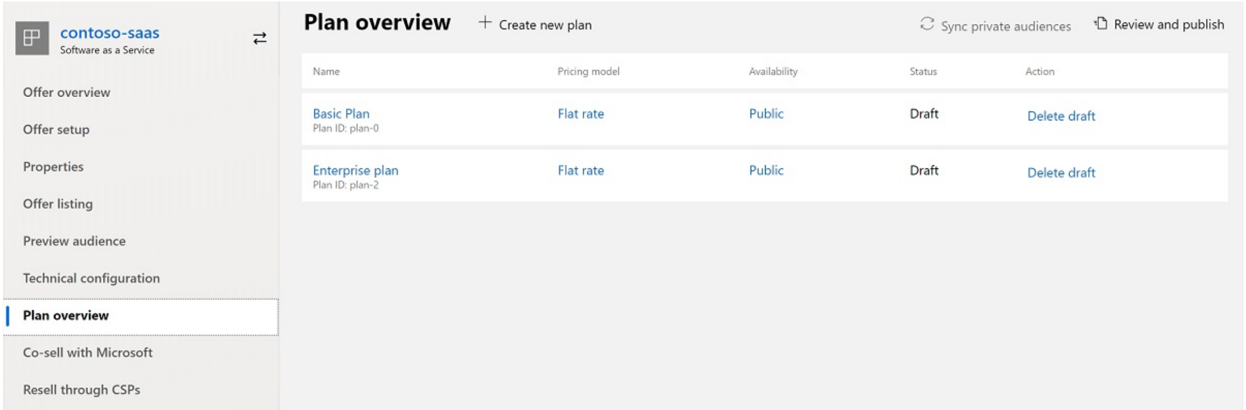
The plan name and description appear on the offer listing page in the commercial marketplace online store(s). The following screenshot shows three plans for a SaaS offer listing in Azure Marketplace.



Once you create your plans, the **Plan overview** page shows a list of your plans' name, ID, other details, current publishing status, and any available actions. The available actions will depend on the status of your plan and might include:

- If the plan status is **Draft** – Delete draft.
- If the plan status is **Live** – Stop distribution of the plan or Sync private audience.

The following screenshot shows two draft offers.



Pricing and availability

The commercial marketplace operates on an agency model, whereby publishers set prices, Microsoft bills customers, and Microsoft pays revenue to publishers while withholding an agency fee. You define your offer's markets, visibility, and pricing (when applicable) on the **Pricing and availability** or **Availability** tab.

- **Markets**: Every plan must be available in at least one market. You have the option to select only "Tax Remitted" countries, in which Microsoft remits sales and use tax on your behalf.
- **Pricing**: Pricing models only apply to plans for Azure managed application, SaaS, and Azure virtual machine offers. All plans for the same offer must use the same pricing model.
- **Plan visibility**: Depending on the offer type, you can define a private audience or hide the offer or plan from Azure Marketplace. This is explained in more detail in Plan visibility later in this article.

> **TIP**
>
> We recommend that you create plans that are best suited to the usage patterns of your target customer base. This reduces users from frequently switching plans based on their changes in usage. For an example of a SaaS offer with three metered billing plans, see Sample offer.

Pricing models

You must associate a pricing model with each plan for the following offer types. Each of these offer types have different available pricing models:

- **Azure managed application**: flat rate (monthly) and usage-based pricing (metering service dimensions).
- **Software as a service**: flat rate (monthly or annual), per user, and usage-based pricing (metering service dimensions).
- **Azure virtual machine**: Bring your own license (BYOL) and usage-based pricing. For a usage-based pricing model, you can charge per core, per core size, or per market and core size. A BYOL license model does not allow for additional, usage-based charges. (BYOL virtual machine offers do not require a pricing model.)

All plans for the same offer must use the same pricing model. For example, a SaaS offer cannot have one plan that's flat rate and another plan that’s per user. See specific offer documentation for detailed information.

If you have already set prices for your plan in United States Dollars (USD) and add another market location, the price for the new market will be calculated according to the current exchange rates. After saving your changes, you will see an **Export prices (xlsx)** link that you can use to review and change the price for each market before publishing.

> **IMPORTANT**
>
> After your offer is published, the pricing model choice cannot be changed.

Flat-rate SaaS offers and managed application offers support metered billing using the marketplace metering service. This is a usage-based billing model that lets you define non-standard units, such as bandwidth or emails, that your customers will pay on a consumption basis. See related documentation to learn more about metered billing for managed applications and SaaS apps.

Custom prices

To set custom prices in an individual market, export, modify, and then import the pricing spreadsheet. You're responsible for validating this pricing and owning these settings.

Review your prices carefully before publishing, as there are some restrictions on what can change after a plan is published:

- After a plan is published, the pricing model can't be changed.
- After a billing term is published for a plan, it can't be removed later.
- After a price for a market in your plan is published, it can't be changed later.

Prices set in United States Dollars (USD) are converted into the local currency of all selected markets using the current exchange rates when saved. Validate these prices before publishing by exporting the pricing spreadsheet and reviewing the price in each market you selected.

1. You must first save your pricing changes to enable export of pricing data. Near the bottom of the **Pricing and availability** tab, select **Save draft**.
2. Under **Pricing**, select the **Export pricing data** link.
3. Open the exportedPrice.xlsx file in Microsoft Excel.

4. In the spreadsheet, make the updates you want to your pricing information and then save the .CSV file.

> **NOTE**
>
> You may need to enable editing in Excel before you can update the file.

5. On the **Pricing and availability** tab, under **Pricing**, select the **Import pricing data** link.
6. In the dialog box that appears, select **Yes**.
7. Select the exportedPrice.xlsx file you updated, and then select **Open**.

Plan visibility

You can make plans for some offer types publicly available or available to only a specific (private) audience. Offers with private plans will be published to the Azure portal. Learn more about private plans in Private plans in the Microsoft commercial marketplace.

You define your private audience by using Azure tenant IDs or Azure subscription IDs, depending on the offer type. You can enter up to 10 IDs manually or import up to 10,00 subscription IDs or 20,000 tenant IDs (as applicable) with a .csv file. You can also define private audiences for consulting services and Dynamics 365 offers that do not have plans.

After your offer is published with a private plan, you can update the audience or choose to make the plan available to everyone. After a plan is published as visible to everyone, it must remain visible to everyone and cannot be configured as a private plan again.

> **NOTE**
>
> A private audience differs from a preview audience. On the **Availability** page for some offer types, you can define an audience who can preview your offer prior to the offer being published live in the commercial marketplace. While the private audience designation only applies to a specific plan, the preview audience can view all plans (private or not), but only during the limited preview period while the plan is being tested and validated.

You can also choose to hide the plan entirely from Azure Marketplace if your offer will be deployed as part of a managed application or solution template.

Free trials

You can enable a free trial on plans for transactable Azure virtual machine and SaaS offers.

> **NOTE**
>
> This section explains free trials on paid plans for offers that are sold through Microsoft. This is different than free trial listings from partners who choose to process their transactions independently. You can create a free trial listing (that is not associated with a plan) for the following offer types:
>
> - Azure virtual machine
> - SaaS
> - Dynamics 365 Business Central
> - Dynamics 365 for Customer Engagement & Power Apps
> - Dynamics 365 for Operations
>
> For more information about listing options, see Determine your publishing option.

Free trials are supported for all billing models except metered plans. SaaS plans allow for 1-month free trials.

Azure virtual machine plans allow for 1, 3, or 6-month free trials.

When a customer selects a free trial, we collect their billing information, but we don't start billing the customer until the trial is converted to a paid subscription. Free trials automatically convert to a paid subscription at the end of the trial, unless the customer cancels the subscription before the trial period ends.

During the trial period, customers can evaluate any of the supported plans within the same offer that has a free trial enabled. If they switch to a different trial within the same offer, the trial period doesn't restart. For example, if a customer uses a free trial for 15 days and then switches to a different free trial for the same offer, the new trial period will account for 15 days used. The free trial that the customer was evaluating when the trial period ends is the one that's automatically converted to a paid subscription.

After a customer selects a free trial for a plan, they can't convert to a paid subscription for that plan until the trial period has ended. If a customer chooses to convert to a different plan within the offer that doesn't have a free trial, the conversion will happen, but the free trial will end immediately and any data will be lost.

> **NOTE**
>
> After a customer starts paying for a plan, they can't get a free trial on the same offer again, even if they switch to another plan that supports free trials.

To obtain information on customer subscriptions currently participating in a free trial, use the new API property `isFreeTrial`, which will be marked as true or false. For more information, see the SaaS Get Subscription API.

Next steps

- To learn how to add or update plans on an existing offer, see Update an existing offer in the commercial marketplace.
- To learn more about transaction options and associated pricing models, see Commercial marketplace transact capabilities.

Standard Contract for Microsoft commercial marketplace

11/22/2021 • 2 minutes to read • Edit Online

Microsoft offers a Standard Contract for Microsoft commercial marketplace. This helps to simplify the procurement process for customers, reduce legal complexity for software vendors, and facilitate transactions in the marketplace. Rather than crafting custom terms and conditions, as a commercial marketplace publisher, you can choose to offer your software under the Standard Contract, which customers only need to vet and accept one time.

The terms and conditions for an offer are defined when creating the offer in Partner Center. You can select to use the Standard Contract for the Microsoft commercial marketplace instead of providing your own custom terms and conditions.

NOTE

Once you publish an offer using the Standard contract for the Microsoft commercial marketplace, you won't be able to use your own custom terms and conditions. You either offer your solution under the Standard Contract *or* your own terms and conditions. Custom terms and conditions are defined at the offer level and apply to all plans; write your custom terms and conditions in the **Properties** page of your offer in Partner Center. If you'd like to modify the terms of the Standard Contract, you can do so through Standard Contract Amendments.

TIP

To see the customer's view of legal contracts in Azure Marketplace, see Legal contracts.

Standard Contract Amendments

Standard Contract Amendments allow publishers to select the Standard Contract for simplicity, and with customized terms for their product or business. Customers only need to review the amendments to the contract, if they have already reviewed and accepted the Microsoft Standard Contract.

There are two kinds of amendments available for commercial marketplace publishers:

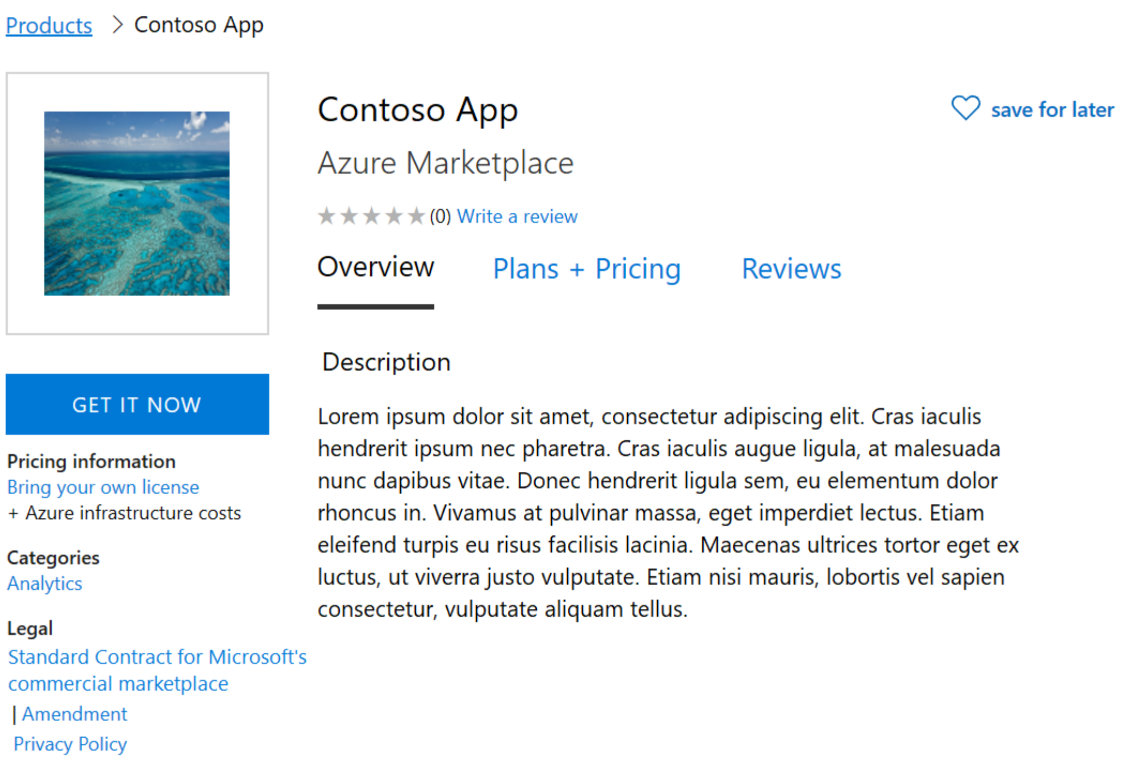
- Universal Amendments: These amendments are applied universally to the Standard Contract for all customers. Universal amendments are shown to every customer of the offer in the purchase flow. Customers must accept the terms of the Standard Contract and the amendment before they can use your offer.
- Custom Amendments: These amendments are special amendments to the Standard Contract that are targeted to specific customers only via Azure tenant IDs. Publishers can choose the tenant they want to target. Only customers from the tenant will be presented with the custom amendment terms in the offer's purchase flow. Customers must accept the terms of the Standard Contract and the amendment(s) before they can use your offer.

> **NOTE**
>
> These two types of amendments stack on top of each other. Customers targeted with custom amendments will also get the universal amendment to the Standard Contract during purchase. Amendments are limited to 4000 characters, including spaces.

You can leverage the Standard Contract for the Microsoft commercial marketplace for the following offer types: Azure Applications (Solution Templates and Managed Applications), Azure Containers, Container Apps, Virtual Machines, and SaaS.

Customer experience

During the discovery experience in Azure Marketplace or AppSource, customers will be able to see the terms associated with the offer as the Standard Contract for the Microsoft commercial marketplace and any universal amendments.



During the purchase process in the Azure portal, customers will be able to see the terms associated with the offer as the Standard Contract for the Microsoft commercial marketplace and any universal and/or tenant-specific amendments.

PRODUCT DETAILS

Contoso App

by Azure Marketplace

Standard Contract for Microsoft's commercial marketplace

| **Amendment 1** | **Amendment 2**

| **Privacy policy**

Not covered by credits ⓘ

Basic A1

by Microsoft

Terms of use | **Privacy policy**

Subscription credits apply ⓘ

Pricing for other VM sizes

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the Azure Marketplace Terms for additional details.

API

Customers may use Get-AzureRmMarketplaceTerms to retrieve the terms of an offer and accept it. The Standard Contract and associated amendments will be returned in the output of the cmdlet.

Azure Marketplace listing guidelines

11/22/2021 • 8 minutes to read • Edit Online

This article explains the requirements and guidelines for listing new offers and services on Azure Marketplace. All offers must meet the listing requirements listed below. Use the links on the right to navigate to additional requirements and checklists for specific listing types.

Listing requirements for all offers

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
1	Offer title	Briefly describes the solution offering. Matches the online promotion of the solution on the partner's website.	Contains key search words.
2	Logo	The logo displays correctly.	The logo displays correctly.
3	Offer description	• Contains 2-3 paragraphs. • Solution offering is easily understood at a glance. • Is free of spelling and grammar mistakes. • Is comprehensive and captures target audience, type of user, and why it's valuable (value proposition). • Is in paragraph narrative form with short sentences that are easy to understand.	• The target industry is outlined (if relevant). • Good style formatting, with each paragraph heading having a single sentence or phrase summarizing the content that follows and using bullet points, when appropriate, to emphasize key benefits. The objective is for the reader to understand the offering at a glance in an easy-to-view format and not have to read long paragraphs. • There is spacing between each paragraph. It reads like a car brochure. That is, it is comprehensive and describes the offering simply, without technical jargon.

<table>
<tr><th>NO.</th><th>LISTING ELEMENT</th><th>BASE REQUIREMENT</th><th>OPTIMAL REQUIREMENT</th></tr>
<tr><td>4</td><td>Categories and industries</td><td>Categories and subcategories must match offer capabilities
Do not select categories/subcategories that do not fit with your offer capabilities.</td><td>Select up to two categories, including a primary and a secondary category (optional).
Select up to two subcategories for each primary and/or secondary category. If no subcategory is selected, your offer will still be discoverable on the selected category.</td></tr>
<tr><td>5</td><td>Images</td><td>Image requirements are listed in Partner Center.
Text included in the screenshot is legible, and the image is clear.</td><td>The solution offering is easily understood at a glance.</td></tr>
<tr><td>6</td><td>Videos</td><td>No video is required but, if provided, it must play back without any errors.
If provided, it may not refer to competitor companies unless it is demonstrating a migration solution.</td><td>Ideally, the length is 3 min. or more.
The solution offer is easily understood through video content.
Provides demo of solution capabilities.</td></tr>
<tr><td>7</td><td>List status (listing options)</td><td>Must be labeled as one of the following types:
Contact Me
Trial/Get Trial Now/Start Trial/Test Drive
Buy Now/Get It Now</td><td>Customer can readily understand what the next steps are:
Try the Trial.
Buy Now.
Contact via email or phone number to arrange for Proof of Concept (POC), Assessment, or Briefing.</td></tr>
<tr><td>8</td><td>Solution pricing</td><td>Must have solution pricing tab/details, and pricing must be in the local currency of the partner solution offering.</td><td>Multiple billing options should be available with tier pricing to give customer options.</td></tr>
</table>

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
9	Learn more	Links at the bottom (under the description, not Azure Marketplace links on the left) lead to more information about the solution and are publicly available and displaying correctly.	Links to specific items (for example, spec pages on the partner site) and not just the partner home page.
10	Solution support and help	Link to at least one of the following: • Telephone numbers • Email support • Chat agents • Community forums	• All support methods are listed. • Paid support is offered free during the *Trial* or *Test Drive* period.
11	Legal	Policies or terms are available via a public URL.	

Trial offer requirements

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
	List status (Listing option)	The link must lead to a customer-led *Trial* experience.	Other listing options (for example, *Buy Now*) are also available.

SaaS application requirements

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
1	Offer title	• Must consist only of lowercase letters, alphanumeric characters, dashes, or underscores. The title can't be modified after it's published. • Describes solution offering. • Matches online promotion of solution on partner's website.	Contains key search words.

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
2	Technical information: Configuration	• For software as a service (SaaS) apps, choose whether you want only to list your app or to enable customers to purchase your app through Azure. • Select the text that you want on your offer's acquisition button: *Free*, *Free Trial*, or *Contact Me*. • In the pop-up window, select only one applicable product if your app utilizes the technology: Cortana Intelligence, Power BI Solution Templates, or Power Apps.	
3	Test drive	Select *Yes* or *No*	Customer can readily understand what the next steps are: 1. Try the Trial. 2. Buy Now. 3. Contact via email or phone number to arrange for POC, Assessment, or Briefing.
4	Online store details: Offer summary	Appears on your app's search page, and has a maximum of 100 characters.	
5	Online store details: Industries	Industries (max. 2): Select the industries that your app is best aligned and applicable to.	

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
6	Offer description	• Simple HTML is allowed, including <p>, <em>, , , , and header tags. Max. 3000 characters. • Contains 2-3 paragraphs. • Solution offering is easily understood at a glance. • Description is comprehensive and captures target audience, type of user, and why it's valuable (value proposition). • Is in paragraph narrative form, with short sentences that are easy to understand.	• Target industry is outlined (if relevant). • Good style formatting, with each paragraph heading having a single sentence or phrase summarizing the content that follows and using bullet points, when appropriate, to emphasize key benefits. The objective is for the reader to understand the offering at a glance in an easy-to-view format and not have to read paragraphs. • There is spacing between each paragraph. It reads like a car brochure. That is, it is comprehensive and describes the offering simply, without technical jargon.
7	Marketing artifacts	Logos are displayed correctly.	• Logos: Small (48 x 48 px, optional), Medium (90 x 90 px, optional), and Large (from 216 x 216 to 350 x 350 px, required). • Screenshot (max. 5): Requires a .PNG image with a resolution of 1280x720 pixels.

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
8	Categories and industries	• Categories match solution offering capabilities. • Select at least one item in the pop-up window. • Do not select categories that the solution does not fit. • Optimal industry, or all industries selected (if not optimal industries).	Max. 3 categories selected, if applicable.
9	Lead management	Select the system where your leads will be stored. See get customer leads to connect your CRM system.	

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
10	Contacts: Solution support and help	• Engineering contact name: The name of the engineering contact for your app. This contact will receive technical communications from Microsoft. • Engineering contact email: The email address of the engineering contact for your app. • Engineering contacts phone: The phone number of the engineering contact. ISO phone number notations are supported. • Support contact name: The name of the support contact for your app. This contact will receive support-related communications from Microsoft. • Support contact email: The email address of the support contact for your app. • Support contact phone: The phone number of the support contact. ISO phone number notations are supported. • Support URL: The URL of your support page.	• All support methods are listed. • Paid support offered free during the *Trial* or *Test Drive* period.
11	Legal	• Privacy policy URL: The URL for your app's privacy policy in the Privacy policy URL field in the CPP. • Terms of use: The terms of use of your app. Customers are required to accept these terms before they can try your app.	Policies or terms are available via a public URL site.

Container offer requirements

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
1	Offer settings	• Offer ID: Max. 50 characters. • Publisher ID: Select it from the drop-down list. • Name: Max. 50 characters.	Mirrors the title style already available in the description. Avoid using long titles.
2	Plans	The partner selects new plans.	The title mirrors the title style already available in the description. Avoid using long titles.
3	Marketplace artifacts	Logos are displayed correctly.	• Logos: Small (48 x 48 px, optional), Medium (90 x 90 px, optional), and Large (from 216 x 216 to 350 x 350 px, required). • Screenshot (max. 5): Requires a .PNG image with a resolution of 1280 x 720 pixels.
4	Lead management	• Lead management: Select the system where your leads will be stored. • See get customer leads to connect your CRM system.	

Consulting offer requirements

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
1	Offer title	Must clearly list the service type and duration in the format *Name: Duration Type* (for example, "Offer Engagement: 1-Week Proof-of-Concept").	• Does not repeat publisher name. • The title mirrors the title style already available in the description. Avoid using long titles.

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
2	Offer description	• Ensure proper usage of Microsoft product names. • Offers marked as *Price: Estimated* must have a note at either the top or bottom to explain the variability (travel to client, number of servers being migrated, and so on). • Each offer type has description requirements, as follows: ◦ Briefings need at least four or five bullets, with information about topics to be covered. ◦ All workshops need an agenda. ◦ All agendas must be broken down by day or by week, depending on the duration of the workshop. ◦ Assessment, POC, non-training workshops, and implementation offers need deliverables. ◦ Training workshops don't need deliverables, but they need a more detailed agenda with topics that will be covered.	• Any offer has agenda and deliverables. • Offer includes a paragraph with context about the company providing the service in the top section. • Offer includes a paragraph about the value of the service itself as a top section.

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
3	Markdown formatting	All offers must use Markdown formatting so that the offer renders properly when it's converted to HTML.	
4	Categories and industries	Categories are not relevant.	
5	List status (Listing option)	Automatically listed as *Contact Me*.	
6	Solution support and help	Support and help are not required.	
7	Privacy policy and terms of use available	Policies or terms are not required.	
8	Service types	Ensure that the service type matches the title.	
9	Competencies	Must have competency in at least one of the following: • Application Development • Application Integration • Application Lifecycle Management • Cloud Platform • Data Analytics • Data Center • Data Platform • DevOps	
10	Products	Must be Azure products.	
11	Country/region	Ensure that the country/region matches the selected currency.	

NO.	LISTING ELEMENT	BASE REQUIREMENT	OPTIMAL REQUIREMENT
12	Learn more	• Links at the bottom (under the description, not Azure Marketplace links on the left) lead to more information about the solution and are publicly available and being displayed correctly. • Links must have a "friendly name" and are not displayed as the file name of any downloads.	

Next steps

- Learn about the various offer types in Azure Marketplace:
  - SaaS apps
  - Containers
  - Consulting services
- Determine your publishing option

Customer leads from your commercial marketplace offer

11/22/2021 • 5 minutes to read • Edit Online

Leads are customers interested in or deploying your offers from Microsoft AppSource and Azure Marketplace. You can receive customer leads after your offer is published to the commercial marketplace. This article explains the following lead management concepts:

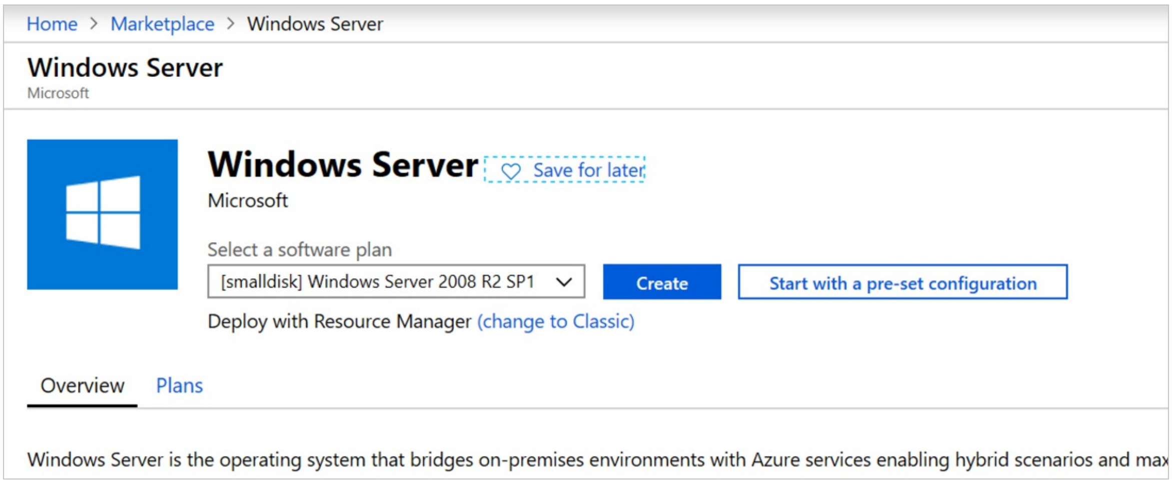
- How your commercial marketplace offer generates customer leads to ensure that you don't miss business opportunities.
- How to connect your customer relationship management (CRM) system to your offer so that you can manage your leads in one central location.
- The lead data we send you so that you can follow up on customers who reached out to you.

Generate customer leads

Here are places where a lead is generated:

- A customer consents to sharing their information after they select **Contact me** from the commercial marketplace. This lead is an *initial interest* lead. We share information with you about the customer who has expressed interest in getting your product. The lead is the top of the acquisition funnel.

- A customer selects **Get It Now** (or selects **Create** in the Azure portal) to get your offer. This lead is an *active* lead. We share information with you about the customer who has started to deploy your product.



- A customer selects **Test Drive** or **Free Trial** to try out your offer. Test drives or free trials are accelerated opportunities for you to share your business instantly with potential customers without any barriers of entry.

Connect to your CRM system

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.
3. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM

Online)
- Configure your offer to send leads to HTTPS endpoint
- Configure your offer to send leads to Marketo
- Configure your offer to send leads to Salesforce

4. To validate the configuration you provided, select the **Validate** link.

5. Select **Connect**.

Understand lead data

Each lead you receive during the customer acquisition process has data in specific fields. The first field to look out for is the `LeadSource` field, which follows this format: **Source-Action** | **Offer**.

Sources: The value for this field is populated based on the marketplace that generated the lead. Possible values are `"AzureMarketplace"`, `"AzurePortal"`, and `"AppSource (SPZA)"`.

Actions: The value for this field is populated based on the action the customer took in the marketplace that generated the lead.

Possible values are:

- **"INS"**: Stands for *installation*. This action is in Azure Marketplace or AppSource when a customer acquires your product.
- **"PLT"**: Stands for *partner-led trial*. This action is in AppSource when a customer selects the **Contact me** option.
- **"DNC"**: Stands for *do not contact*. This action is in AppSource when a partner who was cross-listed on your app page gets requested to be contacted. We share a notification that this customer was cross-listed on your app, but they don't need to be contacted.
- **"Create"**: This action is only inside the Azure portal and is generated when a customer purchases your offer to their account.
- **"StartTestDrive"**: This action is only for the **Test Drive** option and is generated when a customer starts their test drive.

Offers: You might have multiple offers in the commercial marketplace. The value for this field is populated based on the offer that generated the lead. The publisher ID and offer ID are both sent in this field and are values you provided when you published the offer to the marketplace.

The following examples show values in the expected format `publisherid.offerid`:

- `checkpoint.check-point-r77-10sg-byol`
- `bitnami.openedxcypress`
- `docusign.3701c77e-1cfa-4c56-91e6-3ed0b622145`

Customer information

The customer's information is sent via multiple fields. The following example shows the customer information that's contained in a lead:

- FirstName: John
- LastName: Smith
- Email: jsmith@microsoft.com
- Phone: 1234567890
- Country: US
- Company: Microsoft

- Title: CTO

> **NOTE**
>
> Not all the data in the previous example is always available for each lead. Because you'll get leads from multiple steps as mentioned in the "Generate customer leads" section, the best way to handle the leads is to de-duplicate the records and personalize the follow-ups. This way each customer gets an appropriate message, and you create a unique relationship.

Best practices for lead management

Here are some recommendations for driving leads through your sales cycle:

- **Process**: Define a clear sales process, with milestones, analytics, and clear team ownership.
- **Qualification**: Define prerequisites, which indicate whether a lead was fully qualified. Make sure sales or marketing representatives qualify leads carefully before taking them through the full sales process.
- **Follow-up**: Don't forget to follow up within 24 hours. You will get the lead in your CRM of choice immediately after the customer deploys a test drive; email them within while they are still warm. Request scheduling a phone call to better understand if your product is a good solution for their problem. Expect the typical transaction to require numerous follow-up calls.
- **Nurture**: Nurture your leads to get you on the way to a higher profit margin. Check in, but don't bombard them. We recommend you email leads at least a few times before you close them out; don't give up after the first attempt. Remember, these customers directly engaged with your product and spent time in a free trial; they are great prospects.

After the technical setup is in place, incorporate these leads into your current sales and marketing strategy and operational processes. We're interested in better understanding your overall sales process and want to work closely with you to provide high-quality leads and enough data to make you successful. We welcome your feedback on how we can optimize and enhance the leads we send you with additional data to help make these customers successful. Let us know if you're interested in providing feedback and suggestions to enable your sales team to be more successful with commercial marketplace leads.

Next steps

- Lead management FAQ and troubleshooting

ISV to Cloud Reseller private offers

11/22/2021 • 7 minutes to read • Edit Online

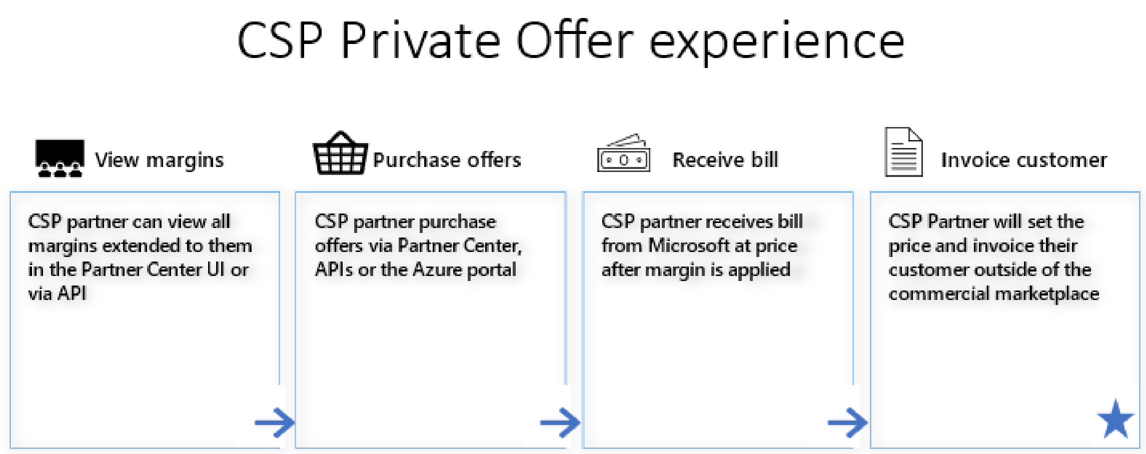
> **IMPORTANT**
> This feature is currently in public preview.

Overview

Private offers let Independent Software Vendors (ISVs) and Cloud Resellers (CSP partners) grow their revenue by creating time-bound customized margins that suit each entity's business needs.

As an ISV, you can specify the margin and duration to create a wholesale price for your CSP partner. When your partner makes a sale to a customer, Microsoft will make its payments to you off the wholesale price.

As a CSP partner, you can discover all the margins available to you via Partner Center UI or API. For any sale you make, you receive your bill from Microsoft at the wholesale price. You continue to set your customer price and invoice your customer outside of the marketplace. Learn more about the CSP partner experience for private offers at Discover margins configured by ISVs.



> **NOTE**
>
> If you only publish your offer to Microsoft AppSource (so it is not available through Azure Marketplace) and opted it in to be sold by partners in the Cloud Solution Provider (CSP) program, there may be a delay with your offer displaying for CSP partners to purchase in their portal. Please contact support if you believe your offer is not available for your CSP partner to transact.

Prerequisites to create a private offer for Cloud Resellers

You must meet these pre-requisites to create a private offer for cloud resellers:

1. You have created a commercial marketplace account in Partner Center.
2. Your account is enrolled in the commercial marketplace program.
3. You have published a transactable and publicly available offer to Azure Marketplace.
4. Your offer is opted into the Cloud Reseller channel.
5. You are creating a private offer for a Cloud Reseller who is part of Microsoft's Cloud Solution Provider (CSP) program.

Supported offer types

Private offers can be created for all transactable marketplace offer types. This includes SaaS, Azure Virtual Machines, and Azure Applications.

> **NOTE**
>
> Margins are applied on all custom meter dimensions your offer may use. Margins are only applied on the software charges set by you, not on the associated Azure infrastructure hardware charges.

Private offers dashboard

The **Private offers** dashboard in the left-nav menu of Partner Center is your centralized location to create and manage private offers. This dashboard has two tabs:

1. **Customers**: Learn more about private offers for customers once the feature goes into Private Preview in Fall 2021.

2. **Cloud Resellers**: Opens the Cloud Reseller private offer dashboard, which lets you:

   - Create new private offers
   - View the status of all your private offers
   - Clone existing private offers
   - Withdraw private offers
   - Delete private offers

Create a new Private Offer for Cloud Resellers

1. Sign in to Partner Center.
2. Select **Private offers** from the left-nav menu to open the dashboard.
3. Select the **Cloud Resellers** tab.
4. Select + **New Private offer**.
5. Enter a private offer name. This is a descriptive name that you will use to refer to your private offer within Partner Center. This name will not be visible to Cloud Resellers.

Offer Setup

The offer setup page lets you define private offer terms, notification contact, pricing, and Cloud Resellers.

1. **Private offer terms** determine the duration during which your Cloud Resellers can discover and sell your private offer.

   - To have your private offer start immediately, choose a **Start Date** of "As soon as possible". If all pre-requisites are met, your private offer will be made available within 15 minutes after you submit it. If a private offer is extended to an existing customer of a Pay-as-you-go-product, this will make the private price applicable for the entire month.
   - To have your private offer start in an upcoming month, select **Specific month** and make a selection. The start date for this option will always be the first of the month.
   - Choose the month for your private offer's **End date**. This will always be the last date of the month.

2. Provide up to five emails as **Notification Contacts** to receive email updates on the status of your private offer. These emails are sent when your private offer moves to **Live**, **Ended** or is **Withdrawn**.

3. Configure a **Pricing** margin percentage for up to 10 offers/plans in a private offer. The margin the Cloud Reseller receives will be a percentage off your plan's list price in the marketplace.

   - Select **+ Add Offers/plans** to choose the offers/plans you want to provide a private offer for.
   - Choose to provide a private offer at an offer level (all current and future plans under that Offer will have a private price associated to it) or at a plan level (only the plan you selected will have a private price associated with it).
   - Choose up to 10 offers/plans and then **Add**.
   - Enter the margin percentage to provide to your Cloud Resellers. The margin you provide will be calculated as a percentage off your plan's list price in the marketplace.

   > **NOTE**
   >
   > Only offers/plans that are transactable in Microsoft AppSource or Azure Marketplace appear in the selection menu.

4. Select the **Cloud Resellers** you authorize to sell your private offer.

   a. Select **+Add Cloud Resellers**.
   b. Search for your Cloud Reseller by name/tenant ID. Or, search by applying filters such as regions, skills, or competencies.
   c. Choose the Cloud Resellers and select **Add**.

   > **NOTE**
   >
   > - You can only select Cloud Resellers who are part of Microsoft's Cloud Solution Provider (CSP) program.
   > - Once your private offer ends, the Cloud Resellers you authorize can continue to sell your marketplace offer at the list price.
   > - Private offers can be extended to a maximum of 400 Cloud Resellers tenants.

Review and Submit

This page is where you can review all of the information you've provided.

Once submitted, private offers cannot be modified. Ensure your information is accurate.

When you're ready, click **Submit**. You will be returned to the dashboard where you can view the status of your private offer. The notification contact(s) will receive an email once the private offer is live.

View private offers status

To view the status of your private offer:

1. Select **Private offers** from the left-nav menu to open the dashboard.
2. Select the **Cloud Resellers** tab.
3. Examine the **Status** column.

The status of the private offer will be one of the following:

- **Draft**: You have started the process of creating a private offer but have not yet submitted it.
- **In Progress**: You have submitted a private offer and it is currently being published in our systems.
- **Live**: Your private offer is discoverable and transactable by Cloud Resellers.
- **Ended**: Your private offer has expired or passed its end date.

Clone a private offer

Cloning a private offer helps you create a new private offer quickly.

1. Select **Private offers** from the left-nav menu to open the dashboard.
2. Select the **Cloud Resellers** tab.
3. Check the box of the private offer you want to clone.
4. Select **Clone**.
5. Enter a new private offer name.
6. Select **Clone**.
7. Edit the details on the Offer Setup page as needed.
8. **Submit** the new private offer.

Withdraw a private offer

By withdrawing a private offer, your Cloud Resellers will immediately no longer receive a margin and all future purchases will be at the list price.

> **IMPORTANT**
>
> Private offers can only be withdrawn if no Cloud Reseller has sold it to a customer.

To withdraw a private offer:

1. Select **private offers** from the left-nav menu to open the dashboard.
2. Select the **Cloud Resellers** tab.
3. Check the box of the private offer you want to withdraw.
4. Select **Withdraw**.
5. Select **Request withdraw**.
6. Your notification contact(s) will receive an email if your private offer has been successfully withdrawn.

Delete a private offer

To delete a private offer in draft state:

1. Select **Private offers** from the left-nav menu to open the dashboard.
2. Select the **Cloud Resellers** tab.
3. Check the box of the private offer you want to delete.

4. Select **Delete**.
5. Select **Confirm**.

Find additional details

While your private offer publish is in progress, you can view additional details on its current state:

1. Select **private offers** from the left-nav menu to open the dashboard.
2. Select the **Cloud Resellers** tab.
3. Select the "In Progress" hyperlink of the private offer in the **Status** column.

The additional details will be one of the following:

- **Cloud Reseller authorization in progress**: We are currently authorizing the given Cloud Reseller to be able to sell your offer.
- **Private offer publish in progress**: We are currently publishing the given Cloud Reseller's private price.
- **Live**: The private offer is now Live for this Cloud Reseller.

Reporting on private offers

The payout amount and agency fee that Microsoft charges is based on the price after margin is applied for line items with an associated margin.

Next steps

- Frequently Asked Questions about configuring ISV to Cloud Reseller private offers

What is a test drive?

11/22/2021 • 3 minutes to read • Edit Online

A test drive is a great way to showcase your offer to potential customers by giving them the option to try before you buy, generating highly qualified leads and resulting in increased conversion. A test drive brings your product to life in a real-world implementation scenario. Customers who try out your product are demonstrating a clear intent to buy a similar solution. Use this to your advantage by following up with more advanced leads.

Your customers benefit from a test drive as well. By allowing them to try your product first, you are reducing the friction of the purchase process. In addition, test drive is pre-provisioned, i.e., customers don't have to download, set up or configure the product.

> **TIP**
> To see the customer's view of test drive in the commercial marketplace, see What is Azure Marketplace? and What is Microsoft AppSource?.

How does it work?

Test drives are managed instances that launch your solution or application on-demand for customers who request it. Once a test drive instance is assigned, it is available for use by that customer for a set period. After the period has ended, it is then deleted to create room for another customer.

As a publisher, you manage and configure the test drive settings in Partner Center. Technical configuration details vary depending on the type of offer. For detailed guidance, see the Test drive technical configuration.

Potential customers discover your test drive as a CTA on your offer on AppSource. They provide their contact information and agree to your offer's terms and privacy policy, then gain access to your pre-configured environment to try it for a fixed period. Customers receive a hands-on, self-guided trial of your product's key features and benefits and you receive a valuable lead.

Types of test drives

There are different test drives available on the commercial marketplace for select offers depending on the type of product, scenario, and marketplace you are on:

- Azure Resource Manager
  - Azure Applications
  - SaaS
  - Virtual Machines
- Hosted test drive
  - Dynamics 365 for Business Central (currently not supported)
  - Dynamics 365 for Customer Engagement
  - Dynamics 365 for Operations
- Logic app (in support mode only)
- Power BI

For details on configuring one of these test drives, see Test drive technical configuration.

Azure Resource Manager test drive

This deployment template contains all the Azure resources that comprise your solution. Products that fit this scenario use only Azure resources. The Azure Resource Manager test drive is available for these offer types:

- Azure applications
- SaaS
- Virtual machines

> **NOTE**
> This is the only test drive option for virtual machine and Azure application offers.

Hosted test drive (Recommended)

A hosted test drive removes the complexity of setup by letting Microsoft host and maintain the service that performs the test drive user provisioning, and de-provisioning. If you have an offer on Microsoft AppSource, build your test drive to connect with a Dynamics AX/CRM instance. You can use the following AppSource offers types:

- Use Dynamics 365 for Customer Engagement and Power Apps for a Customer Engagement system such as sales, service, project service, and field service.
- Use Dynamics 365 for Operations for a Finance and Operations enterprise resource planning system such as finance, operations, and manufacturing, supply chain.

Logic app test drive

This type of test drive is not hosted by Microsoft and uses Azure Resource Manager (ARM) templates for Dynamics AX/CRM offer types. You will need to run the ARM template to create required resources in your Azure subscription. Logic App Test Drive is currently on support mode only and is not recommended by Microsoft For details on configuring a Logic App Test Drive, see Test drive technical configuration.

Power BI test drive

This is simply an embedded link to a custom-built dashboard. Any product that only demonstrates an interactive Power BI visual should use this type of test drive.

Transforming examples

The process of turning an architecture of resources into a test drive can be daunting. Check out these examples of how to best transform current architectures.

Transform a website template into a test drive

Transform a virtual machine template into a test drive

Transform an existing Resource Manager template into a test drive

Generate leads from your test drive

A commercial marketplace test drive is a great tool for marketers. We recommend you incorporate it in your go-to-market efforts when you launch to generate more leads for your business. For detailed guidance, see Customer leads from your commercial marketplace offer.

If you close a deal with a test drive lead, be sure to register it at Microsoft Partner Sales Connect. Also, we would love to hear about your customer wins where a test drive played a role.

Other resources

Additional test drive resources:

- Test Drive best practices
- Overview (PDF; make sure your pop-up blocker is off)

Next steps

- Test drive technical configuration

Test drive technical configuration

11/22/2021 • 7 minutes to read • Edit Online

The test drive option in the Microsoft commercial marketplace lets you configure a hands-on, self-guided tour of your product's key features. With a test drive, new customers can try your offer before committing to purchase it. For more information, see What is Test Drive?

If you no longer want to provide a test drive for your offer, return to the **Offer setup** page and clear the **Enable test drive** check box. Not all offer types have a test drive available.

> **TIP**
> To see the customer's view of test drive in the commercial marketplace, see What is Azure Marketplace? and What is Microsoft AppSource?.

Azure Resource Manager test drive

This is the only test drive option for virtual machine or Azure app offers and requires fairly detailed setup. Read the sections below for Deployment subscription details and Test drive listings, then continue with the separate topic for Azure Resource Manager test drive configuration.

Hosted test drive

Microsoft can remove the complexity of setting up a test drive by hosting and maintaining the service provisioning and deprovisioning. The configuration for this type of test drive is the same regardless of whether the test drive is targeting a Dynamics 365 Customer Engagement or Dynamics 365 Operations audience.

- **Max concurrent test drives** (required) – Set the maximum number of customers that can use your test drive at one time. Each concurrent user will consume a Dynamics 365 license while the test drive is active, so ensure you have enough licenses available to support the maximum limit set. The recommended value is 3-5.
- **Test drive duration** (required) – Enter the number of hours the test drive will stay active for each customer. After this period, the session will end and no longer consumes one of your licenses. We recommend a value of 2-24 hours depending on the complexity of your offer. This duration may only be set in whole hours (for example, "2 hours" is valid; "1.5 hours" is not). The user can request a new session if they run out of time and want to access the test drive again.
- **Instance URL** (required) – The URL where the customer will begin their test drive. Typically the URL of your Dynamics 365 instance running your app with sample data installed (for example, `https://testdrive.crm.dynamics.com`).
- **Instance Web API URL** (required) – Retrieve the Web API URL for your Dynamics 365 instance by logging into your Microsoft 365 account and navigating to **Settings** > **Customization** > **Developer Resources** > **Instance Web API (Service Root URL)**, copy the URL found here (for example, `https://testdrive.crm.dynamics.com/api/data/v9.0`).
- **Role name** (required) – Provide the security role name you have defined in your custom Dynamics 365 test drive, which will be assigned to the user during their test drive (for example, test-drive-role).

For help on how to set up your Dynamics 365 environment for test drive and grant AppSource permission to provision and deprovision test drive users in your tenant, follow these instructions.

For step by step instructions on listing and configuring your Hosted Test Drive, please visit the Detailed configuration for hosted test drive page.

Logic app test drive

This type of test drive is not hosted by Microsoft. Use it to connect with a Dynamics 365 offer or other custom resource, which encompasses a variety of complex solution architectures. For more information about setting up Logic App test drives, visit Operations and Customer Engagement on GitHub.

- **Region** (required, single-selection dropdown list) – Currently there are 26 Azure-supported regions where your test drive can be made available. The resources for your Logic app will be deployed in the region you select. If your Logic App has any custom resources stored in a specific region, make sure that region is selected here. The best way is to fully deploy your Logic App locally on your Azure subscription in the portal and verify that it functions correctly before making this selection.

- **Max concurrent test drives** (required) – Set the maximum number of customers that can use your test drive at one time. These test drives are already deployed, enabling customers to instantly access them without waiting for a deployment.

- **Test drive duration** (required) – Enter the length of time that the Test Drive will stay active, in # of hours. The test drive terminates automatically after this time period ends.

- **Azure resource group name** (required) – Enter the Azure resource group) name where your Logic App test drive is saved.

- **Azure logic app name** (required) – Enter the name of the Logic app that assigns the test drive to the user. This Logic app must be saved in the Azure resources group above.

- **Deprovision logic app name** (required) – Enter the name of the Logic app that de-provisions the test drive once the customer is finished. This Logic app must be saved in the Azure resources group above.

Power BI test drive

Products that want to demonstrate an interactive Power BI visual can use an embedded link to share a custom-built dashboard as their test drive, no further technical configuration required. All you need to do here is upload your embedded Power BI URL.

For more information on setting up Power BI apps, see What are Power BI apps?

Deployment subscription details

To allow Microsoft to deploy the test drive on your behalf, create and provide a separate, unique Azure Subscription (not required for Power BI test drives).

- **Azure subscription ID** (required for Azure Resource Manager and Logic apps) – Enter the subscription ID to grant access to your Azure account services for resource usage reporting and billing. We recommend that you consider creating a separate Azure subscription to use for test drives if you don't have one already. You can find your Azure subscription ID by logging in to the Azure portal and navigating to the **Subscriptions** tab of the left-side menu. Selecting the tab will display your subscription ID (for example, "a83645ac-1234-5ab6-6789-1h234g764ghty").

- **Azure AD tenant ID** (required) – Enter your Azure Active Directory (AD) tenant ID). To find this ID, sign in to the Azure portal, select the Active Directory tab in the left-menu, select **Properties**, then look for the **Directory ID** number listed (for example, 50c464d3-4930-494c-963c-1e951d15360e). You can also look up your organization's tenant ID using your domain name address at https://www.whatismytenantid.com.

- **Azure AD tenant name** (required for Dynamic 365) – Enter your Azure Active Directory (AD) name. To find this name, sign in to the Azure portal, in the upper right corner your tenant name will be listed under your account name.
- **Azure AD app ID** (required) – Enter your Azure Active Directory (AD) application ID). To find this ID, sign in to the Azure portal, select the Active Directory tab in the left-menu, select **App registrations**, then look for the **Application ID** number listed (such as `50c464d3-4930-494c-963c-1e951d15360e`).
- **Azure AD app client secret** (required) – Enter your Azure AD application client secret). To find this value, sign in to the Azure portal. Select the **Azure Active Directory** tab in the left menu, select **App registrations**, and select your test drive app. Next, select **Certificates and secrets**, select **New client secret**, enter a description, select **Never** under **Expires**, and choose **Add**. Make sure to copy down the value. Don't navigate away from the page before you copy the value.

Test drive listings

The **Test Drive listings** option found under the **Test drive** tab in Partner Center displays the languages (and markets) where your test drive is available, currently English (United States) is the only location available. Additionally, this page displays the status of the language-specific listing and the date/time that it was added. You will need to define the test drive details (description, user manual, videos, etc.) for each language/market.

- **Description** (required): Describe your test drive, what will be demonstrated, objectives for the user to experiment with, features to explore, and any relevant information to help the user determine whether to acquire your offer. Up to 3,000 characters of text can be entered in this field.
- **Access information** (required for Azure Resource Manager and Logic test drives): Explain what a customer needs to know in order to access and use this test drive. Walk through a scenario for using your offer and exactly what the customer should know to access features throughout the test drive. Up to 10,000 characters of text can be entered in this field.
- **User Manual** (required): An in-depth walk-through of your test drive experience. The User Manual should cover exactly what you want the customer to gain from experiencing the test drive and serve as a reference for any questions that they may have. The file must be in PDF format and be named (255 characters max) after uploading.
- **Videos: Add videos** (optional): Videos hosted elsewhere can be referenced here with a link and thumbnail image (533 x 324 pixels) so a customer can view a walk-through of information to help them better understand the test drive, including how to successfully use the features of your offer and understand scenarios that highlight their benefits.
  - **Name** (required)
  - **URL** (YouTube or Vimeo only; required)
  - **Thumbnail** (533 x 324 pixels) – Image must be in PNG format.

If you are currently creating your test drive in Partner Center, select **Save draft** before continuing.

For step by step instructions on listing and configuring your Hosted Test Drive, please visit the Detailed configuration for hosted test drive page.

Next steps

- Test Drive Best Practices
- Overview (PDF; make sure your pop-up blocker is off)
- Update an existing offer in the commercial marketplace

Azure Resource Manager test drive

11/22/2021 • 11 minutes to read • Edit Online

Use this type if you have an offer on Azure Marketplace or AppSource but want to build a test drive with only Azure resources. An Azure Resource Manager (ARM) template is a coded container of Azure resources that you design to best represent your solution. Test drive takes the provided ARM template and deploys all the resources it requires to a resource group. This is the only test drive option for virtual machine or Azure app offers.

If you are unfamiliar with what an ARM template is, read What is Azure Resource Manager? and Understand the structure and syntax of ARM templates to better understand how to build and test your own templates.

For information on a **hosted** or **logic app** test drive, see What is a test drive?

> **TIP**
>
> To see the customer's view of test drive in the commercial marketplace, see What is Azure Marketplace? and What is Microsoft AppSource?.

Technical configuration

A deployment template contains all the Azure resources that comprise your solution. Products that fit this scenario use only Azure resources. Set the following properties in Partner Center:

- **Regions** (required) – Currently there are 26 Azure-supported regions where your test drive can be made available. For the best performance, we recommend choosing one region where you expect the largest number of customers to be located. You will need to make sure that your subscription is allowed to deploy all of the resources needed in each of the regions you are selecting.
- **Instances** – Select the type (hot or cold) and number of available instances, which will be multiplied by the number of regions where your offer is available.
  - **Hot** – This type of instance is deployed and awaiting access per selected region. Customers can instantly access *Hot* instances of a test drive, rather than having to wait for a deployment. The tradeoff is that these instances are always running on your Azure subscription, so they will incur a larger uptime cost. It is highly recommended to have at least one *Hot* instance, as most customers don't want to wait for full deployments, resulting in a drop-off in customer usage if no *Hot* instance is available.
  - **Cold** – This type of instance represents the total number of instances that can possibly be deployed per region. Cold instances require the entire Test Drive Resource Manager template to deploy when a customer requests the test drive, so *Cold* instances are much slower to load than *Hot* instances. The tradeoff is that you only have to pay for the duration of the test drive, it is *not* always running on your Azure subscription as with a *Hot* instance.
- **Test drive Azure Resource Manager template** – Upload the .zip containing your Azure Resource Manager template. Learn more about creating an Azure Resource Manager template in the quickstart article Create and deploy Azure Resource Manager templates by using the Azure portal.

  > **NOTE**
  >
  > To publish successfully, it is important to validate the formatting of the ARM template. Two ways to do this are (1) by using an online API tool or (2) with a test deployment.

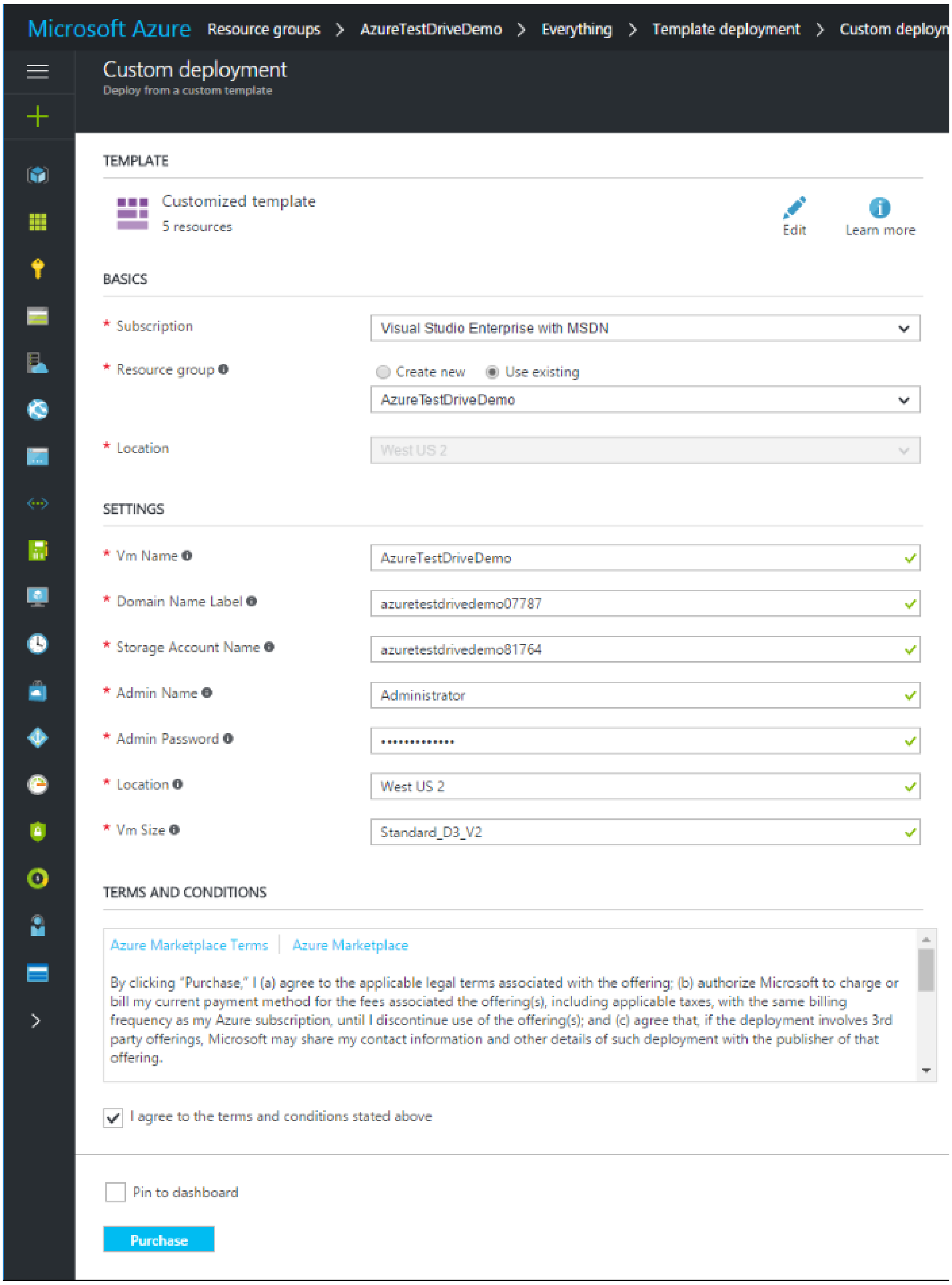
- **Test drive duration** (required) – Enter the number of hours the test drive will stay active. The test drive terminates automatically after this time period ends. Use only whole numbers (for example, "2" hours is valid, "1.5" is not).

Write the test drive template

Once you have designed the desired package of resources, write and build the test drive ARM template. Because test drive runs deployments in a fully automated mode, test drive templates have some restrictions:

Parameters

Most templates have a set of parameters that define resource names, resources sizes (such as types of storage accounts or virtual machine sizes), user names and passwords, DNS names, and so on. When you deploy solutions using Azure portal, you can manually populate all these parameters, pick available DNS names or storage account names, and so on.



However, test drive works automatically, without human interaction, so it only supports a limited set of parameter categories. If a parameter in the test drive ARM template doesn't fall into one of the supported categories, you must replace this parameter with a variable or constant value.

You can use any valid name for your parameters; test drive recognizes parameter category by using a metadata-type value. Specify metadata-type for every template parameter, otherwise your template will not pass validation:

```
"parameters": {
  ...
  "username": {
    "type": "string",
    "metadata": {
      "type": "username"
    }
  },
  ...
}
```

> **NOTE**
> All parameters are optional, so if you don't want to use any, you don't have to.

Accepted Parameter Metadata Types

METADATA TYPE	PARAMETER TYPE	DESCRIPTION	SAMPLE VALUE
baseuri	string	Base URI of your deployment package	`https://<..>.blob.core.windows.net/<`
username	string	New random user name.	admin68876
password	secure string	New random password	Lp!ACS^2kh
session id	string	Unique test drive session ID (GUID)	b8c8693e-5673-449c-badd-257a405a6dee

baseuri

Test drive initializes this parameter with a **Base Uri** of your deployment package so you can use this parameter to construct a Uri of any file included in your package.

```
"parameters": {
  ...
  "baseuri": {
    "type": "string",
    "metadata": {
      "type": "baseuri",
      "description": "Base Uri of the deployment package."
    }
  },
  ...
}
```

Use this parameter inside your template to construct a Uri of any file from your test drive deployment package. The following example shows how to construct a Uri of the linked template:

```
"templateLink": {
  "uri": "[concat(parameters('baseuri'),'templates/solution.json')]",
  "contentVersion": "1.0.0.0"
}
```

username

Test drive initializes this parameter with a new random user name:

```
"parameters": {
  ...
  "username": {
    "type": "string",
    "metadata": {
      "type": "username",
      "description": "Solution admin name."
    }
  },
  ...
}
```

Sample value: `admin68876`

You can use either random or constant usernames for your solution.

password

Test drive initializes this parameter with a new random password:

```
"parameters": {
  ...
  "password": {
    "type": "securestring",
    "metadata": {
      "type": "password",
      "description": "Solution admin password."
    }
  },
  ...
}
```

Sample value: `Lp!ACS^2kh`

You can use either random or constant passwords for your solution.

session ID

Test drive initializes this parameter with a unique GUID representing Test drive session ID:

```
"parameters": {
  ...
  "sessionid": {
    "type": "string",
    "metadata": {
      "type": "sessionid",
      "description": "Unique test drive session id."
    }
  },
  ...
}
```

Sample value: `b8c8693e-5673-449c-badd-257a405a6dee`

You can use this parameter to uniquely identify the test drive session, if it's necessary.

Unique Names

Some Azure resources, like storage accounts or DNS names, requires globally unique names. This means that every time test drive deploys the ARM template, it creates a new resource group with a unique name for all its resources. Therefore, you must use the uniquestring function concatenated with your variable names on resource group IDs to generate random unique values:

```
"variables": {
  ...
  "domainNameLabel": "[concat('contosovm',uniquestring(resourceGroup().id))]",
  "storageAccountName": "[concat('contosodisk',uniquestring(resourceGroup().id))]",
  ...
}
```

Ensure you concatenate your parameter/variable strings (`contosovm`) with a unique string output (`resourceGroup().id`), because this guarantees the uniqueness and reliability of each variable.

For example, most resource names cannot start with a digit, but unique string function can return a string, which starts with a digit. So, if you use raw unique string output, your deployments will fail.

You can find additional information about resource naming rules and restrictions in this article.

Deployment Location

You can make you test drive available in different Azure regions.

When test drive creates an instance of the Lab, it always creates a resource group in one of the selected regions, and then executes your deployment template in this group context. So, your template should pick the deployment location from resource group:

```
"variables": {
  ...
  "location": "[resourceGroup().location]",
  ...
}
```

And then use this location for every resource for a specific Lab instance:

```
"resources": [
  {
    "type": "Microsoft.Storage/storageAccounts",
    "location": "[variables('location')]",
    ...
  },
  {
    "type": "Microsoft.Network/publicIPAddresses",
    "location": "[variables('location')]",
    ...
  },
  {
    "type": "Microsoft.Network/virtualNetworks",
    "location": "[variables('location')]",
    ...
  },
  {
    "type": "Microsoft.Network/networkInterfaces",
    "location": "[variables('location')]",
    ...
  },
  {
    "type": "Microsoft.Compute/virtualMachines",
    "location": "[variables('location')]",
    ...
  }
]
```

Ensure your subscription is allowed to deploy all the resources you want in each of the regions you select. Also ensure your virtual machine images are available in all the regions you will enable, otherwise your deployment template will not work for some regions.

Outputs

Normally with Resource Manager templates you can deploy without producing any output. This is because you know all the values you use to populate template parameters and you can always manually inspect properties of any resource.

For test drive Resource Manager templates, however, it's important to return to test drive all the information, which is required to get access to the lab (Website URIs, Virtual Machine host names, user names, and passwords). Ensure all your output names are readable because these variables are presented to the customer.

There are no any restrictions related to template outputs. Test drive converts all output values into strings, so if you send an object to the output, a user will see JSON string.

Example:

```
"outputs": {
  "Host Name": {
    "type": "string",
    "value": "[reference(variables('pubIpId')).dnsSettings.fqdn]"
  },
  "User Name": {
    "type": "string",
    "value": "[parameters('adminName')]"
  },
  "Password": {
    "type": "string",
    "value": "[parameters('adminPassword')]"
  }
}
```

Subscription Limits

Don't forget about subscription and service limits. For example, if you want to deploy up to ten 4-core virtual machines, you need to ensure the subscription you use for your lab allows you to use 40 cores. For more information about Azure subscription and service limits, see Azure subscription and service limits, quotas, and constraints. As multiple test drives can be taken at the same time, verify that your subscription can handle the number of cores multiplied by the total number of concurrent test drives that can be taken.

What to upload

The test drive ARM template is uploaded as a zip file, which can include various deployment artifacts, but must have one file named `main-template.json`. This is the ARM deployment template which test drive uses to instantiate a lab. If you have additional resources beyond this file, you can reference them as external resources inside the template or include them in the zip file.

During the publishing certification, test drive unzips your deployment package and puts its content into an internal test drive blob container. The container structure reflects the structure of your deployment package:

PACKAGE.ZIP	TEST DRIVE BLOB CONTAINER
`main-template.json`	`https:\/\/\<\...\>.blob.core.windows.net/\<\...\>/main-template.json`
`templates/solution.json`	`https:\/\/\<\...\>.blob.core.windows.net/\<\...\>/templates/solution.json`
`scripts/warmup.ps1`	`https:\/\/\<\...\>.blob.core.windows.net/\<\...\>/scripts/warmup.ps1`

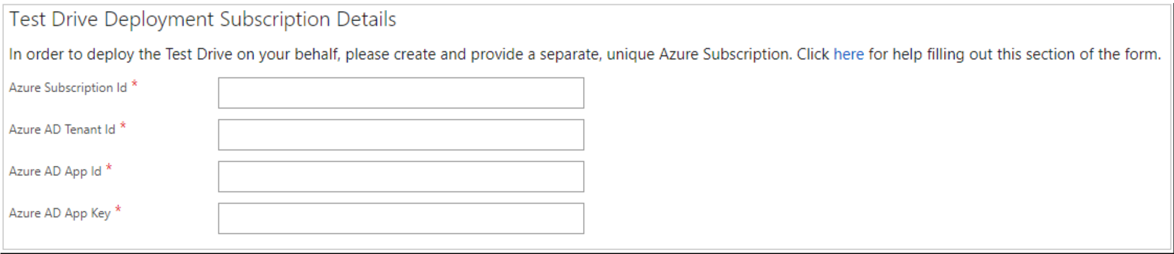
We call a Uri of this blob container Base Uri. Because every revision of your lab has its own blob container, every revision of your lab has its own Base Uri. Test drive can pass a Base Uri of your unzipped deployment package into your template through template parameters.

Transform template examples for test drive

The process of turning an architecture of resources into a test drive Resource Manager template can be daunting. For additional help, see these examples of how to best transform current deployment templates at What is a test drive?.

Test drive deployment subscription details

The final section to complete is to be able to deploy the test drives automatically by connecting your Azure Subscription and Azure Active Directory (AD).


Test Drive Deployment Subscription Details

In order to deploy the Test Drive on your behalf, please create and provide a separate, unique Azure Subscription. Click here for help filling out this section of the form.

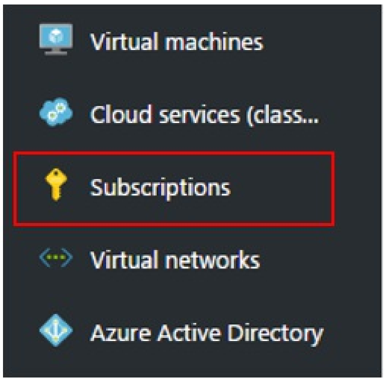
Azure Subscription Id *

Azure AD Tenant Id *

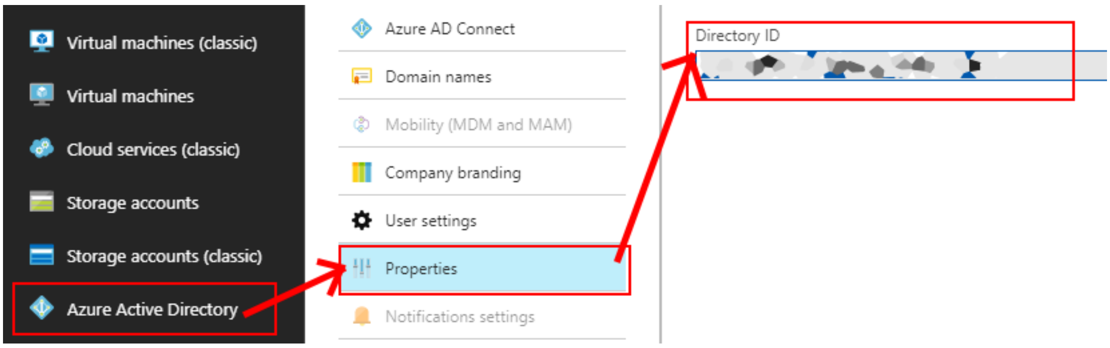
Azure AD App Id *

Azure AD App Key *

1. Obtain an **Azure Subscription ID**. This grants access to Azure services and the Azure portal. The subscription is where resource usage is reported and services are billed. If you do not already have a separate Azure subscription for test drives only, make one. You can find Azure Subscription IDs (such as `1a83645ac-1234-5ab6-6789-1h234g764ghty1`) by signing in to Azure portal and selecting **Subscriptions** from the left-nav menu.



2. Obtain an **Azure AD Tenant ID**. If you already have a Tenant ID available you can find it in **Azure Active Directory** > **Properties** > **Directory ID**:



If you don't have a tenant ID, create a new one in Azure Active Directory. For help with setting up a tenant, see Quickstart: Set up a tenant.

3. Provision the Microsoft Test-Drive application to your tenant. We will use this application to perform operations on your test drive resources.

   a. If you don't have it yet, install the Azure Az PowerShell module.

   b. Add the Service Principal for Microsoft Test-Drive application.

      a. Run `Connect-AzAccount` and provide credentials to sign in to your Azure account, which requires the Azure active directory **Global Administrator** built-in role.

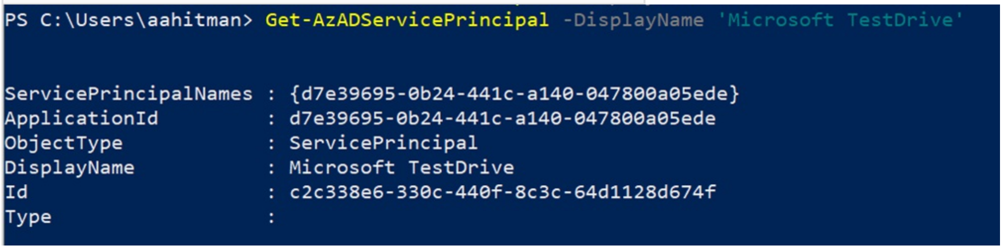
      b. Create a new service principal:

```
New-AzADServicePrincipal -ApplicationId d7e39695-0b24-441c-a140-047800a05ede -DisplayName
'Microsoft TestDrive' -SkipAssignment
```

.

c. Ensure the service principal has been created:

`Get-AzADServicePrincipal -DisplayName 'Microsoft TestDrive'`.



```
PS C:\Users\aahitman> Get-AzADServicePrincipal -DisplayName 'Microsoft TestDrive'


ServicePrincipalNames : {d7e39695-0b24-441c-a140-047800a05ede}
ApplicationId         : d7e39695-0b24-441c-a140-047800a05ede
ObjectType            : ServicePrincipal
DisplayName           : Microsoft TestDrive
Id                    : c2c338e6-330c-440f-8c3c-64d1128d674f
Type                  :
```

4. For **Azure AD App ID**, paste in this Application ID: `d7e39695-0b24-441c-a140-047800a05ede`.

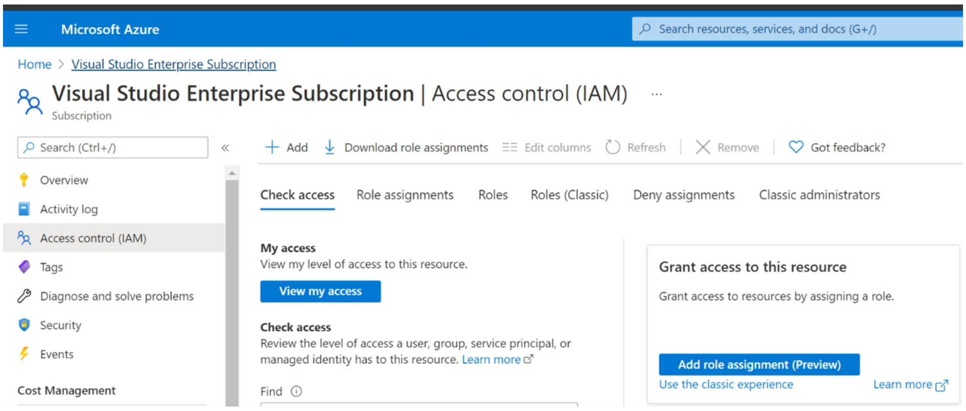
5. For **Azure AD App Key**, since no secret is required, insert a dummy secret, such as "no-secret".

6. Since we are using the application to deploy to the subscription, we need to add the application as a contributor on the subscription, from the Azure portal or PowerShell:

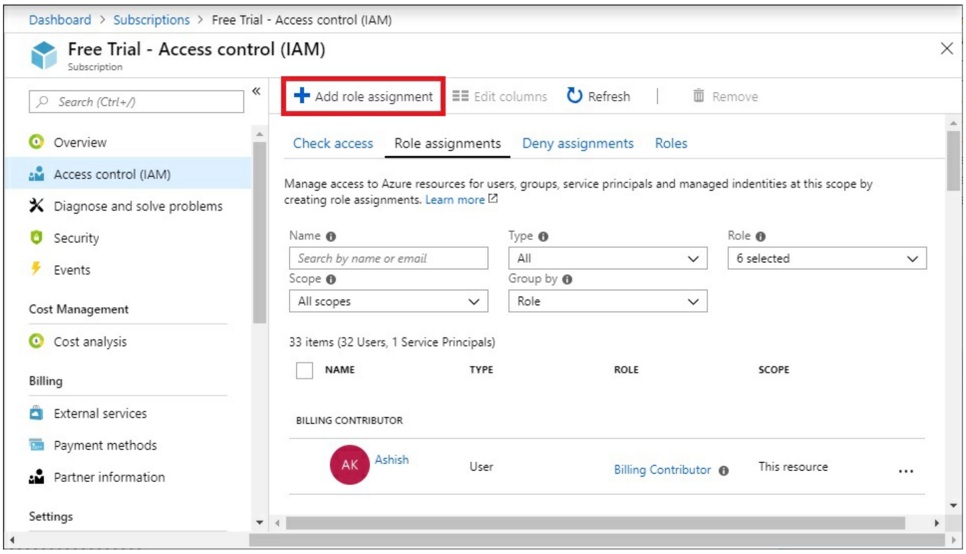
   a. From the Azure portal:

      a. Select the **Subscription** being used for the test drive.

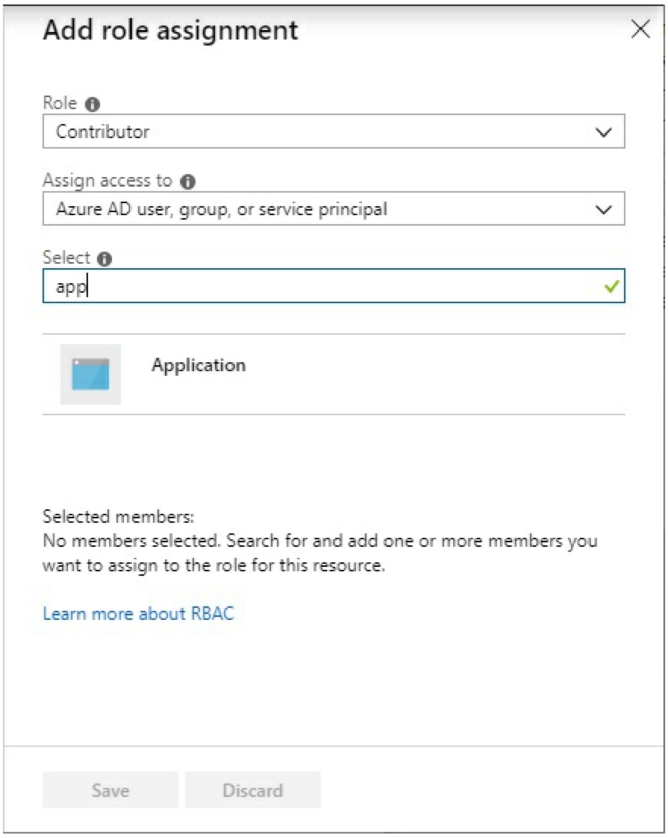
      b. Select **Access control (IAM)**.



      c. Select the **Role assignments** tab, then **+ Add role assignment**.



      d. Enter this Azure AD application name: `Microsoft TestDrive`. Select the application to which you want to assign the **Contributor** role.



e. Select **Save**.

b. If using PowerShell:

a. Run this to get the ServicePrincipal object-id: `(Get-AzADServicePrincipal -DisplayName 'Microsoft TestDrive').id`.

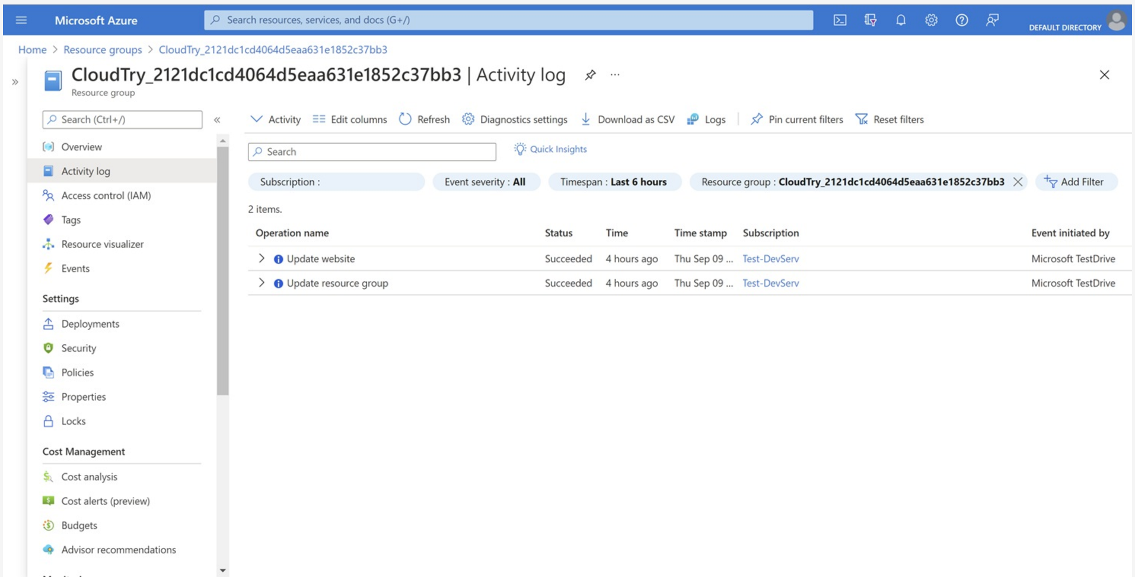
b. Run this with the ObjectId and subscription ID:

```
New-AzRoleAssignment -ObjectId <objectId> -RoleDefinitionName Contributor -Scope
/subscriptions/<subscriptionId>
```

.

NOTE

Before deleting the old appID, go to the Azure portal, then **Resource groups**, and search for `CloudTry_`. Check the **Event initiated by** column.



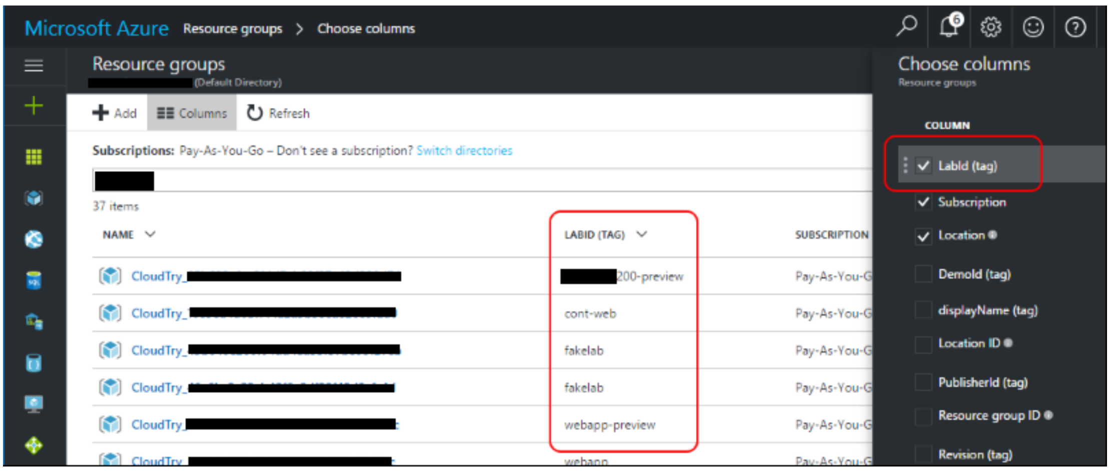
Don't delete the old appID unless at least one resource (**Operation name**) is set to **Microsoft TestDrive**.

To delete the appID, in the left nav menu select **Azure Active Directory** > **App Registrations**, then the **All applications** tab. Choose your application and select **Delete**.

Republish

Now that all your test drive fields are complete, **Republish** your offer. Once your test drive has passed certification, test the customer experience in the preview of your offer:

1. Start a test drive in the UI.
2. Open your Azure subscription inside the Azure portal.
3. Verify that your test drive is deploying correctly.



Don't delete any test drive instances provisioned for your customers; the test drive service will automatically clean up these Resource Groups after a customer is finished with it.

Once you are comfortable with your Preview offering, it's time to **go live**! There is a final review process to double-check the entire end-to-end experience. If we reject the offer, we will email the engineering contact for your offer explaining what needs to be fixed.

Next steps

- If you were following the instructions to create your offer in Partner Center, use the Back arrow to return to that topic.
- Learn more about other types of test drives at What is a test drive?.

Detailed configuration for hosted test drives

11/22/2021 • 13 minutes to read • Edit Online

This article describes how to configure a hosted test drive for Dynamics 365 for Customer Engagement & Power Apps or Dynamics 365 for Operations.

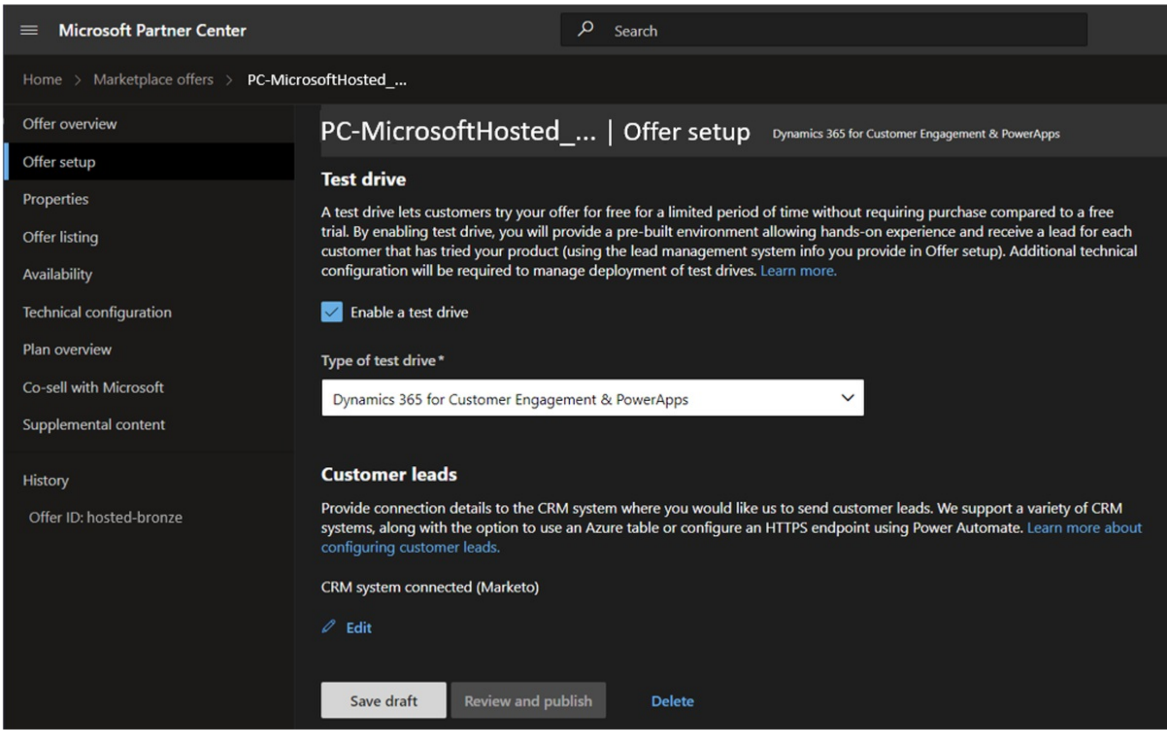
> **TIP**
>
> To see the customer's view of test drive in the commercial marketplace, see What is Azure Marketplace? and What is Microsoft AppSource?.

Configure for Dynamics 365 Customer Engagement & Power Apps

> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

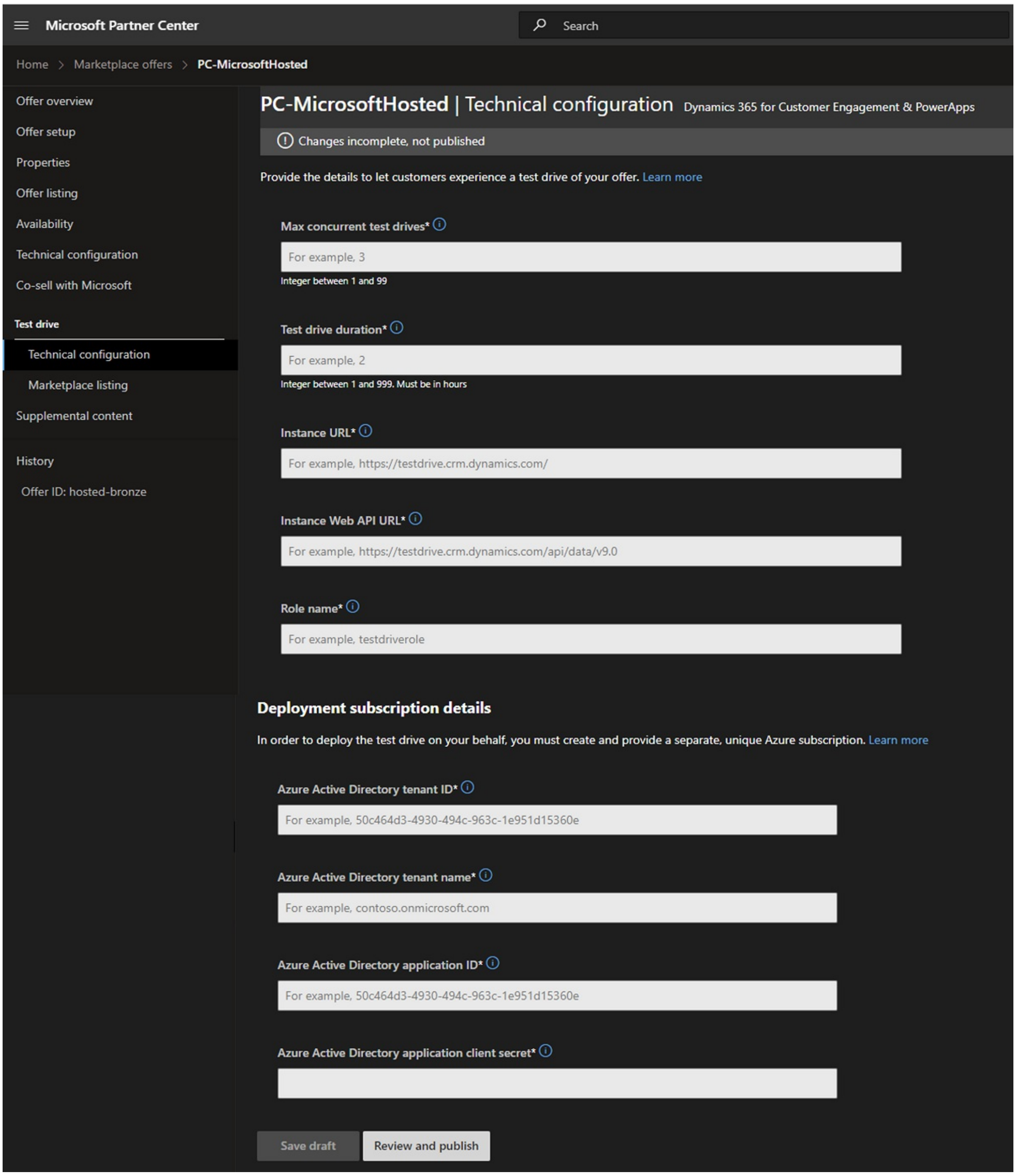
1. Sign in to Partner Center.
2. If you can't access the above link, you need to submit a request here to publish your application. Once we review the request, you will be granted access to start the publish process.
3. Find an existing **Dynamics 365 for Customer Engagement & Power Apps** offer or create a new **Dynamics 365 for Customer Engagement & Power Apps** offer.
4. On the **Offer setup** page, select the **Enable a test drive** check box and select a **Type of test drive** (see bullet below), then select **Save draft**.



- **Type of test drive** – Choose **Microsoft Hosted (Dynamics 365 for Customer Engagement & PowerApps)**. This indicates that Microsoft will host and maintain the service that performs the test drive user provisioning and deprovisioning.

5. Grant Microsoft AppSource permission to provision and deprovision test drive users in your tenant using these instructions. In this step, you will generate the **Azure AD App ID** and **Azure AD App Key** values mentioned below.

6. Complete these fields on the **Test drive** > **technical configuration** page.

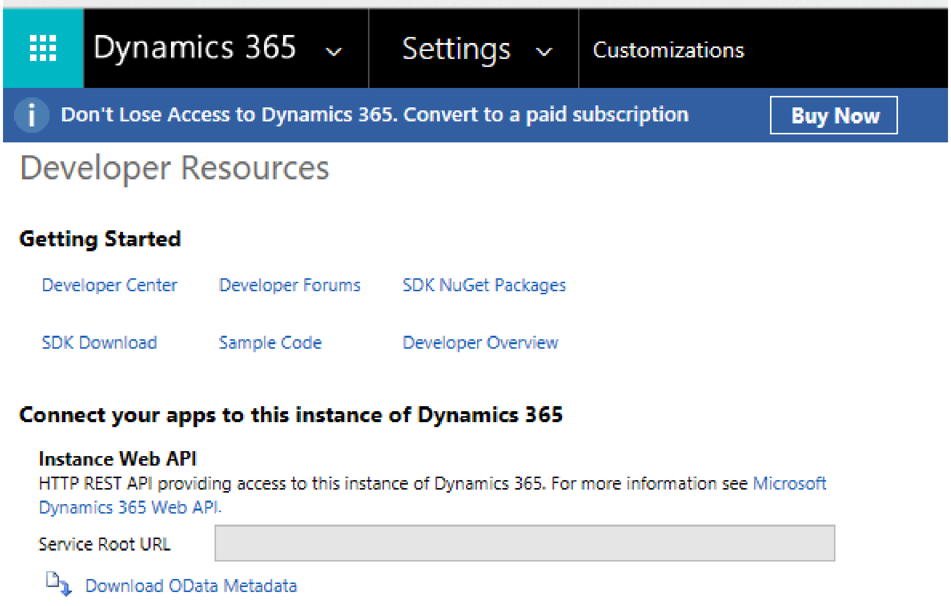


- **Max concurrent test drives** – The number of concurrent users that can have an active test drive running at the same time. Each user will consume a Dynamics license while their test drive is active, so ensure you have at least this many Dynamics licenses available for test drive users. We recommended 3 to 5.

- **Test drive duration** – The number of hours the user's test drive will be active. After the time has expired, the user will be deprovisioned from your tenant. We recommended 2-24 hours depending on the complexity of your app. The user can always request another test drive if they run out of time and want to access the test drive again.

- **Instance URL** – The URL the test drive user will be sent to when they start the test drive. This is typically the URL of your Dynamics 365 instance on which your app and sample data is installed. Example value: `https://testdrive.crm.dynamics.com`.

- **Instance web API URL** – The Web API URL for your Dynamics 365 Instance. Retrieve this value by signing into your Microsoft Dynamics 365 instance and navigating to **Setting** > **Customization** > **Developer Resources** > **Instance Web API** and copy the address (URL). Example value:

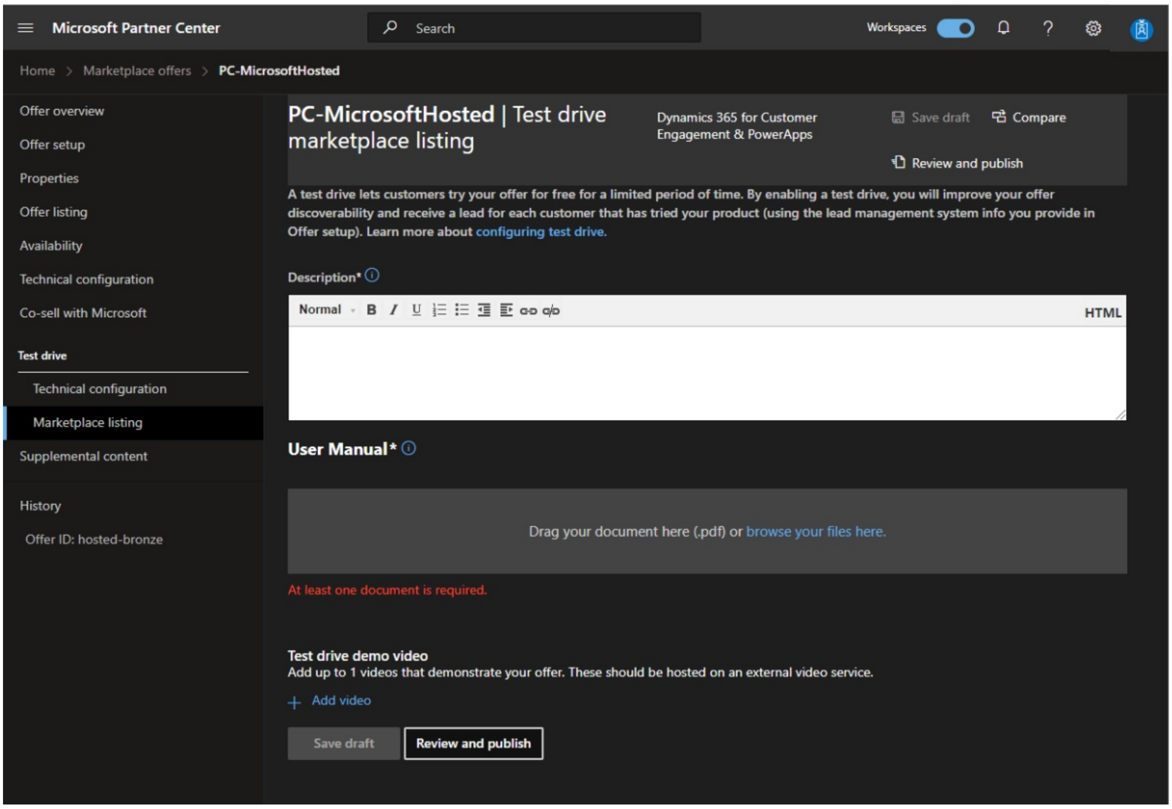


- **Role name** – The name of the custom Dynamics 365 security role you created for test drive or you can use an existing role. A new role should have minimum required privileges added to the role to sign into a Customer Engagement instance. Refer to Minimum privileges required to sign into Microsoft Dynamics 365. This is the role that will be assigned to users during their test drive. Example value: `testdriverole`.

> **IMPORTANT**
>
> Ensure the security group check is not added. This allows the user to be synced to the Customer Engagement instance.

- **Azure Active Directory tenant ID** – The ID of the Azure tenant for your Dynamics 365 instance. To retrieve this value, sign in to Azure portal and navigate to **Azure Active Directory** > **Properties** and copy the directory ID. Example value: 172f988bf-86f1-41af-91ab-2d7cd01112341.
- **Azure Active Directory tenant name** – The name of the Azure Tenant for your Dynamics 365 Instance. Use the format `<tenantname>.onmicrosoft.com`. Example Value: `testdrive.onmicrosoft.com` .
- **Azure Active Directory application ID** – The ID of the Azure Active Directory (AD) app you created in Step 5. Example value: `53852862-a2ae-4e43-9461-faa49650a096`.
- **Azure Active Directory application client secret** – Secret for the Azure AD app created in Step 5. Example value: `IJUgaIOfq9b9LbUjeQmzNBW4VGn6grr1l/n3aMrnfdk=`.

7. Complete the fields on the **Test drive marketplace listing** page.



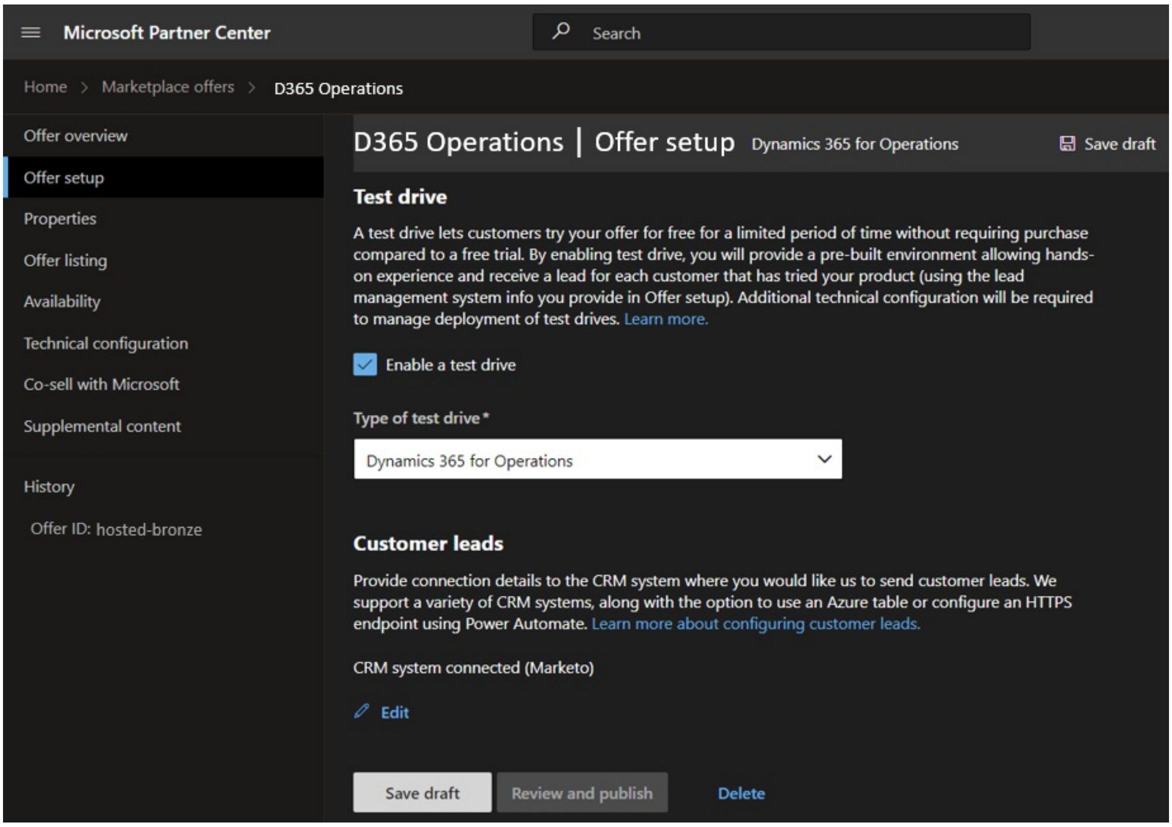
- **Description** – An overview of your test drive. This text will be shown to the user while the test drive is being provisioned. This field supports HTML if you want to provide formatted content (required).
- **User manual** – A PDF user manual that helps test drive users understand how to use your app (required).
- **Test drive demo video** – A video that showcases your app (optional).

Configure for Dynamics 365 Operations

> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

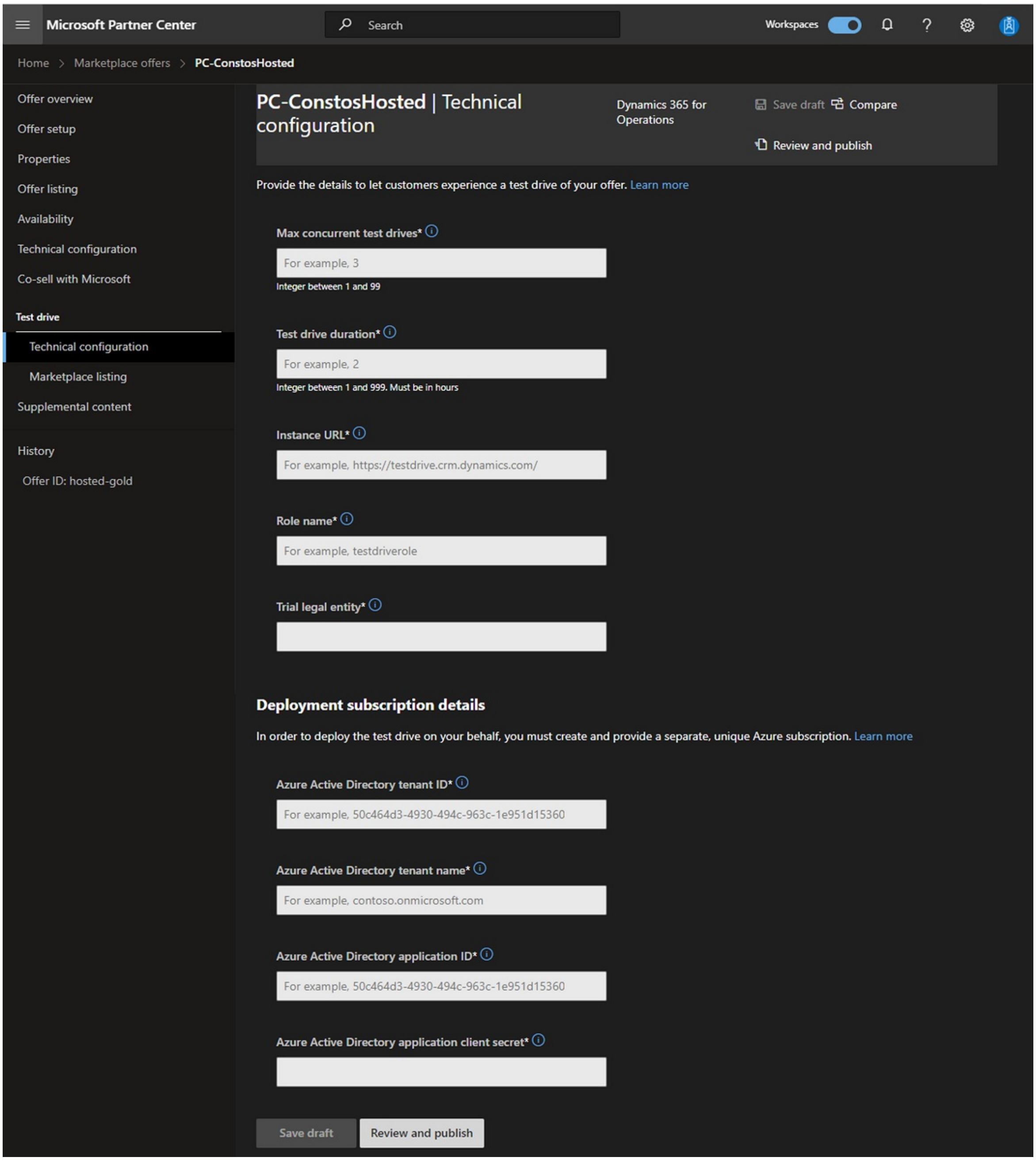
1. Sign in to Partner Center.
2. If you can't access the above link, you need to submit a request here to publish your application. Once we review the request, you will be granted access to start the publish process.
3. Find an existing **Dynamics 365 for Operations** offer or create a new **Dynamics 365 for Operations** offer.
4. On the **Offer setup** page, select the **Enable a test drive** check box and select a **Type of test drive** (see bullet below), then select **Save draft**.



- **Type of test drive** – Choose **Dynamics 365 for Operations** option. This means Microsoft will host and maintain the service that performs the test drive user provisioning and deprovisioning.

5. Grant Microsoft AppSource permission to provision and deprovision test drive users in your tenant using these instructions. In this step, you will generate the **Azure AD App ID** and **Azure AD App Key** values mentioned below.

6. Complete these fields on the **Test drive** > **Technical configuration** page.



- **Max concurrent test drives** – The number of concurrent users that can have an active test drive running at the same time. Each user will consume a Dynamics license while their test drive is active, so ensure you have at least this many Dynamics licenses available for test drive users. We recommended 3 to 5.

- **Test drive duration** – The number of hours the user's test drive will be active. After the time has expired, the user will be deprovisioned from your tenant. We recommended 2-24 hours depending on the complexity of your app. The user can always request another test drive if they run out of time and want to access the test drive again.

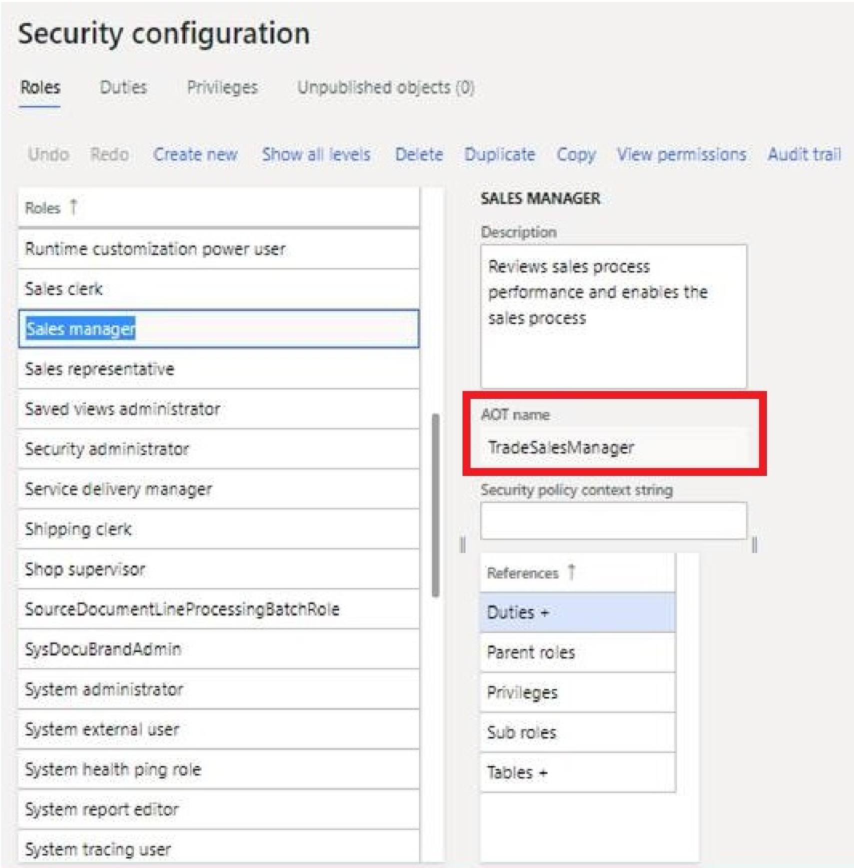
- **Instance URL** – The URL the test drive user will be sent to when they start the test drive. This is typically the URL of your Dynamics 365 instance on which your app and sample data is installed. Example value: `https://testdrive.crm.dynamics.com`.

- **Azure Active Directory tenant ID** – The ID of the Azure tenant for your Dynamics 365 instance. To retrieve this value, sign in to Azure portal and navigate to **Azure Active Directory** > **Properties** and copy the directory ID. Example value: 172f988bf-86f1-41af-91ab-2d7cd01112341.

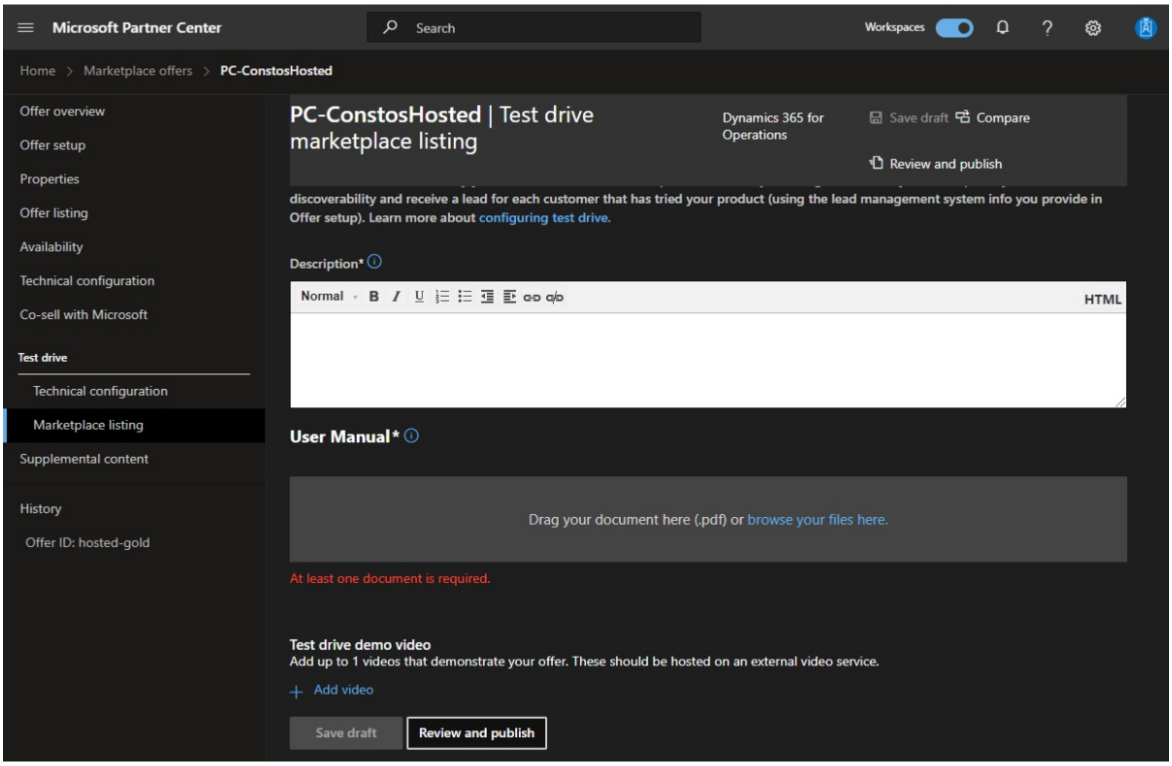
- **Azure Active Directory tenant name** – The name of the Azure Tenant for your Dynamics 365

Instance. Use the format `<tenantname>.onmicrosoft.com`. Example Value: `testdrive.onmicrosoft.com`
.

- **Azure Active Directory application ID** – The ID of the Azure Active Directory (AD) app you created in Step 5. Example value: `53852862-a2ae-4e43-9461-faa49650a096`.
- **Azure Active Directory application client secret** – Secret for the Azure AD app created in Step 5. Example value: `IJUgaIOfq9b9LbUjeQmzNBW4VGn6grr1l/n3aMrnfdk=`.
- **Trial Legal Entity** – Provide a Legal Entity to assign a trial user. You can create a new one at Create or modify a legal entity.
- **Role name** – The AOT name (Application Object Tree) of the custom Dynamics 365 security role you created for test drive. This is the role that will be assigned to users during their test drive.



7. Complete the fields on the **Test drive marketplace listing** page.



- **Description** – An overview of your test drive. This text will be shown to the user while the test drive is being provisioned. This field supports HTML if you want to provide formatted content (required).
- **User manual** – A PDF user manual that helps test drive users understand how to use your app (required).
- **Test drive demo video** – A video that showcases your app (optional).

Set up an Azure Marketplace subscription for hosted test drives

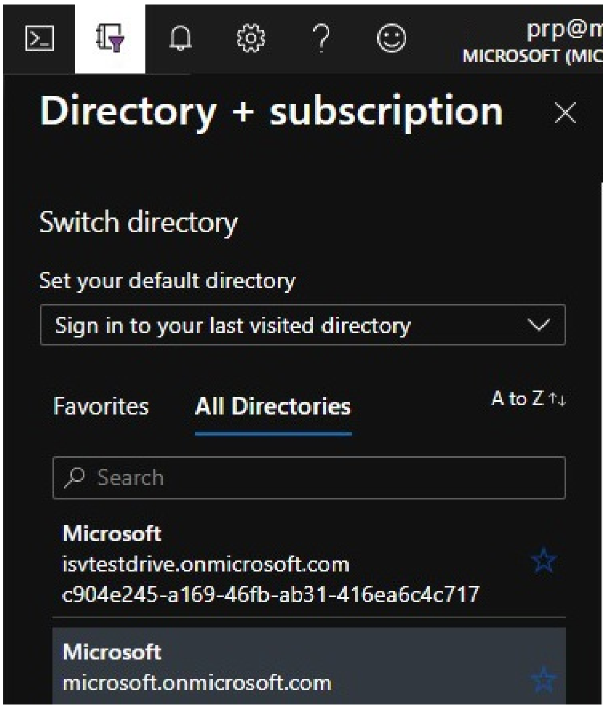
11/22/2021 • 5 minutes to read • Edit Online

This article explains how to set up an Azure Marketplace subscription and **Dynamics 365 for Customer Engagement & Power Apps** or **Dynamics 365 for Operations** environment for test drives.

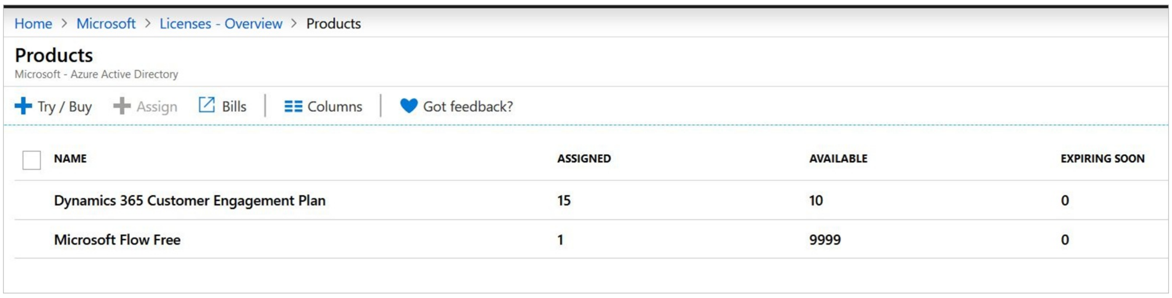
Set up for Dynamics 365 for Customer Engagement & Power Apps

1. Sign into the Azure portal with an Admin account.

2. Verify you are in the tenant associated with your Dynamics 365 test drive instance by hovering over your account icon in the upper right corner. If you are not in the correct tenant, select the account icon to switch into the correct tenant.



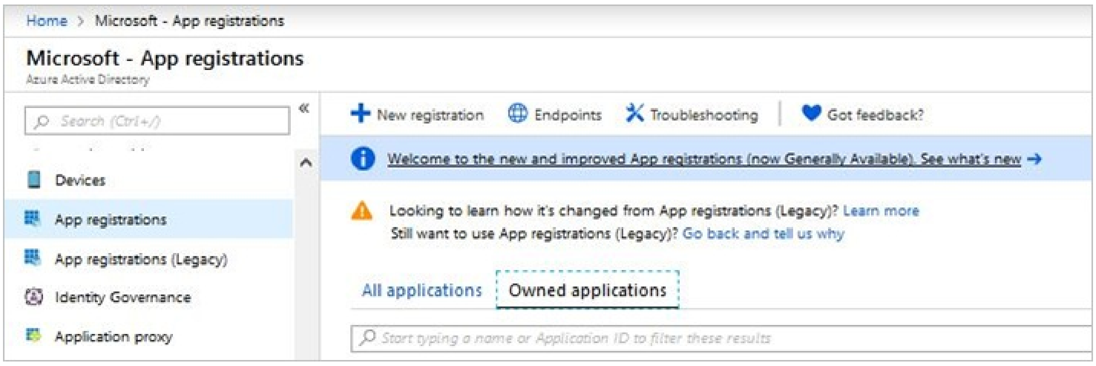
3. Verify that the **Dynamics 365 Customer Engagement Plan** license is available.



4. Create an Azure Active Directory (AD) app in Azure. AppSource will use this app to provision and deprovision the test drive user in your tenant.

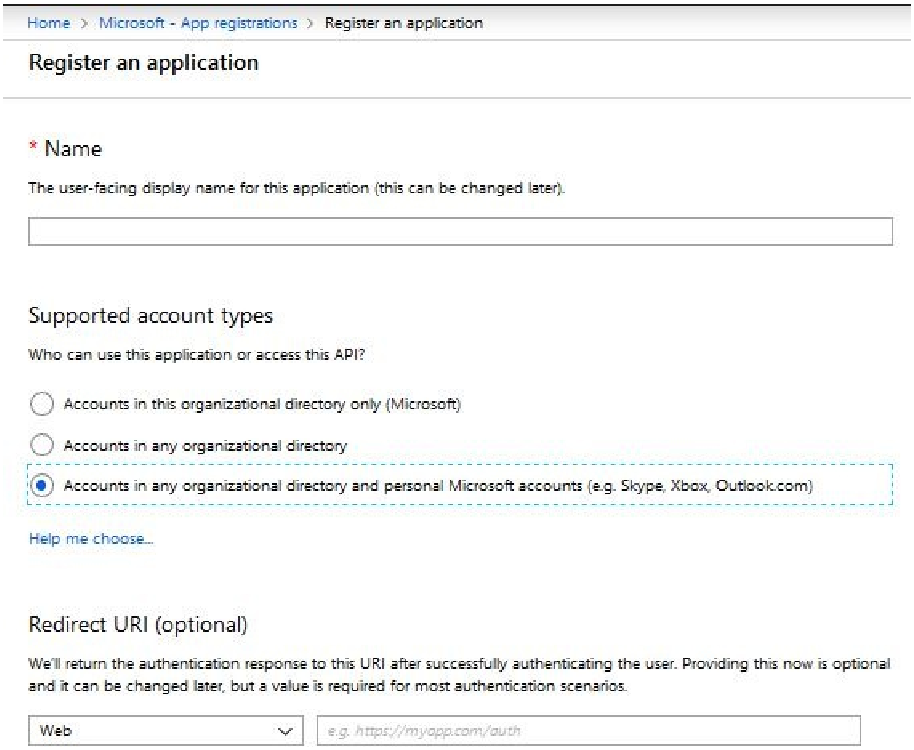
   a. From the filter pane, select **Azure Active Directory**.

   b. Select **App registrations**.



c. Select **New registration**.

d. Provide an appropriate application name.



e. Under Supported account types, select **Account in any organization directory and personal Microsoft accounts**.

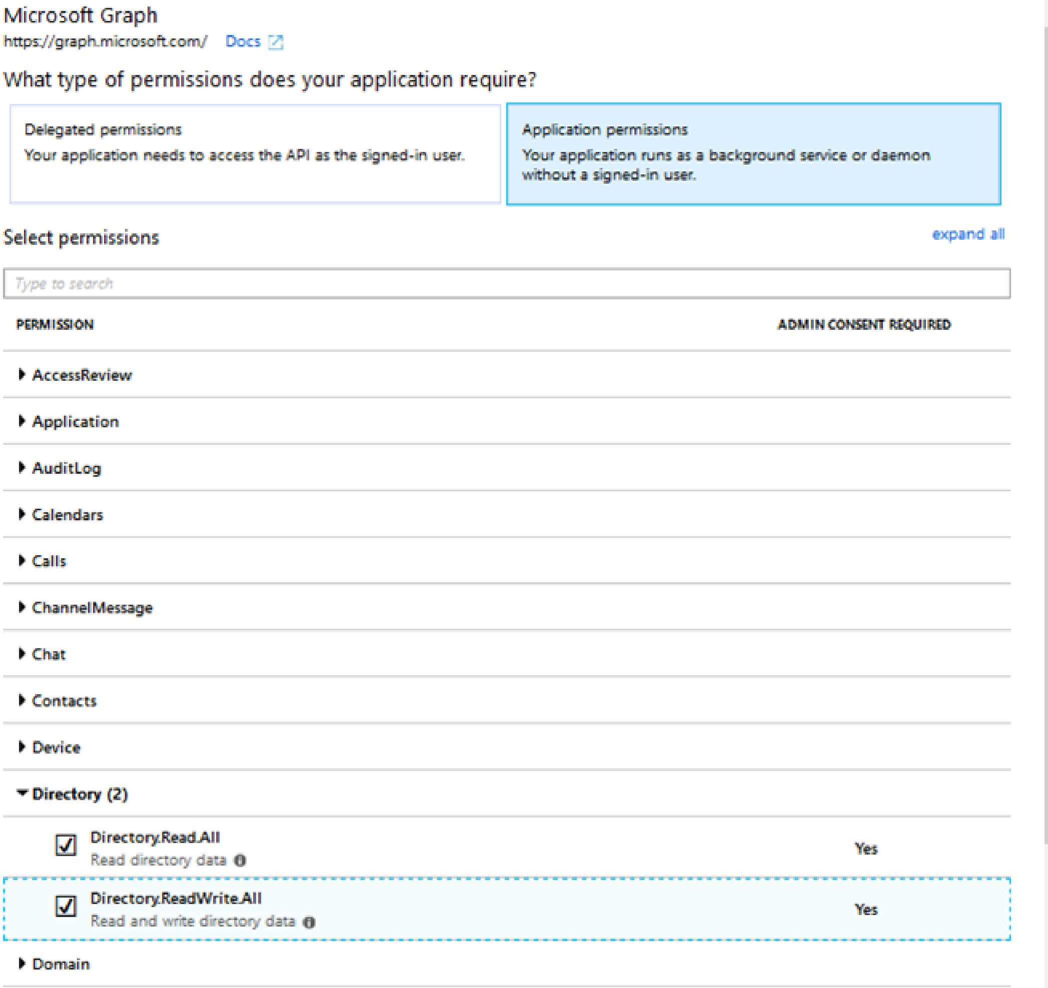
f. Select **Create** and wait for your app to be created.

g. Once the app is created, note the **Application ID** displayed on the overview screen. You will need this value later when configuring your test drive.

h. Under **Manage Application**, select **API permissions**.

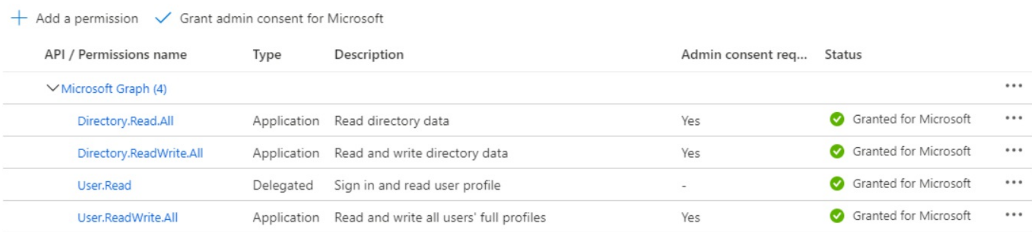
i. Select **Add a permission** and then **Microsoft Graph API**.

j. Select the **Application** permission category and then the **User.ReadWrite.All**, **Directory.Read.All** and **Directory.ReadWrite.All** permissions.



k. Once the permission is added, select **Grant admin consent for Microsoft**.

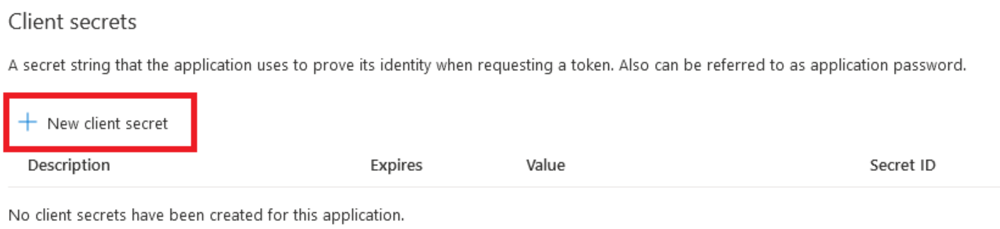
l. From the message alert, select **Yes**.



m. To generate a secret for the Azure AD App:

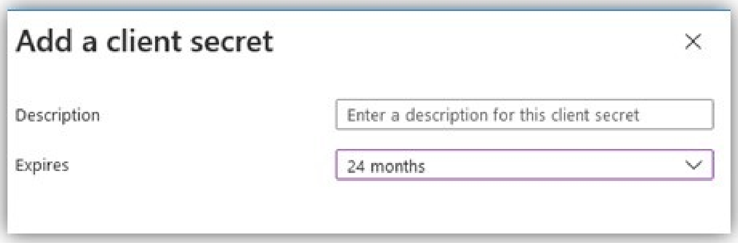
a. From **Manage Application**, select **Certificate and secrets**.

b. Under Client secrets, select **New client secret**.



c. Enter a description, such as *Test Drive*, and select an appropriate duration. Because the test drive will break once this Key expires, at which point you will need to generate and provide AppSource a new key, we recommend using the maximum duration of 24 months.

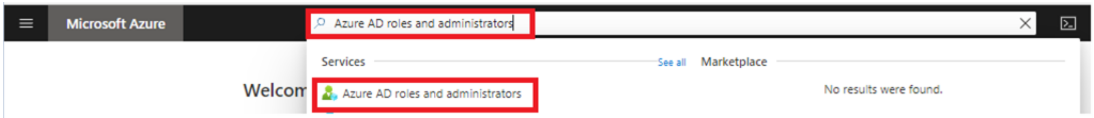
d. Select **Add** to generate the Azure app secret. Copy this value as it will be hidden as soon as you leave this blade. You will need this value later when configuring your test drive.



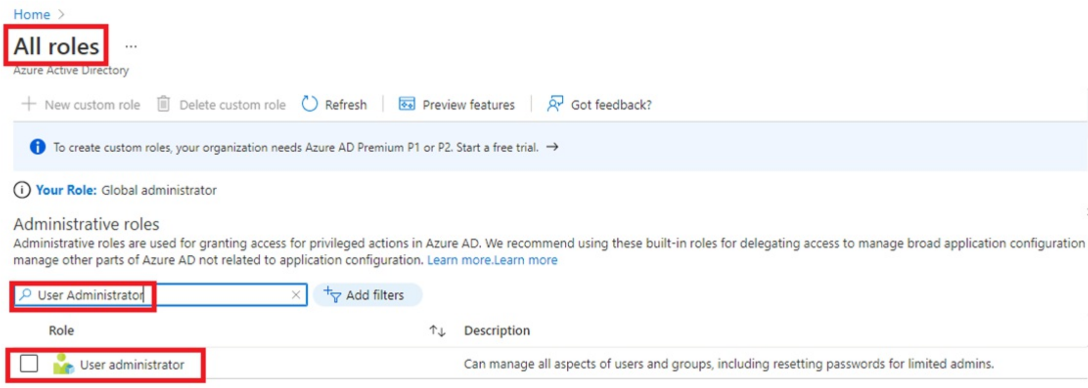
5. Add the Service Principal role to the application to allow the Azure AD app to remove users from your Azure tenant. There are two options for completing this step.

   Option 1

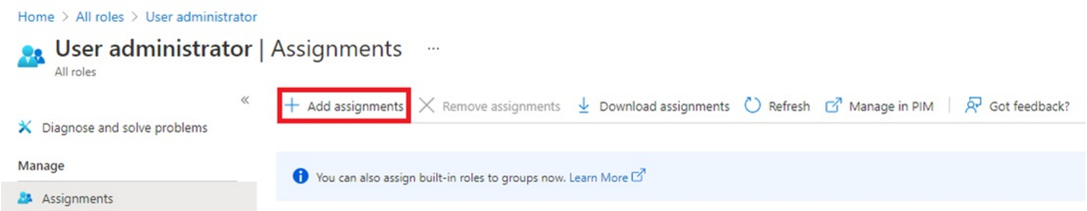
   a. Search for **Azure AD roles and administrators** and select the service.



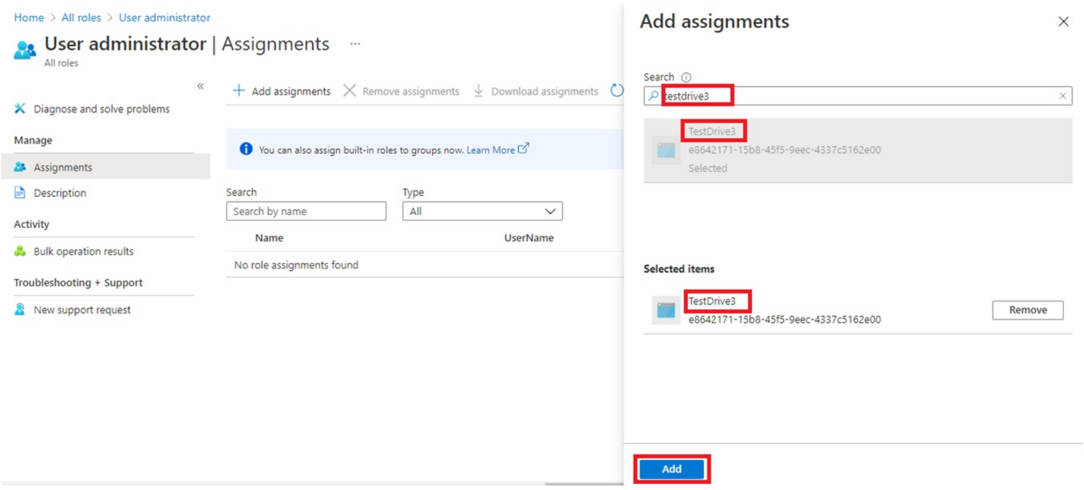
   b. On the **All roles** page, search for the **User Administrator** role and double-click **User administrator**.



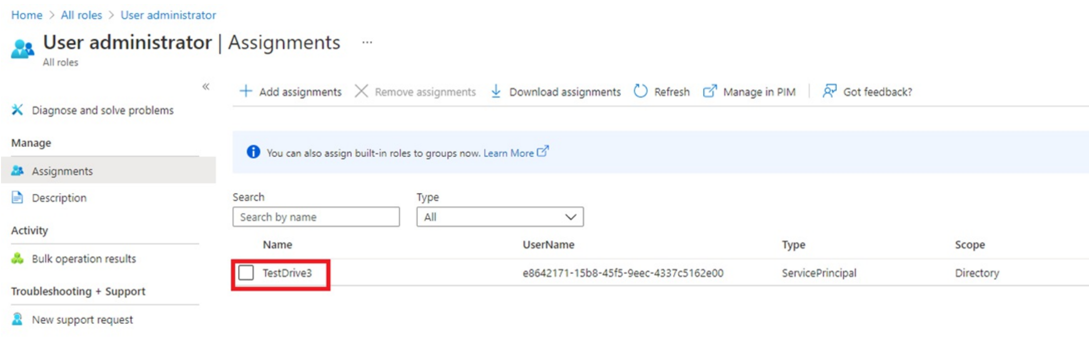
   c. Select **Add Assignments**.



   d. Search for and select the above-created app, then **Add**.



e. Note the Service Principal role successfully assigned to the application:



Option 2

a. Open an Administrative-level PowerShell command prompt.

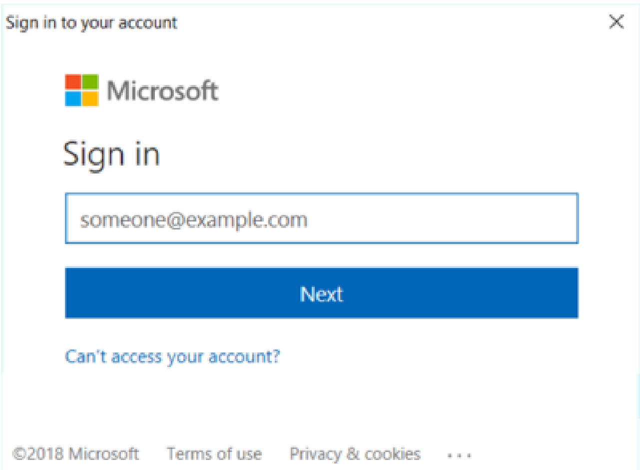
b. Install-Module MSOnline (run this command if MSOnline is not installed).

c. Connect-MsolService (this will display a popup window; sign in with the newly created org tenant).

d. $applicationId = <YOUR_APPLICATION_ID>.

e. $sp = Get-MsolServicePrincipal -AppPrincipalId $applicationId.

f. Add-MsolRoleMember -RoleObjectId fe930be7-5e62-47db-91af-98c3a49a38b1 -RoleMemberObjectId $sp.ObjectId -RoleMemberType servicePrincipal.



6. Create a new Security Group and add it to Canvas App (Power Apps). This step is applicable only to Canvas App (Power Apps) offers.

   a. Create a new Security Group.

a. Go to **Azure Active Directory**.

b. Under **Manage**, select **Groups**.

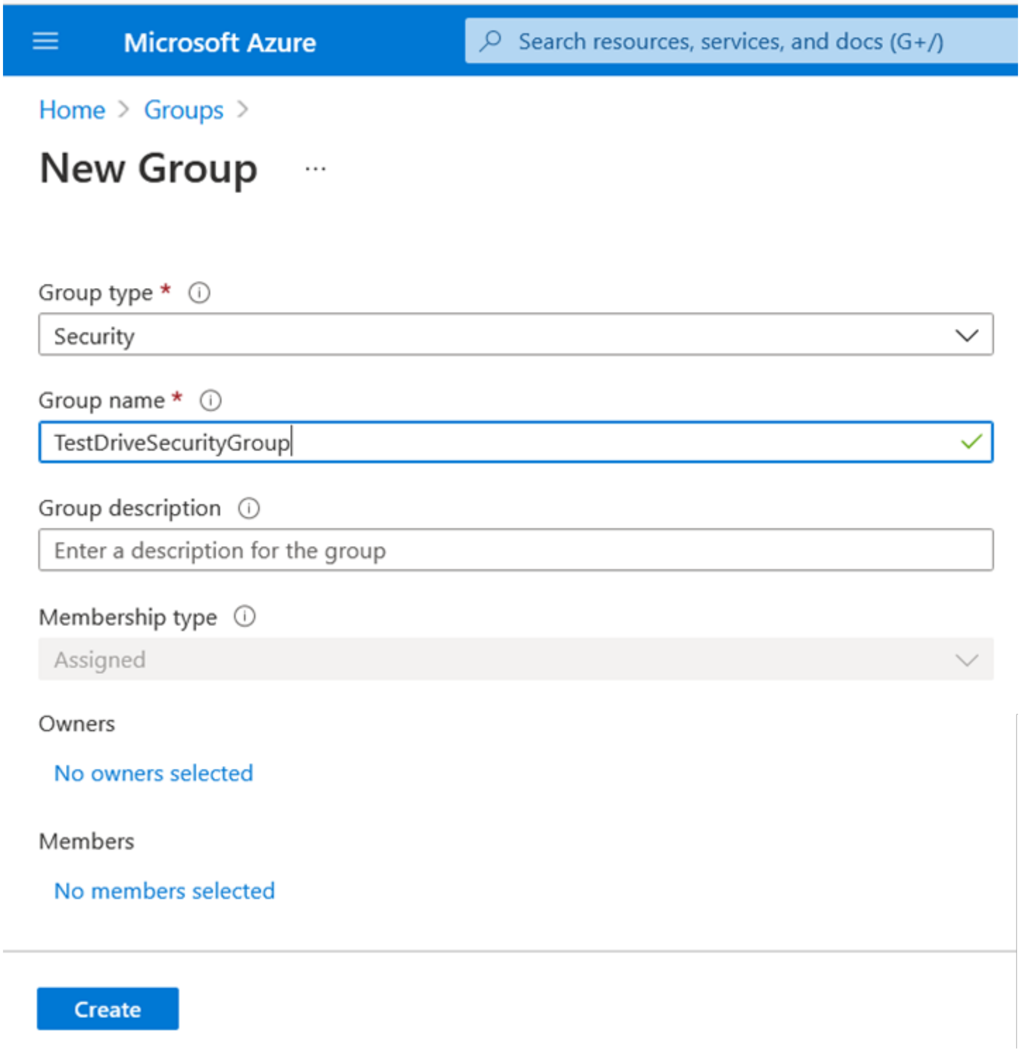
c. Select **+ New Group**.

d. Select the **Security Group** type.

e. For **Group Name**, enter *TestDriveSecurityGroup*.

f. Add a description, such as **Security Group for Test Drive**.

g. Leave other fields as default and select **Create**.



b. Add the security group just created to the Canvas App (Power Apps).

a. Open the **PowerApps** portal page and sign in.

b. Select **Apps**, then the ellipses at the app.

c. Select **Share**.

d. Search for the **TestDriveSecurityGroup** security group created in the prior step.

e. Add **Data permissions** to the security group.

f. Clear the **send email** invitation check box.

g. Select **Share**.

NOTE

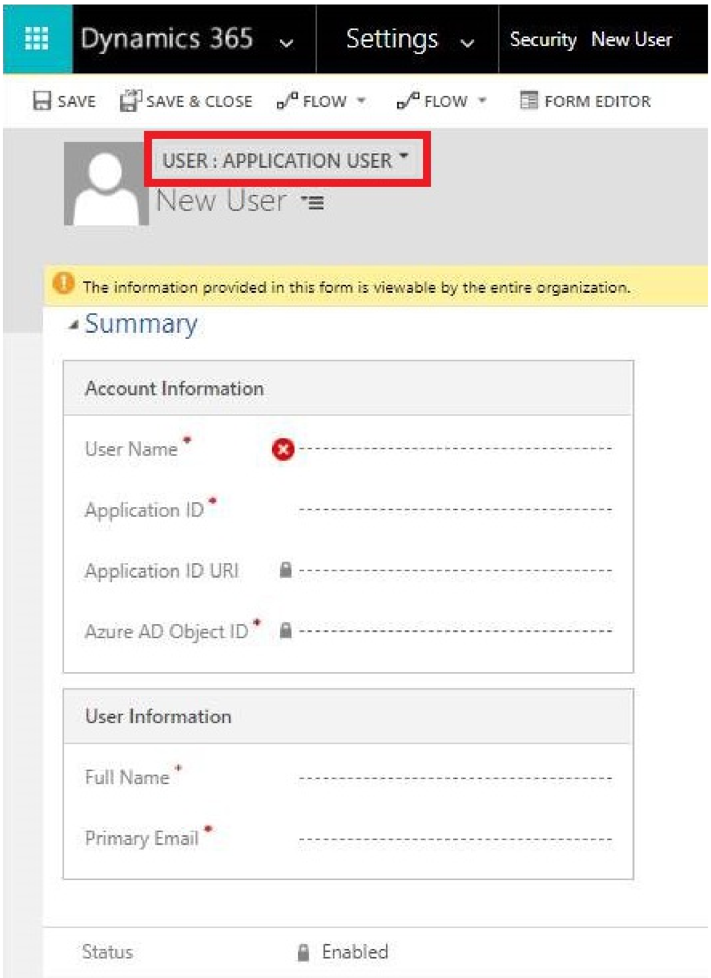
When using a backend data source other than CE/Dataverse for Canvas App (Power Apps):

- Allow the above created security group to access your data source. For example, a SharePoint data source.
- Open SharePoint and share the data table with the Security Group.

7. Add the just-created Azure app as an application user to your test drive CRM instance. This step is applicable only to Dynamics 365 Customer Engagement Offers.

   a. Sign into **CRM instance** and select **Setting** > **Security** > **Users**.

   b. Change the view to **Application Users**.

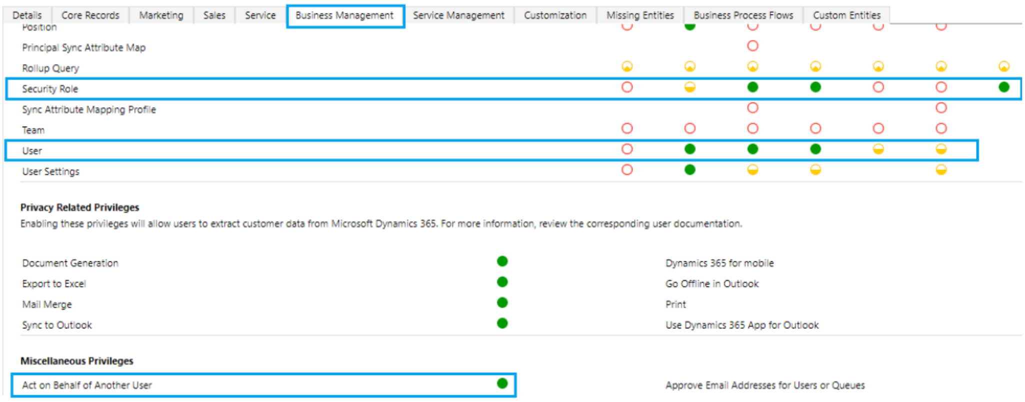
   c. Add a new user (ensure the form is for APPLICATION USER).

   d. Add the above created **Azure ApplicationId** in **Application ID**.

   e. Select **Save**.

   f. Select **Manage roles**.

   g. Assign a custom or OOB security role that contains read, write, and assign role privileges, such as *System Administrator*.



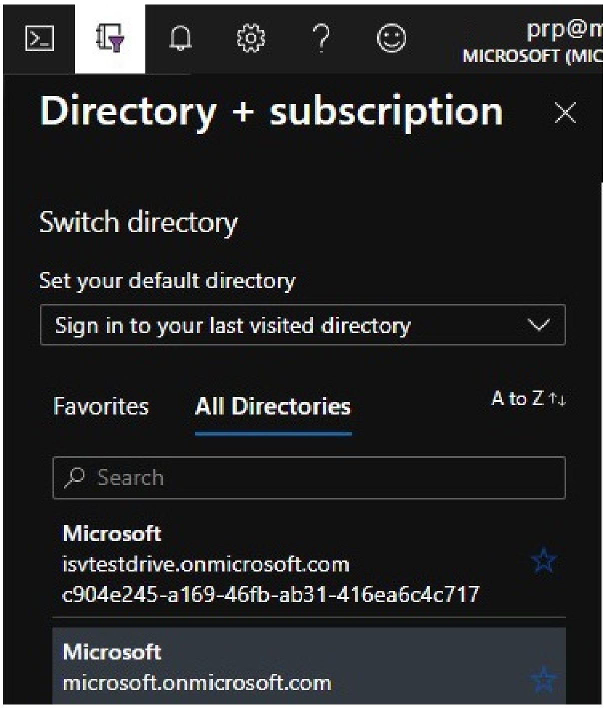
h. Enable the **Act on Behalf of Another User** privilege.

i. Assign the application user the custom security role you created for your test drive.

Set up for Dynamics 365 for Operations

1. Sign into the Azure portal with an Admin account.

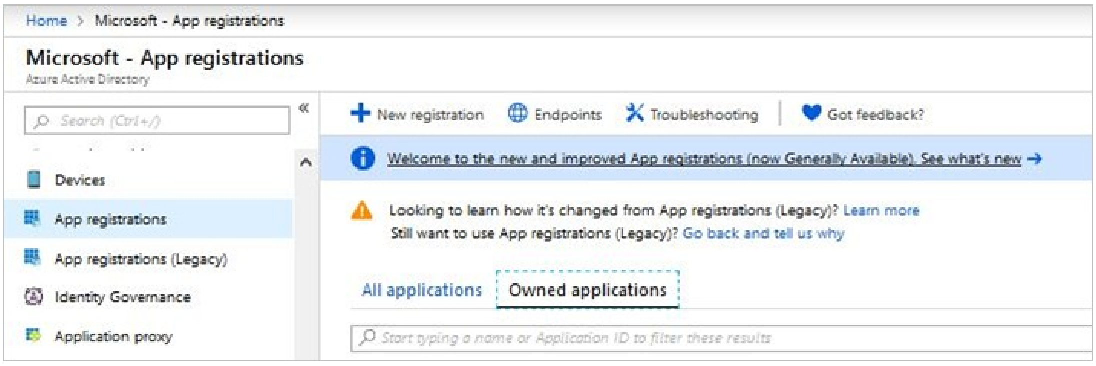
2. Verify you are in the tenant associated with your Dynamics 365 test drive instance by hovering over your account icon in the upper right corner. If you are not in the correct tenant, select the account icon to switch into the correct tenant.



3. Create an Azure AD App in Azure. AppSource will use this app to provision and deprovision the test drive user in your tenant.

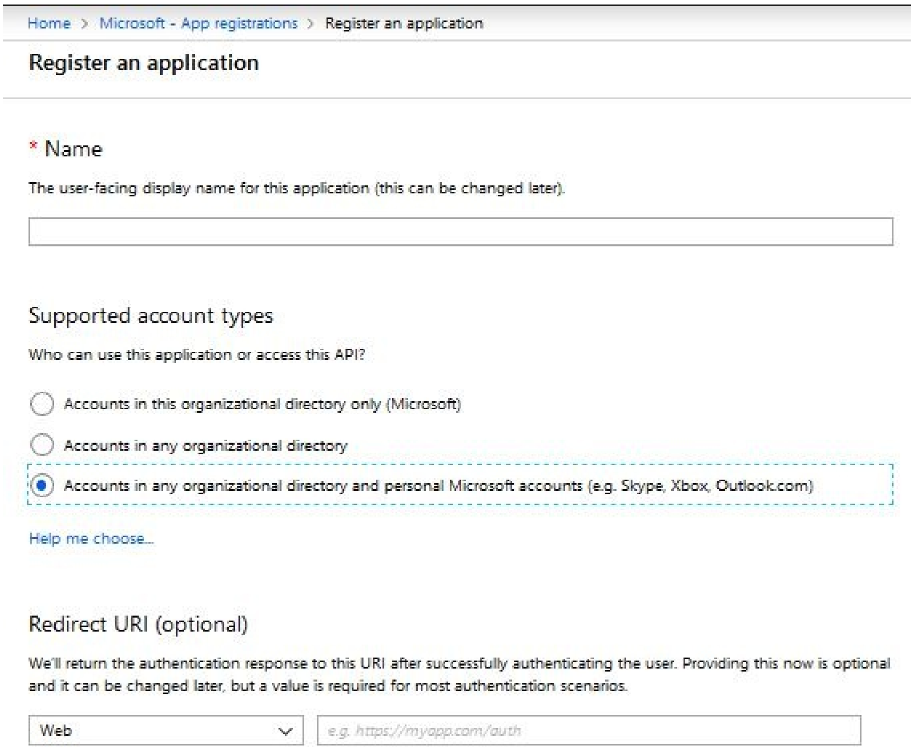
   a. From the filter pane, select **Azure Active Directory**.

   b. Select **App registrations**.



c. Select **New registration**.

d. Provide an appropriate application name.



e. Under Supported account types, select **Account in any organization directory and personal Microsoft accounts**.

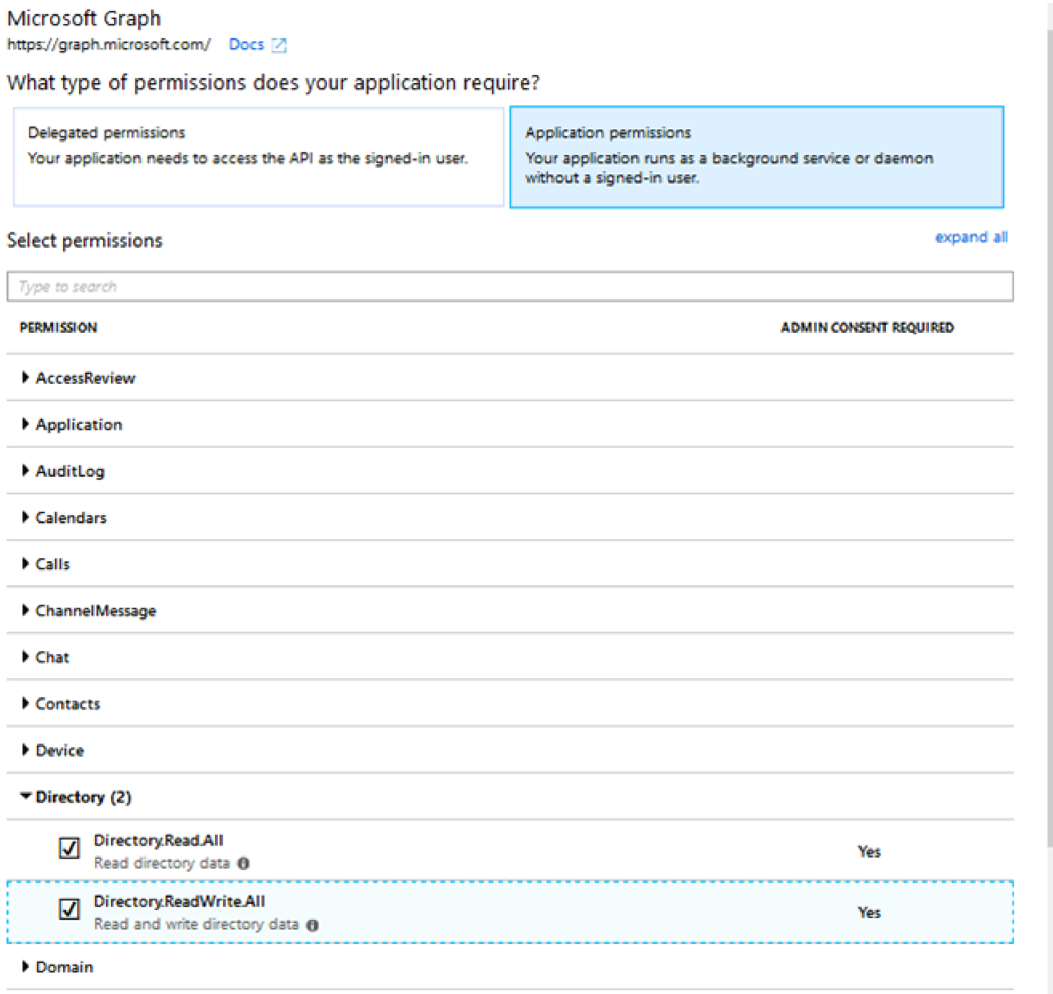
f. Select **Create** and wait for your app to be created.

g. Once the app is created, note the **Application ID** displayed on the overview screen. You will need this value later when configuring your test drive.

h. Under **Manage Application**, select **API permissions**.

i. Select **Add a permission** and then **Microsoft Graph API**.

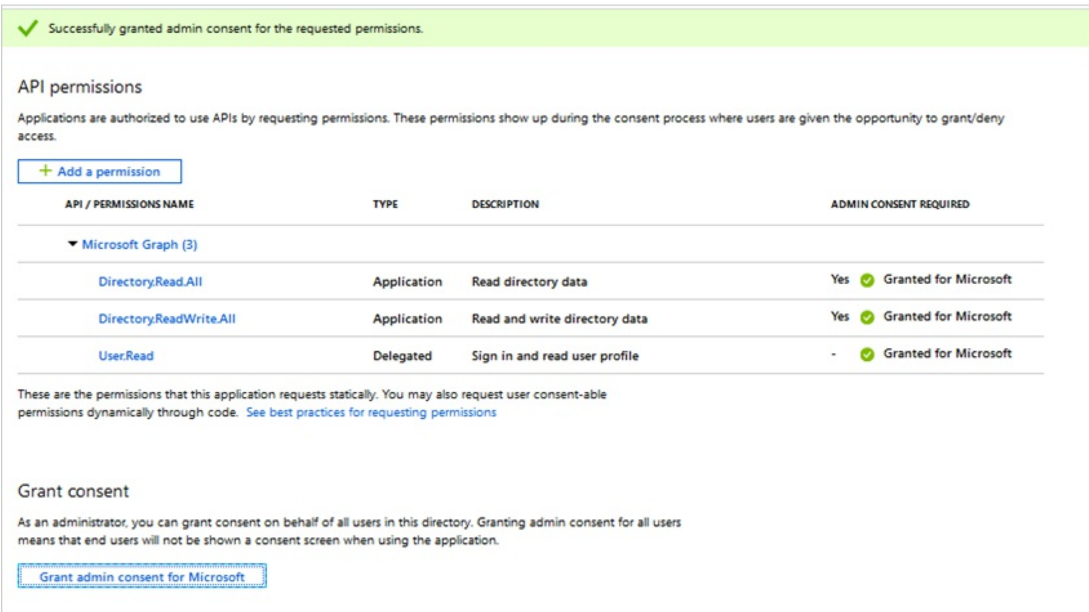
j. Select the **Application** permission category and then the **Directory.Read.All** and **Directory.ReadWrite.All** permissions.



k. Select **Add permission**.

l. Once the permission is added, select **Grant admin consent for Microsoft**.

m. From the message alert, select **Yes**.



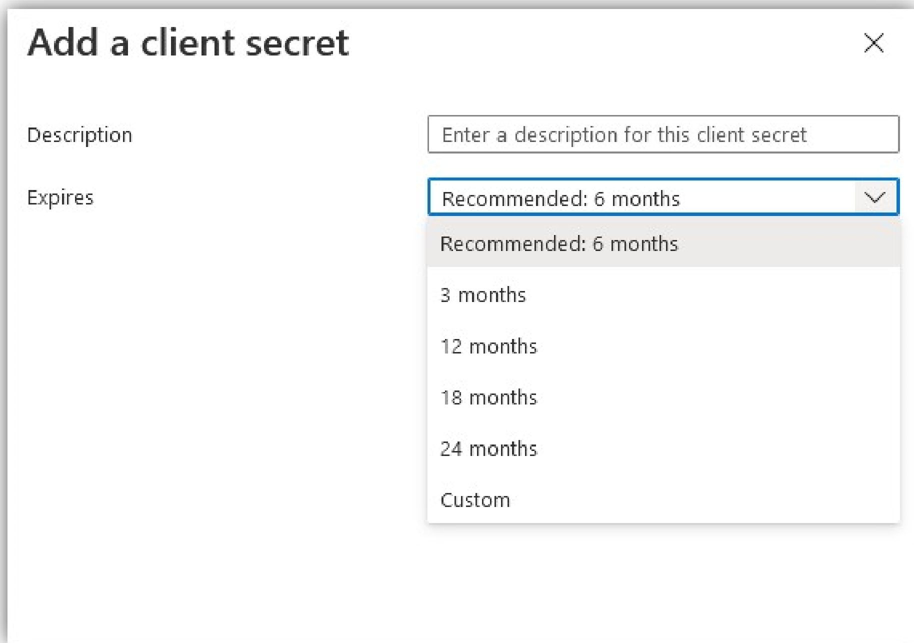
n. To generate a secret for the Azure AD App:

a. From **Manage Application**, select **Certificate and secrets**.

b. Under Client secrets, select **New client secret**.

c. Enter a description, such as *Test Drive*, and select an appropriate duration. The test drive will break once this Key expires, at which point you will need to generate and provide AppSource a new key.

d. Select **Add** to generate the Azure app secret. Copy this value as it will be hidden as soon as you leave this blade. You will need this value later when configuring your test drive.



4. Add the Service Principal role to the application to allow the Azure AD app to remove users from your Azure tenant.

   a. Open an Administrative-level PowerShell command prompt.

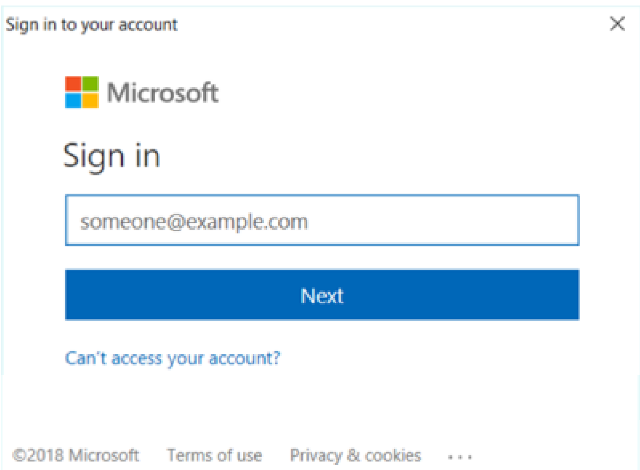
   b. Install-Module MSOnline (run this command if MSOnline is not installed).

   c. Connect-MsolService (this will display a popup window; sign in with the newly created org tenant).

   d. $applicationId = <YOUR_APPLICATION_ID>.

   e. $sp = Get-MsolServicePrincipal -AppPrincipalId $applicationId.

   f. Add-MsolRoleMember -RoleObjectId fe930be7-5e62-47db-91af-98c3a49a38b1 -RoleMemberObjectId $sp.ObjectId -RoleMemberType servicePrincipal.



5. Now add the above app to **Dynamics 365 for Operations** to enable the app to manage users.

   a. Find your **Dynamics 365 for Operations** instance.
   b. From the top-left corner, click the three-line menu (hamburger).

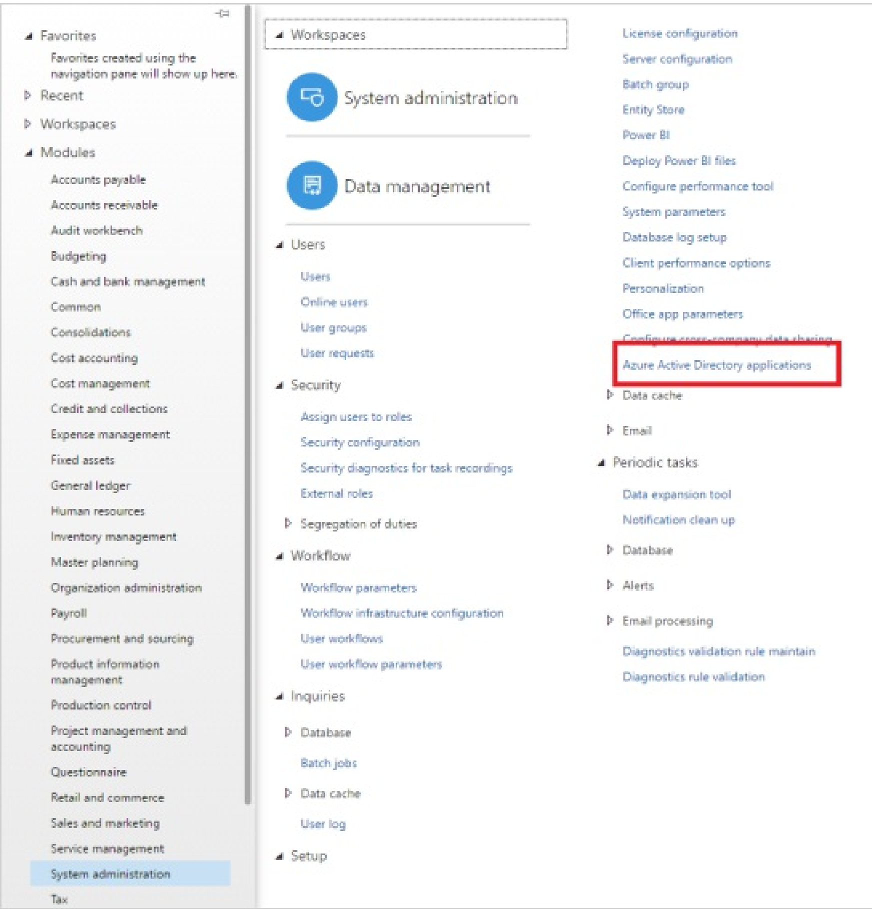
c. Select **System Administration**.

d. Select **Azure Active Directory applications**.

e. Select **+ New**.

f. Enter the **Client ID of the Azure AD app** that is going to perform the on-behalf-of actions.

> **NOTE**
>
> The user ID on whose behalf the actions will be performed (typically the System Admin of the instance or a user who has privileges to add other users).



Azure customer usage attribution

11/22/2021 • 12 minutes to read • Edit Online

Customer usage attribution associates usage from Azure resources in customer subscriptions created while deploying your IP with you as a partner. Forming these associations in internal Microsoft systems brings greater visibility to the Azure footprint running your software. For Azure Application offers in the commercial marketplace, this tracking capability helps you align with Microsoft sales teams and gain credit for Microsoft partner programs. Customer usage attribution isn't applicable to Azure virtual machine offers in the commercial marketplace. There is nothing a marketplace publisher needs to do for virtual machine offers to ensure their Azure consumption is tracked in end-customer subscriptions.

Customer usage attribution supports three deployment options:

1. Azure Resource Manager templates (the common underpinnings of Azure apps, also referred to in the commercial marketplace as "solution templates" or "managed apps"): partners create Resource Manager templates to define the infrastructure and configuration of their Azure solutions. A Resource Manager template allows your customers to deploy your solution's resources in a consistent and repeatable state.
2. Azure Resource Manager APIs: partners can call the Resource Manager APIs to deploy a Resource Manager template or directly provision Azure services.
3. Terraform: partners can use Terraform to deploy a Resource Manager template or directly deploy Azure services.

There are secondary use cases for customer usage attribution outside of the commercial marketplace described later in this article.

> **IMPORTANT**
>
> - Customer usage attribution is not intended to track the work of systems integrators, managed service providers, or tools designed primarily to deploy and manage Azure resources.
> - Customer usage attribution is for new deployments and does not support tracking resources that have already been deployed.
> - Not all Azure services are compatible with customer usage attribution. Azure Kubernetes Services (AKS), VM Scale Sets, and Azure Batch have known issues that cause under-reporting of usage.

Commercial marketplace Azure apps

Tracking Azure usage from Azure apps published to the commercial marketplace is largely automatic. When you upload a Resource Manager template as part of the technical configuration of your marketplace Azure app's plan, Partner Center will add a tracking ID readable by Azure Resource Manager.

> **NOTE**
>
> To ensure your application's usage is attributed accurately in our systems:
>
> 1. If you define the tracking ID in the resource type Microsoft.Resources/deployment with a variable, replace the variable with the tracking ID visible in Partner Center on the plan's **Technical Configuration** page (see Add a GUID to a Resource Manager template below).
> 2. If your Resource Manager template uses resources of type Microsoft.Resources/deployments for purposes other than customer usage attribution, Microsoft will be unable to add a customer usage attribution tracking ID on your behalf. Add a new resource of type Microsoft.Resources/deployments and add the tracking ID visible in Partner Center on the plan's **Technical configuration** page (see Add a GUID to a Resource Manager template below).

If you use Azure Resource Manager APIs, you will need to add your tracking ID per the instructions below to pass it to Azure Resource Manager as your code deploys resources. This ID is visible in Partner Center on your plan's Technical Configuration page.

> **NOTE**
>
> For existing Azure apps, a one-time migration began in March 2021 to update the tracking IDs in each plan's technical configuration. Usage from past deployments of those offers will remain tracked in Microsoft systems.
>
> As you update your offers, you no longer need to add the **Microsoft.Resources/deployments** resource type in your main template file.

Other use cases

You may use customer usage attribution to track Azure usage of solutions not available in the commercial marketplace. These solutions usually reside in the Quickstart repository, private GitHub repositories, or come from 1:1 customer engagements that create durable IP (such as a deployable and scalable app).

There are several manual steps required:

1. Create one or more GUIDs to use as your tracking IDs.
2. Register those GUIDs in Partner Center.
3. Add your registered GUIDs to your Azure app and/or user agent strings.

Create GUIDs

Unlike the tracking IDs that Partner Center creates on your behalf for Azure apps in the commercial marketplace, other uses of CUA require you to create a GUID to use as your tracking ID. A GUID is a unique reference identifier that has 32 hexadecimal digits. To create GUIDs for tracking, you should use a GUID generator, for example, via PowerShell:

```
[guid]::NewGuid()
```

You should create a unique GUID for each product and distribution channel. You can use a single GUID for a product's multiple distribution channels if you don't want reporting to be split. Reporting occurs by Microsoft Partner Network ID and GUID.

Register GUIDs

GUIDs must next be registered in Partner Center so they can be associated with you as a partner:

1. Sign in to Partner Center.

2. Sign up as a commercial marketplace publisher.

3. Select **Settings** (gear icon) in the top-right corner, then **Account settings**.

4. Select **Organization profile** > **Identifiers** > **Add Tracking GUID**.

5. In the **GUID** box, enter your tracking GUID. Enter just the GUID without the `pid-` prefix. In the **Description** box, enter your solution name or description.

6. To register more than one GUID, select **Add Tracking GUID** again. Additional boxes appear on the page.

7. Select **Save**.

Add a GUID to a Resource Manager template

To add your registered GUID to a Resource Manager template, make a single modification to the main template file:

1. Open the Resource Manager template.

2. Add a new resource of type Microsoft.Resources/deployments in the main template file. The resource needs to be in the **mainTemplate.json** or **azuredeploy.json** file only, not in any nested or linked templates.

3. Enter the GUID value after the `pid-` prefix as the name of the resource. For example, if the GUID is eb7927c8-dd66-43e1-b0cf-c346a422063, the resource name will be **pid-eb7927c8-dd66-43e1-b0cf-c346a422063**. Example:

```
{ // add this resource to the resources section in the mainTemplate.json
    "apiVersion": "2020-06-01",
    "name": "pid-XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", // use your generated GUID here
    "type": "Microsoft.Resources/deployments",
    "properties": {
        "mode": "Incremental",
        "template": {
            "$schema": "https://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",
            "contentVersion": "1.0.0.0",
            "resources": []
        }
    }
} // remove all comments from the file when complete
```

4. Check the template for errors.

5. Republish the template in the appropriate repositories.

6. Verify GUID success in the template deployment.

> **TIP**
>
> For more information on creating and publishing Resource Manager templates, see: create and deploy your first Resource Manager template.

Verify deployments tracked with a GUID

After you modify your template and run a test deployment, use the following PowerShell script to retrieve the resources you deployed and tagged.

You can use the script to verify that the GUID is successfully added to your Resource Manager template. The script doesn't apply to Resource Manager API or Terraform deployments.

Sign in to Azure. Select the subscription with the deployment you want to verify before you run the script. Run the script within the subscription context of the deployment.

The **GUID** (below called "deploymentName") and **resourceGroupName** name of the deployment are required parameters.

You can get the original script on GitHub.

```
Param(
    [string][Parameter(Mandatory=$true)]$deploymentName, # the full name of the deployment, e.g. pid-
XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
    [string][Parameter(Mandatory=$true)]$resourceGroupName
)

# Get the correlationId of the named deployment
$correlationId = (Get-AzResourceGroupDeployment -ResourceGroupName $resourceGroupName -Name
"$deploymentName").correlationId

# Find all deployments with that correlationId
$deployments = Get-AzResourceGroupDeployment -ResourceGroupName $resourceGroupName | Where-
Object{$_.correlationId -eq $correlationId}

# Find all deploymentOperations in all deployments with that correlationId as PowerShell doesn't surface
outputResources on the deployment or correlationId on the deploymentOperation

foreach ($deployment in $deployments){
    # Get deploymentOperations by deploymentName
    # then the resourceIds for each resource
    ($deployment | Get-AzResourceGroupDeploymentOperation | Where-Object{$_.targetResource -notlike
"*Microsoft.Resources/deployments*"}).TargetResource
}
```

Notify your customers

Partners should inform their customers about deployments that use customer usage attribution. Microsoft reports the Azure usage associated with these deployments to the partner. The following examples include content that you can use to notify your customers about these deployments. In the examples, replace <PARTNER> with your company name. Partners should ensure the notification aligns with their data privacy and collection policies, including options for customers to be excluded from tracking.

Notification for Resource Manager template deployments

When you deploy this template, Microsoft can identify the installation of <PARTNER> software with the deployed Azure resources. Microsoft can correlate these resources used to support the software. Microsoft collects this information to provide the best experiences with their products and to operate their business. The data is collected and governed by Microsoft's privacy policies, located at https://www.microsoft.com/trustcenter.

Notification for SDK or API deployments

When you deploy <PARTNER> software, Microsoft can identify the installation of <PARTNER> software with the deployed Azure resources. Microsoft can correlate these resources used to support the software. Microsoft collects this information to provide the best experiences with their products and to operate their business. The data is collected and governed by Microsoft's privacy policies, located at https://www.microsoft.com/trustcenter.

Use Resource Manager APIs

In some cases, you may make calls directly against the Resource Manager REST APIs to deploy Azure services. Azure supports multiple SDKs to enable these calls. You can use one of the SDKs or call the REST APIs directly to deploy resources.

To enable customer usage attribution, when you design your API calls, include your tracking ID in the user agent header in the request. Format the string with the `pid-` prefix. Examples:

```
//Commercial Marketplace Azure app
pid-contoso-myoffer-partnercenter //copy the tracking ID exactly as it appears in Partner Center

//Other use cases
pid-b6addd8f-5ff4-4fc0-a2b5-0ec7861106c4 //enter your GUID after "pid-"
```

IMPORTANT

If you are using Resource Manager APIs with an Azure app in the commercial marketplace, use the tracking ID provided in Partner Center. Do NOT use a GUID.

Various SDKs interact with the Resource Manager APIs differently and will require some differences in your code. The examples below feature the non-commercial marketplace approach using a GUID and cover a variety of the more popular Azure SDKs.

Example: Python SDK

For Python, use the `config` attribute. You can only add the attribute to a UserAgent. Example:

```
client = azure.mgmt.servicebus.ServiceBusManagementClient(**parameters)
client.config.add_user_agent("pid-b6addd8f-5ff4-4fc0-a2b5-0ec7861106c4")
```

IMPORTANT

Add the attribute for each client. There's no global static configuration. You might tag a client factory to ensure every client is tracking. For more information, see this client factory sample on GitHub.

Example: .NET SDK

For .NET, make sure to set the user agent. Use the Microsoft.Azure.Management.Fluent library to set the user agent with the following code (example in C#):

```
var azure = Microsoft.Azure.Management.Fluent.Azure
    .Configure()
    // Add your pid in the user agent header
    .WithUserAgent("pid-XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", String.Empty)
    .Authenticate(/* Credentials created via
Microsoft.Azure.Management.ResourceManager.Fluent.SdkContext.AzureCredentialsFactory */)
    .WithSubscription("<subscription ID>");
```

Example: Azure PowerShell

If you deploy resources via Azure PowerShell, append your GUID using this method:

```
[Microsoft.Azure.Common.Authentication.AzureSession]::ClientFactory.AddUserAgent("pid-eb7927c8-dd66-43e1-
b0cf-c346a422063")
```

NOTE

This article uses the Azure Az PowerShell module, which is the recommended PowerShell module for interacting with Azure. To get started with the Az PowerShell module, see Install Azure PowerShell. To learn how to migrate to the Az PowerShell module, see Migrate Azure PowerShell from AzureRM to Az.

Example: Azure CLI

When you use the Azure CLI to append your GUID, set the `AZURE_HTTP_USER_AGENT` environment variable within the scope of a script. You can also set the variable globally for shell scope:

```
export AZURE_HTTP_USER_AGENT='pid-eb7927c8-dd66-43e1-b0cf-c346a422063'
```

For more information, see Azure SDK for Go.

Use Terraform

Support for Terraform is available through Azure Provider's 1.21.0 release: https://github.com/terraform-providers/terraform-provider-azurerm/blob/master/CHANGELOG.md#1210-january-11-2019. This applies to all partners who deploy their solution via Terraform and all resources deployed and metered by the Azure Provider (version 1.21.0 or later).

Azure provider for Terraform added a new optional field called *partner_id* for specifying the tracking GUID used for your solution. The value of this field can also be sourced from the *ARM_PARTNER_ID* Environment Variable.

```
provider "azurerm" {
          subscription_id = "xxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
          client_id = "xxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
          ……
          # new stuff for ISV attribution
          partner_id = "xxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"}
```

Set the value of *partner_id* to a registered GUID. DO NOT prefix the GUID with "pid-", just set it to the actual GUID.

> **IMPORTANT**
> If you are using Terraform with an Azure app in the commercial marketplace, use the entire tracking ID provided in Partner Center. Do NOT use a GUID.

Get support

Learn about the support options in the commercial marketplace at Support for the commercial marketplace program in Partner Center.

How to submit a technical consultation request

1. Visit Partner Technical Services.
2. Select **Cloud infrastructure and management** to view the technical journey.
3. Select **Deployment Services** > **Submit a request**.
4. Sign in using your MSA (MPN account) or your AAD (Partner Dashboard account).
5. Complete/review the contact information on the form that opens. The consultation details may be pre-populated or you may have drop-down options.
6. Enter a title and a detailed description of the problem.
7. Select **Submit**.

View step-by-step instructions with screenshots at Using Technical Presales and Deployment Services.

You will be contacted by a Microsoft Partner Technical Consultant to set up a call to scope your needs.

Report

Reporting for Azure usage tracked via customer usage attribution is not available today for ISV partners. Adding reporting to the Commercial Marketplace Program in Partner Center to cover customer usage attribution is targeted for the second half of 2022.

FAQ

After a tracking ID is added, can it be changed?

Tracking IDs for Azure apps in the commercial marketplace are managed automatically by Partner Center. A customer however can download a template and change or remove the tracking ID. Partners should proactively describe the role of the tracking ID to their customers to prevent removal or edits. Changing the tracking ID affects only new deployments and resources, not existing ones.

Can I track templates deployed from a non-Microsoft repository like GitHub?

Yes, as long as the tracking ID is present when the template is deployed, usage is tracked. To maintain the association between you as a publisher and your template deployed from a non-Microsoft repository, first download a copy of your published template (which will contain the tracking ID) from your offer's commercial marketplace listing in the Azure portal. Publish that version to GitHub or another non-Microsoft repository.

If your template is not listed in commercial marketplace and includes a registered GUID, make sure the GUID is present in the version you publish to GitHub or another non-Microsoft repository.

Does the customer receive reporting as well?

No. Customers can track their usage of all resources or resource groups within the Azure portal. Customers do not see usage broken out by CUA tracking ID.

Is customer usage attribution similar to the digital partner of record (DPOR) or partner admin link (PAL)?

Customer usage attribution is a mechanism to associate Azure usage with a partner's repeatable, deployable IP - forming the association at time of deployment. DPOR and PAL are intended to associate a consulting (Systems Integrator) or management (Managed Service Provider) partner with a customer's relevant Azure footprint for the time while the partner is engaged with the customer.

Your commercial marketplace benefits

11/22/2021 • 6 minutes to read • Edit Online

You've published to Microsoft's commercial marketplace, now you want to see your offer be successful. We provide you the sales, technical, and marketing benefits you need to accelerate your offer's growth.

Once your offer is live on Microsoft AppSource or Azure Marketplace, go to Partner Center to access and activate your eligible marketing, sales, and technical benefits. Marketplace Rewards benefits accrue based on your commercial marketplace engagement and sales. The more you engage, the more you get back.

> **NOTE**
>
> Currencies ($) referenced in images in this article are Marketplace Reward benefit tiers, which are based on cumulative billed sales or seats sold through Microsoft AppSource and Azure Marketplace.

Marketplace Rewards

Marketplace Rewards is designed to support you at your specific stage of growth, starting with awareness activities to help you get your first customers. As you grow through the commercial marketplace, you unlock new benefits designed to help you convert customers and close deals.

The program creates a positive feedback loop: the benefits at each stage of growth are designed to progress you to the next stage, allowing you to grow your business to Microsoft customers, with Microsoft's field, and through Microsoft's channel by leveraging the commercial marketplace as your platform.

Your benefits are differentiated based on whether your offer is List, Trial, or Transact.

Based on your eligibility, you will be contacted by a member of the Rewards team when your offer goes live, based on your eligibility.

List and trial offers receive one-time use benefits. Transact offers are eligible for evergreen benefit engagement. As transacting partners, as you grow your billed sales through the commercial marketplace, you unlock greater benefits per per billed sales (or seats sold) tier.

The minimum requirement to publish in the online stores is an MPNID, so these benefits are available to all partners regardless of MPN competency status or partner type. Every partner is empowered to grow your business through the commercial marketplace as a platform.

You will get support in understanding the resources available to you and in implementing best practices, which you can also review on your own.

Detailed descriptions of all program benefits can be found in this Marketplace Rewards program presentation.

Getting started is easy

1. Publish an offer in either Microsoft AppSource or Azure Marketplace.
2. Go to Marketplace Rewards in Partner Center and select **Enroll in Marketplace Rewards Program**.
3. To activate sales and marketing benefits, assign a company marketing contact. This contact will receive follow-up communications about your Marketplace Rewards.
4. To add or update your marketing contact information, go to the top of the Sales and Marketing benefits tab on Marketplace Rewards page, then select **Add, update, or change**. Next, do the following:
   a. Select a user from the list. If the user you want to assign is not in the list, you can add new users in

Account settings.

b. Provide an email address for the user that's different from the email address associated with your company's Partner Center account. We will email instructions for using your Marketplace Rewards benefit to your designated marketing contact's email address.
c. Provide the contact phone and preferred language for this marketing contact. After you finish entering this information, select **Assign user**.
d. After you've updated the marketing contact, select **Activate** for the benefit you want to start using. Once you activate a benefit, your marketing contact will be contacted by a member of the Rewards team within a week.

> **NOTE**
>
> If your offer has been live for more than four weeks and you have not received a message, please verify the owner of the offer within your organization. To do this, go into Partner Center and verify the contacts listed. One of these listed contact should have the communication and next steps.
>
> If you cannot determine the owner, or if the owner has left your company, raise a support ticket at Help and Support.

The scope of the activities available to you expands as you grow your offerings in the commercial marketplace. All listings receive a base level of optimization recommendations and promotion as part of a self-serve email of resources and best practices.

List, trial, and consulting benefits

Each time you publish on Microsoft AppSource or Azure Marketplace, you will have access to a new set of marketing, sales, and technical benefits. Once your offer goes live, go to Partner Center to activate your eligible benefits.

> **IMPORTANT**
>
> All Trial and Consulting benefits expire after three months.

The table below summarizes the eligibility requirements for list, trial, and consulting offers:

Go-To-Market benefit	All listings	Service proof of concept, implementation, or workshop offers	Trial offers
Co-Sell solution finder listing guidance	✓	✓	✓
Commercial marketplace listing optimization	✓	✓	✓
Commercial marketplace What's new blog	✓	✓	✓
Commercial marketplace marketing toolkit	✓	✓	✓
Market research and marketing materials: partner marketing center	✓	✓	✓
Self-serve digital marketing on demand	✓	✓	✓
Partnering and global expansion readiness assessments	✓	✓	✓
Onboarding documentation	✓	✓	✓
Commercial marketplace forums	✓	✓	✓
Microsoft 365 E5 developer subscription (Windows not included)	✓	✓	✓
Press release support #		✓	✓
Partner or customer success story #		✓	✓
Commercial marketplace featured category placement #		✓	

All above (non-transact) benefits expire after 3 months.
Requires a completed Commercial marketplace listing optimization.
All benefits subject to change.

Detailed descriptions for all these benefits can be found in the Marketplace Rewards program deck.

Marketplace Rewards for transact partners

When you go live with your transactable offer in either Microsoft AppSource or Azure Marketplace, you can access additional benefits as you grow your billed sales transactions or seats sold through the commercial marketplace.

> **NOTE**
>
> Seats sold threshold only applies to Microsoft 365 apps (SaaS applications that have integrations with Microsoft Teams, Office, Outlook, or SharePoint) and benefits must be completed by June 30, 2022.

These benefits are designed to support you in marketing, sales, and technical activities, and thereby helping you to get more visitors, receive more leads, and convert more business.

All partners who have a live transactable offer get to work with a dedicated engagement manager to choose the highest-value activities for your portfolio of commercial marketplace offers. This engagement is evergreen per offer, meaning you can choose your activities and the timing of these activities to align to the timing of your company's broader marketing and sales strategies.

Marketing benefits for transact offers

	Commercial marketplace billed sales or seats sold*:								
Transact marketing benefits	Publisher	$500	$25K or 250 seats	$50K or 500 seats	$100K or 1K seats	$500K or 5K seats	$1M or 10K seats	$2M or 20K seats	$5M or 50K seats
Market research and marketing materials: partner marketing center	✓	✓	✓	✓	✓	✓	✓	✓	✓
Self-serve digital marketing on demand	✓	✓	✓	✓	✓	✓	✓	✓	✓
Partnering and global expansion readiness assessments	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commercial marketplace listing optimization	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commercial marketplace marketing toolkit	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commercial marketplace what's new blog ▲	✓	✓	✓	✓	✓	✓	✓	✓	✓
Press release support # ♦	✓	✓	✓	✓	✓	✓	✓	✓	✓
Marketplace Rewards testimonial	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commercial marketplace featured category placement # ▲		✓	✓	✓	✓	✓	✓	✓	✓
Commercial marketplace blog feature #			✓	✓	✓	✓	✓	✓	✓
In-depth customer review #			✓	✓	✓	✓	✓	✓	✓
Azure sponsorship for Test Drive/trial sandbox # * ^				$5K	$10K	$50K	$75K	$100K	$200K
Partner or customer success story # ♦					✓	✓	✓	✓	✓
Partner spotlight in Microsoft internal commercial marketplace newsletter #						✓	✓	✓	✓
Social promotion spotlight # ▲							✓	✓	✓
Commercial marketplace featured home page placement # ▲							✓	✓	✓
Individual guest blog post # ♦							✓	✓	✓
Microsoft executive event endorsement #							✓	✓	✓

All benefits subject to change and must be completed by June 30, 2022.
Requires a completed Commercial marketplace listing optimization.
* Seats sold threshold applies to Microsoft 365 apps only (you must publish a SaaS application that has integrations with Microsoft Teams, Office, Outlook, or SharePoint and an Office 365 add-in offer to be eligible for Transact level benefits).
^Sponsorship is available as per offer availability in the respective country/region.
♦ Private offers require a public listing with the same solution.
▲ Not available for Private offers.

Sales benefits for transact offers

	Commercial marketplace billed sales or seats sold*:								
Transact sales benefits	Publisher	$500	$25K or 250 seats	$50K or 500 seats	$100K or 1K seats	$500K or 5K seats	$1M or 10K seats	$2M or 20K seats	$5M or 50K seats
Co-sell solution finder listing guidance	✓	✓	✓	✓	✓	✓	✓	✓	✓
Azure sponsorship for deployment/proof of concept # * ^		$1K	$5K	$10K	$25K	$50K	$75K	$100K	$200K
Microsoft seller webinar #					✓	✓	✓	✓	✓
Solution spotlight to Microsoft sales team # **					✓	✓	✓	✓	✓

All benefits subject to change and must be completed by June 30, 2022.
Requires a completed Commercial marketplace listing optimization.
** Requires co-sell ready listing in Co-Sell solution finder or a scheduled or completed Microsoft seller webinar.
* Seats sold threshold applies to Microsoft 365 apps only (you must publish a SaaS application that has integrations with Microsoft Teams, Office, Outlook, or SharePoint and an Office 365 add-in offer to be eligible for Transact level benefits).
^Sponsorship is available as per offer availability in the respective country/region.

Technical benefits for transact offers

Transact technical benefits	Commercial marketplace billed sales or seats sold* Publisher	$500	$25K or 250 seats	$50K or 500 seats	$100K or 1K seats	$500K or 5K seats	$1M or 10K seats	$2M or 20K seats	$5M or 50K seats
Onboarding documentation	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commercial marketplace forums	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commercial marketplace consultation: architecture guidance **	✓	✓	✓	✓	✓	✓	✓	✓	✓
Microsoft 365 E5 developer subscription (Windows not included)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Azure sponsorship for commercial marketplace publishing development/testing # * ^				$2K	$5K	$20K	$30K	$50K	$100K
Azure Active Directory integration for transact offers **					✓	✓	✓	✓	✓

All benefits subject to change and must be completed by June 30, 2022.
Requires a completed Commercial marketplace listing optimization.
* *Available to partners that have purchased an MPN package as this requires advisory hours.
* Seats sold threshold applies to Microsoft 365 apps only (you must publish a SaaS application that has integrations with Microsoft Teams, Office, Outlook, or SharePoint and an Office 365 add-in offer to be eligible for Transact level benefits).
^Sponsorship is available as per offer availability in the respective country/region.

Detailed descriptions for all these benefits can be found in the Marketplace Rewards program deck.

In addition to the Marketplace Rewards benefits, business applications partners with Dynamics offers published to Microsoft AppSource have supplementary programming available to them through ISV Connect. This includes technical, marketing, and sales support that is specialized for the needs of business applications partners.

Marketplace Rewards requirements and restrictions

Publisher Agreement

All the activities described on this page are covered by the Microsoft publisher agreement and are pursuant to the Commercial Benefits Program Addendum.

Cancellation policy

List and Trial publishers can opt in or opt out to activities per offer publication. Partners may opt out of any engagement at any time.

Microsoft reserves the right to revoke and terminate Marketplace Rewards benefits to publishers who:

- Engage in illegal activity using their marketplace listing.
- Receive a purchase that is known or believed to be fraudulent.
- Are de-listed from the commercial marketplace.
- Use their offer to show marketing or other content that violates copyright or trademark laws.
- Violate the policies of the Azure sponsorship program, including, but not limited to, using the Azure sponsorship funding for their own internal operations or Bitcoin mining.

Microsoft reserves the right to revoke and terminate Marketplace Rewards when:

- The customer making the purchase did so accidentally and wishes to cancel the purchase.
- The customer cancels before using the partner's product.

Offer availability

This offer is conducted in English for all partners with a live offer in Microsoft AppSource or Azure Marketplace.

Transactions that are proven to be fraudulent will not count towards a publisher's billed sales program tier, as noted in the list, trial, consulting section and the transact partner benefits section. Microsoft will allocate partners to eligibility tiers based on their actual billed sales, after the fraud has been removed.

Next steps

- Sign in to Partner Center to create or configure your offer.
- Activate your Marketplace Rewards benefits in Partner Center.
- Review the self-serve resources available to you.

- Sign up for the Microsoft AppSource and Azure Marketplace community forum and learn about relevant topics or join the discussion.

Co-sell with Microsoft sales teams and partners overview

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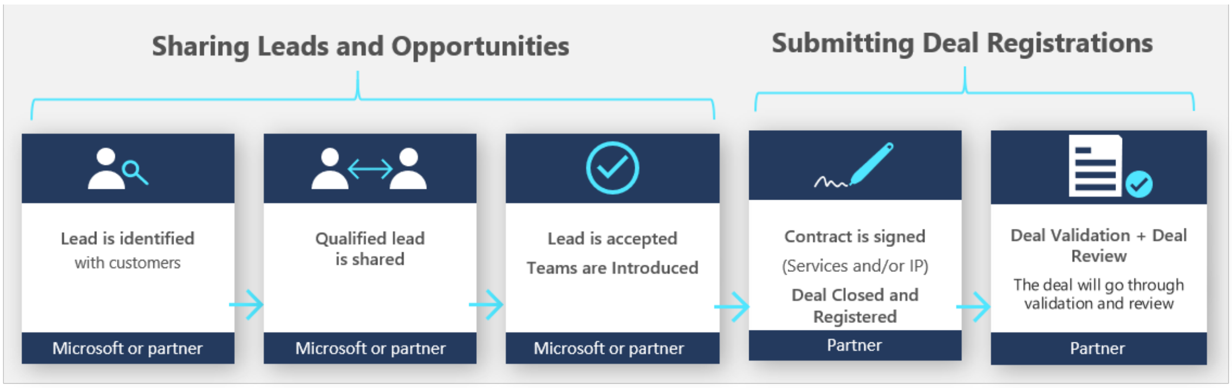
Co-selling with Microsoft is defined as any collaborative engagement between Microsoft and our partner ecosystem. This process includes building demand, sales planning, sharing sales leads, accelerating partner-to-partner empowered selling, and delivering marketplace-led commerce.

When you choose to co-sell an offer, you can work directly with Microsoft sales teams and Microsoft partners on joint selling opportunities. This unlocks benefits when selling through the commercial marketplace online stores: Azure Marketplace and Microsoft AppSource.

Co-selling opportunities are the result of acting on a lead, collaborating on it with Microsoft sales teams or Microsoft partners to provide a solution for a customer need.



These solutions (also called offers) can include software built with your intellectual property (IP) and services that support Microsoft technologies.

Co-sell opportunities

A co-sell opportunity is any type of collaboration with Microsoft sales teams, Microsoft partners, or both to sell products and solutions that meet customer needs. Some of the key categories of co-sell are:

- **Co-sell with Microsoft sales teams** – Work with one or more Microsoft sales teams to actively fulfill customer needs. This can include selling your offers, Microsoft's offers, or both. You and Microsoft sales teams can identify and share customer opportunities in which your solutions may be a good fit.
- **Partner to Partner (P2P)** – Work with another Microsoft partner to actively solve a customer problem.
- **Private deal** – Share what you are independently working on with Microsoft so it will be reflected in the Microsoft reporting system for analysis and forecasting.
- **Solution Assessment (SA)** – Work with partners who are vetted by the solution assessments business team to assess the technology needs of customers who are using or planning to use Microsoft technologies.

Co-sell statuses

These are the levels of co-sell status that can be applied to an offer.

Co-sell statuses for Azure:

- Not co-sell ready
- Co-sell ready

- Azure IP co-sell incentive

Co-sell statuses for business applications

- Business Applications Co-sell Incentive Standard
- Business Applications Co-sell Incentive Premium

For details about the requirements to achieve these co-sell statuses, see Co-sell requirements.

Benefits of co-sell ready status

Co-sell ready status exposes your solutions to Microsoft sales teams. Co-selling with Microsoft sales teams and Microsoft partners helps you reach a vast community of Microsoft-managed customers to collaborate on sales opportunities that accelerate your business growth.

To learn how to achieve co-sell ready and Azure IP co-sell status, see Co-sell ready and co-sell incentive requirements.

Benefits of co-sell incentive status

Co-sell incentivized status includes *Azure IP Co-sell incentivized* and *Business Applications Co-sell incentivized (Standard and Premium)*. These statuses incentivize Microsoft sales teams to sell your offer. To achieve this status, you must also achieve Co-sell ready status. Co-sell incentive status earns all the benefits of Co-sell ready status and can earn additional incentives for Microsoft sales teams, and be eligible for more commercial marketplace benefits.

Azure IP Co-sell incentive status can be applied to these offer types:

- Azure Application
- Azure Container
- Azure Virtual Machine
- IoT Edge module
- Software as a service (SaaS)

Business Applications Co-sell incentive (Standard and Premium) status can be applied to these offer types:

- Dynamics 365 for Customer Engagement & Power Apps
- Dynamics 365 for operations

Offers that achieve *Azure IP Co-sell incentivized* status gain these commercial marketplace benefits:

- Sales of your offer through Azure Marketplace will contribute towards customers' Azure consumption commitments. Eligible customers will see the offer marked as **Azure benefit eligible** in the Azure portal. To learn more about how the MACC program benefits customers and how they can find solutions that are enabled for MACC, see Azure Consumption Commitment benefit. For information about how publishers can get their transactable offer enrolled in MACC, see Azure consumption commitment enrollment.
- Offers that achieve *Azure IP Co-sell incentivized* status or are enrolled in the Microsoft Business Applications ISV Connect Program with Co-sell ready status will receive a **Microsoft Preferred solutions** badge on the offer listing page in the online stores: Azure Marketplace and AppSource. After an offer achieves the corresponding status, it may take up to 30 days for the preferred solution badge to be displayed in the online store. The badge promotes an offer's quality, performance, and ability to address customer needs in a certain industry vertical or solution area.

To learn how to achieve co-sell ready and co-sell incentive status, see Co-sell ready and Co-sell incentive requirements.

Next steps

- For information about requirements, see Co-sell ready and co-sell incentive requirements
- To configure an offer for co-sell, see Configure Co-sell for a commercial marketplace offer
- To verify co-sell status, see Verify Co-sell status for an offer.
- Learn more about Co-selling with Microsoft.

Configure co-sell for a commercial marketplace offer

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This article describes how to configure the **Co-sell with Microsoft** tab for a commercial marketplace offer. Providing information on this tab is entirely optional but it is required to achieve Co-sell Ready and IP Co-sell incentive status. The information you provide will be used by Microsoft sales teams to learn more about your offer when evaluating its fit for customer needs. This information is not available directly to customers. For more information about co-sell, see Co-sell with Microsoft sellers and partners overview and Co-sell with Microsoft.

The Co-sell option is available for the following offer types.

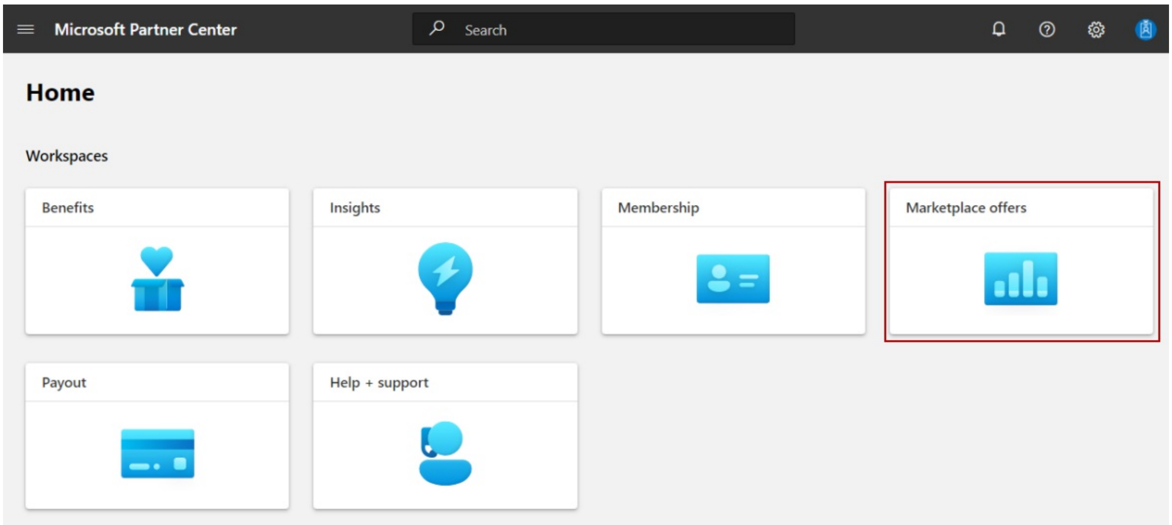
- Azure Application
- Azure Container
- Azure Virtual Machine
- Consulting service
- Dynamics 365 for Customer Engagement & Power Apps
- Dynamics 365 for operations
- Dynamics 365 business central
- IoT Edge Module
- Managed Service
- Power BI App
- Software as a service (SaaS)

Go to the Co-sell with Microsoft tab

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.

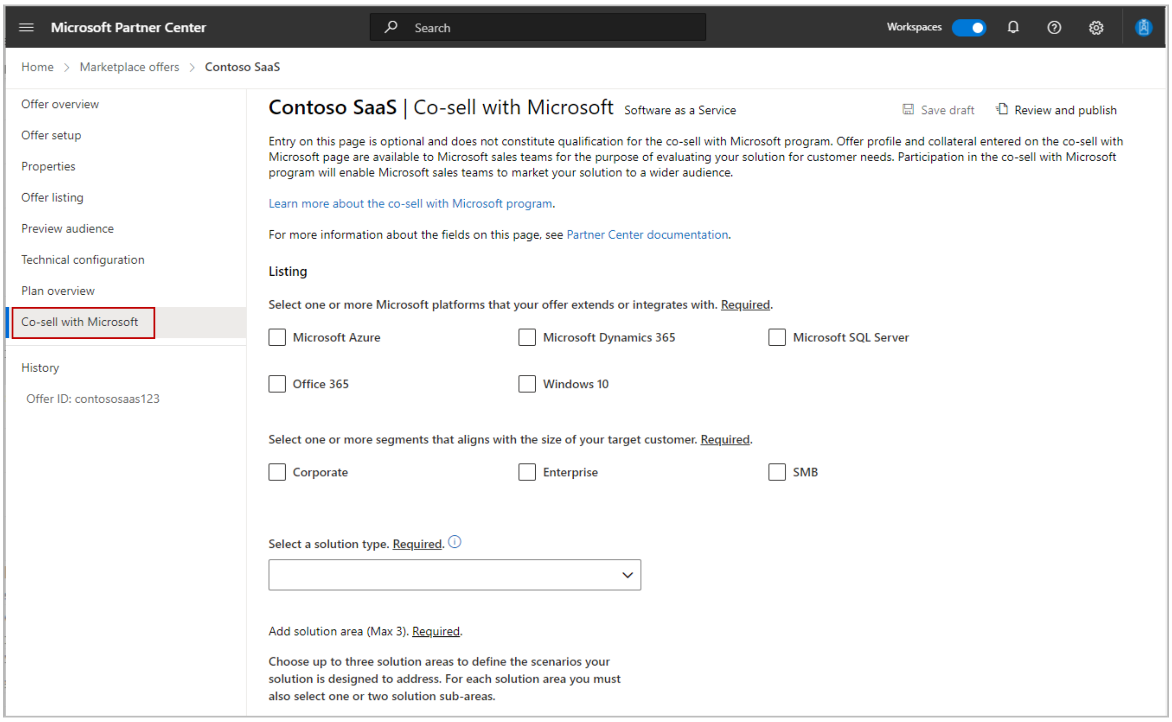


> **TIP**
>
> If you don't see the **Marketplace offers** tile, create a commercial marketplace account in Partner Center and make sure your account is enrolled in the commercial marketplace program.

3. On the Marketplace offers page, select the offer you want to co-sell.

> **NOTE**
>
> You can configure co-sell for a new offer that's not yet published or with an offer that's already published.

4. In the menu on the left, select **Co-sell with Microsoft**.



Co-sell listings

Co-sell listings help Microsoft sales teams market your offer to a wider audience. You must provide the following information to achieve co-sell ready status:

- Microsoft platforms (select one or more)

- Segments (select one or more)
- Solution type (select one)
- Solution sub-area (select one or two)

Select Microsoft platforms and segments

1. Under **Listing**, select one or more Microsoft platforms that your offer is built with, extends, or integrates with.
2. Select one or more market segments that your offer is targeting.

Select solution types

Solution types help define the scenarios that your offer is designed to address.

- From the **Select a solution type** list, select a solution type that best matches your offer. This table describes the available solution types.

Table 1: Available solution types

SOLUTION TYPE	DESCRIPTION
Device (hardware)	An offer that involves building or selling hardware from a device manufacturer.
IP (application)	Apps or other copyrightable material licensed for the customer's use. For example, a CRM program that can be licensed and installed on-premises.
Managed Service	Hands-on expertise for a cloud-based project, usually on an ongoing basis. For example, providing a platform and tools for running an online database, with ongoing management provided by the managed service provider.
Service	Hands-on expertise for a specific one-time project, often delivered via consultants. For example, setting up a customer database for a customer (with the customer assuming responsibility for operating the database after delivery).

Select solution areas

Solution areas help to further define your solution. This helps Microsoft sales teams find and understand your solution’s value proposition. You must select at least one and up to a maximum of five solution areas for your offer. For each solution area, you can further choose up to five solution sub-areas.

1. Select the **+ Add solution area (5 Max)** link.
2. Select a solution area from the drop-down list that appears.
3. Select at least one and up to five solution sub-areas. To select multiple sub-areas, use the `Ctrl` key (on Windows) or `Command` key (on macOS).
4. To add another solution area, repeat steps 1 through 3.

Upload documents

You must provide collateral documents that provide details about your offer. Microsoft sales teams use this information to evaluate whether your offer is a fit for customer needs in order to recommend and sell your offer. The more information you provide, the more information Microsoft sales teams will have to understand and promote your product.

The supported file types are .pdf, .ppt, .pptx, .doc, .docx, .xls, .xlsx, .jpg, .png, and .mp4. Templates for some documents are provided in Table 2 below.

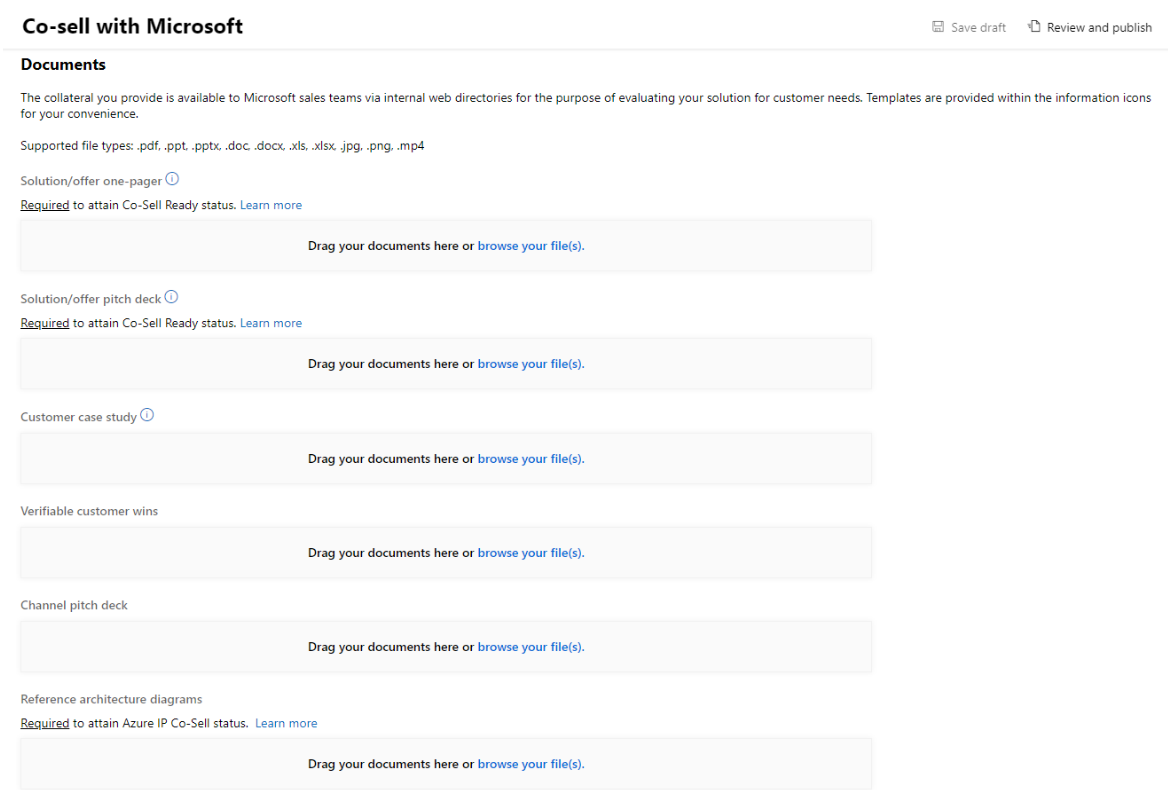
> **NOTE**
>
> The **Solution/offer one-pager** and **Solution/offer pitch deck** are required to attain Co-sell Ready status. They are also prerequisites for some offers to be a Azure IP Co-sell incentive. The Reference architecture diagram is also required for Azure IP co-sell incentive status. The other documents described in this table are optional but recommended.

Table 2: Documents that support co-sell

DOCUMENTS	DESCRIPTION
Solution/offer one-pager (Required)	Drive awareness among potential customers with a professionally designed one-pager that showcases the value proposition of your solution. You can use one of the relevant templates to provide a customer-ready description of your offering: • Microsoft Azure one-pager template • Microsoft Dynamics 365 one-pager template • Microsoft 365 one-pager template • Windows 10 one-pager template Microsoft sales teams may share this information with customers to help determine if your offering may be a good fit, and to ensure that it is customer ready.
Solution/offer pitch deck (Required)	You can use the Customer presentation template to create your pitch deck. This deck should reference the Reference architecture diagram. The purpose of this slide deck is to pitch your offer and its value proposition. After ensuring that your offer is customer ready, Microsoft sales teams may share this presentation with customers to articulate the value that your company and Microsoft bring when deploying a joint solution. The presentation should cover what your offer does, how it can help customers, what industries the offer is relevant for, and how it compares with competing solutions.
Customer case study (Optional)	Use the Case study template to create your customer case study. This information shows a potential customer how you and Microsoft have successfully deployed your offer in prior cases.
Verifiable customer wins (Optional)	Provide specific examples of customer successes after your offer has been deployed.
Channel pitch deck (Optional)	A slide deck with information that helps channel resellers learn more about your offer and get their sales teams ready to sell it. This deck typically includes an elevator pitch, information about target customers, questions to ask customers, talking points, and links to videos, documentation, and support information.

DOCUMENTS	DESCRIPTION
Reference architecture diagram (Required for Azure IP co-sell incentive status)	A diagram that represents your offer and its relationship with Microsoft cloud services. It may also demonstrate how your offer meets the technical requirements for Azure IP Co-sell incentive status. Learn more about the reference architecture diagram.
Other documents (Optional)	You may upload up to five additional documents or videos to help Microsoft sales teams and channel resellers learn more about your offer, organization, and how it's different from other offers.

- After you create your documents, drag them to the appropriate box under **Documents** or select **browse your file(s)** to upload a document from your computer.



Product landing page

- Under **Documents**, in the **Product landing page** box, enter the link to your product's site, where Microsoft sales teams and channel resellers can learn more about your offer and view the latest updates.

Enter your contacts

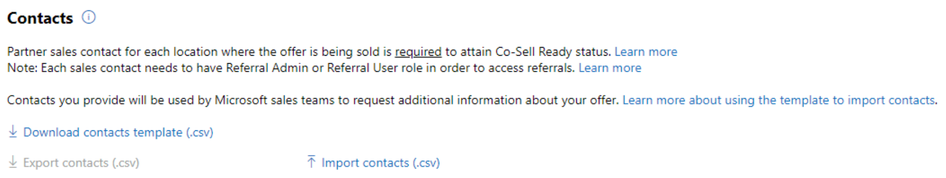
A contact for each geography in which your offer is available is required to achieve co-sell ready status. If you choose to make your offer available in the CSP program, this contact information is also available to channel resellers.

Your contact information lets Microsoft sales teams and channel resellers request additional information from the appropriate resource in your organization. Contact information is available to all Microsoft sales teams.

NOTE

It is critical that you keep your contact information up to date.

1. To download the template to provide your contact information, under **Contacts**, select **Download contacts template (.csv)** as seen in this screenshot. If you previously uploaded contacts, you can export your existing list of contacts for an offer, and then make changes in that .CSV file.



2. Open the .CSV file in an application such as Microsoft Excel, and then fill in each row with information about the contact.

- Name (Required): The contact's name.
- Email (Required): The contact's email address.
- Job title (Required): Job title.
- Role (Required): Use any of the following roles.

Table 3: Description of roles

ROLE	DESCRIPTION
Partner marketing	This role focuses on marketing your offer and collaborating on marketing efforts with Microsoft sales teams and channel resellers. The main point of contact for marketing engagements and offer listing content, such as product descriptions, images, and videos.
Partner sales	This role focuses on selling your offer and collaborating on sales with Microsoft sales teams and channel resellers. Indicate at least one partner sales contact for each region in which you want your offer to be Co-sell ready. The same partner sales contact can cover multiple regions.
Partner technical sales	Supports technical architecture and deployment considerations during the sales cycle, the post-sales integration, and deployment periods.
Partner customer success manager	Typically supports customers post-deployment to help them get the most out of your offer and increase its usage within the customer's organization.

- Countries/Regions (Required): When filling out the template, use the two letter Co-sell country and region codes. If the contact covers all countries and regions, use the three-letter code "OOO". If a contact covers more than one country or region, enter each of the two letter codes separated by a comma. For example, enter "US, CA, FR" without quotation marks into the template.

  The countries and regions should reflect each contact's territory. Microsoft sales teams and channel resellers will use this information when requesting information or collaborating on sales within the specific country or region.

- States/Provinces (Optional): When filling out the template, use the XX-XX format as listed in the states, provinces, and territories tables.

3. Save and close the .CSV file.
4. To import the .CSV file, select the **Import contacts (.csv)** link.

> **NOTE**
>
> Importing the .CSV file will overwrite any existing contacts.

5. Select the .CSV file and then select **Open**. A message appears stating that the contacts have been successfully imported.

Save and republish the offer

1. Select **Save draft** to save your changes before you continue.
2. After you've completed all the required sections of the offer, you can submit it for review and publication. Select **Review and publish**.
3. Do one of the following:
   - If you completed or updated the **Co-sell with Microsoft** tab for an offer that has been previously published live and you haven't updated any other tabs, we recommend that you only select the **Co-sell** check box.
   - If this is a new or draft offer that has never been published, we recommend that you select all boxes. You can optionally select **Compare** to compare the current version against the unpublished changes.
4. To begin the validation phase, select **Publish**. Note that your offer won't be published live until after the offer has been reviewed and then you select **Go live** after the validation phase is complete. If your offer was already published and you configured co-sell, then the offer remains live while we validate the co-sell status. For details about reviewing and publishing an offer, see How to review and publish an offer to the commercial marketplace.

> **NOTE**
>
> You no longer need to contact us to nominate your offer for co-sell. After you complete all required fields on the Co-sell with Microsoft page and republish your offer, we will review your offer to determine if it meets the requirements for co-sell status.

Next steps

- For details about republishing an offer, see How to review and publish an offer to the commercial marketplace.
- For information about commercial marketplace rewards and technical benefits, see Your commercial marketplace benefits.

Co-sell requirements

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This article provides the requirements for the various levels of co-sell status. For the latest list of offer types that support co-sell, see Configure Co-sell for a commercial marketplace offer. For an overview of co-sell, see Co-sell with Microsoft sales teams and partners overview.

This table shows all possible co-sell statuses:

STATUS	COMMENT
Not co-sell ready	The minimum requirements for Co-sell ready status have not been met.
Co-sell ready	All requirements for Co-sell ready status have been met.
Azure IP Co-sell incentive	Co-sell ready requirements have been met in addition to these additional requirements.
Business Applications Co-sell incentive	This status applies to Dynamics 365 and Power Apps offers in the Microsoft Business Applications ISV Connect Program and indicates that all requirements for this status have been met.

Requirements for Co-sell ready status

NOTE

Any offer published through the commercial marketplace developer program in Partner Center is eligible to attain Co-sell Ready status, provided Co-sell Ready requirements are met. Office apps and add-ins are not eligible (e.g. Teams, SharePoint solutions, Outlook, Excel)

For an offer to achieve co-sell ready status, you must meet the following requirements:

All partners:

- Have an MPN ID and an active commercial marketplace account in Partner Center.
- Make sure you have a complete business profile in Partner Center. As a qualified Microsoft partner, your business profile helps to showcase your business to customers who are looking for your unique solutions and expertise to address their business needs, resulting in referrals.
- Complete the **Co-sell with Microsoft** tab and publish the offer to the commercial marketplace.
- Provide a sales contact for each co-sell eligible geography and required bill of materials.

Services partners:

- For offers of the *Service solution* type, you must have an active gold competency in any competency area.

Business Applications ISVs:

- Dynamics 365 & Power Apps (except Dynamics 365 Business Central) solutions require ISV Connect enrollment.

Complete the Co-sell with Microsoft tab

When publishing or updating your offer, provide all the required information on the **Co-sell with Microsoft** tab as detailed in Configure Co-sell for a commercial marketplace offer. This includes providing the following documents:

- Solution/offer one-pager
- Solution/offer pitch deck

We provide templates to help you create these documents. For more information about the required and optional information for the Co-sell with Microsoft tab, see Configure Co-sell for a commercial marketplace offer.

Publish your offer live

To qualify for co-sell ready status, your offer or solution must be published live to at least one of the commercial marketplace online stores: Azure Marketplace or Microsoft AppSource. For information about publishing offers to the commercial marketplace, see Publishing guide by offer type. If you haven't published an offer in the commercial marketplace before, make sure you have a commercial marketplace account.

Requirements for Azure IP Co-sell incentive status

Azure IP Co-sell incentive status applies to the following offer types:

- Azure Application
- Azure Container
- Azure Virtual Machine
- IoT Edge module
- Software as a service (SaaS)

After achieving Co-sell ready status, there are three additional requirements to achieve Azure IP Co-sell incentive status:

Requirement 1- achieve the following:

- At the *organization level*, generate at least $100,000 USD of Azure Consumed Revenue threshold over the trailing 12-month period. This can be obtained through a combination of Azure solutions. If the offer is transactable in the commercial marketplace, you can meet this requirement by meeting a billed revenue threshold of $100,000 USD over the trailing 12-month period.

Requirement 2 - Pass the Microsoft technical validation for an Azure-based solution:

- The technical validation must confirm that more than 50% of your offer's infrastructure uses repeatable IP code on Azure. Note that transactable Azure VMs and Azure Application solutions on the commercial marketplace will meet this requirement by default.

Requirement 3 – Provide a reference architecture diagram:

- Upload a reference architecture diagram with your Co-sell documents in Partner Center for review. For guidance on creating this diagram, see Reference architecture diagram. For information about uploading the diagram, see Configure Co-sell for a commercial marketplace offer.

Requirements for Business Applications Co-sell incentive status

This status applies to IP-based solutions built on Dynamics 365 or Power Apps (except for Dynamics 365 Business Central) that are enrolled in the ISV Connect program. However, offers must also complete the requirements for Co-sell ready status (described above) in order for Microsoft sellers to be able to Co-sell the offer with you.

Next steps

- Configure Co-sell for a commercial marketplace offer

Verify Co-sell status of a commercial marketplace offer

11/22/2021 • 2 minutes to read • Edit Online

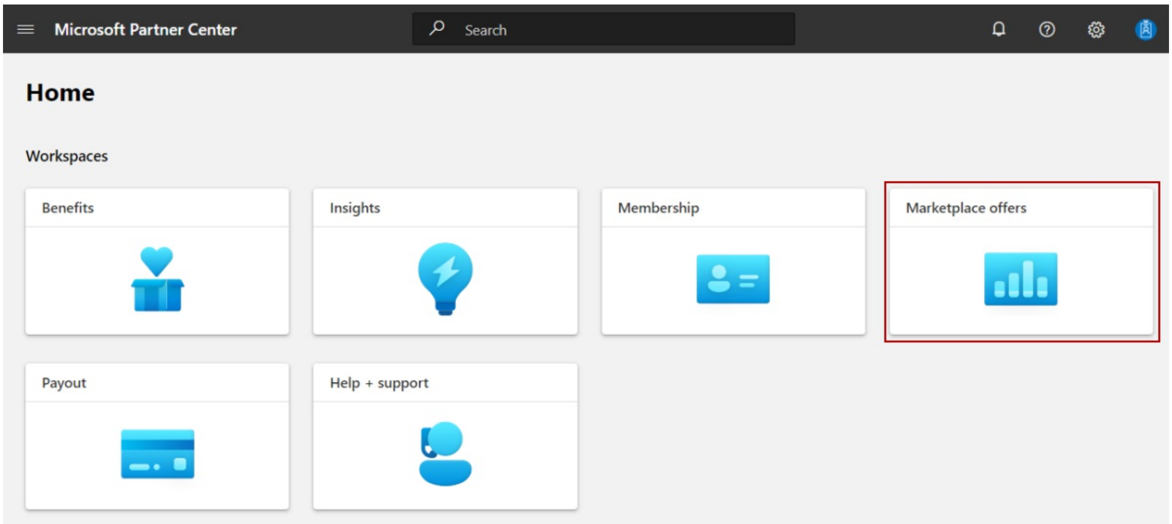
You can verify the Co-sell status for an offer on the **Offer overview** page of an offer in the Commercial Marketplace program of Partner Center.

Verify Co-sell status

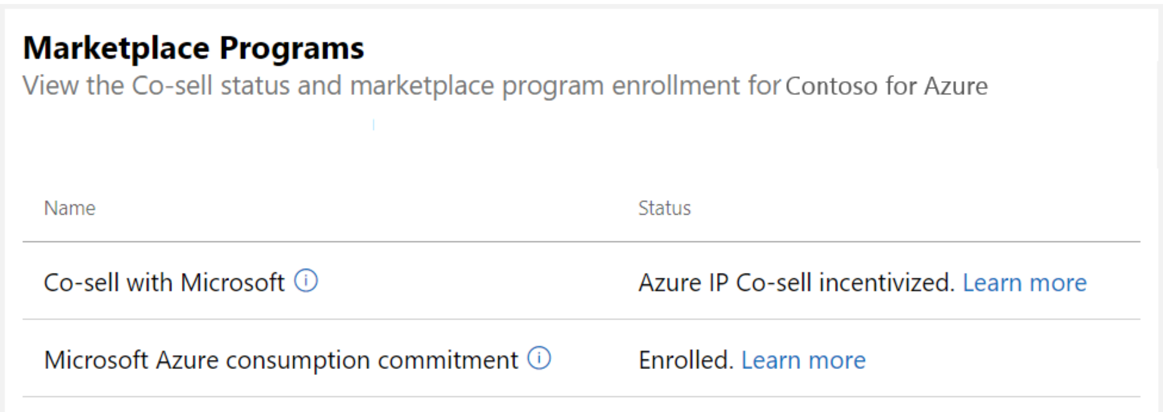
> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. In the **Offer alias** column, select the offer you want. The co-sell status is shown in the Marketplace Programs section of the page.



The following table shows all possible co-sell statuses. To learn about the requirements for each co-sell status, see Co-sell requirements.

STATUS	COMMENT
Not co-sell ready	The minimum requirements for Co-sell ready status have not been met.
Co-sell ready	All requirements for Co-sell ready status have been met.
Azure IP Co-sell incentive	Co-sell ready requirements have been met in addition to these additional requirements.
Business Applications Co-sell incentive	This status applies to Dynamics 365 and Power Apps offers in the ISV Connect Program and indicates that all requirements for this status have been met.

Next steps

- For information about Co-sell requirements, see Co-sell ready requirements.
- For help configuring an offer for Co-sell, see Configure Co-sell for a commercial marketplace offer.

Migration of co-sell solutions from OCP GTM to the commercial marketplace

11/22/2021 • 9 minutes to read • Edit Online

Microsoft is moving the publishing experience. The commercial marketplace provides simplified offer publishing to co-sell through Microsoft's three channels by centralizing offer creation and management in Partner Center, where you are already managing your relationship with Microsoft.

As a Microsoft partner enrolled in the commercial marketplace, you can:

- Publish your offers centrally and co-sell across Microsoft direct customer, partner, and seller channels.
- Ensure your offers are in the correct online store—Microsoft AppSource or Azure Marketplace—to reach the millions of cloud customers who align with your offer's capabilities.
- Drive your own publishing experience to co-sell with the offers that align with your business goals.
- Align your offer publishing within Partner Center, where you are already managing your Microsoft relationship and co-sell opportunities.
- Unlock Marketplace Rewards.

Prerequisites to continue co-selling with Microsoft

Ensure you have an active Microsoft Partner Network membership and are enrolled in the commercial marketplace in Partner Center.

- Join the Microsoft Partner Network at no cost. As a partner, you'll have access to exclusive resources, programs, tools, and connections to grow your business.
- If you do not have an account in commercial marketplace, enroll now to continue co-selling with Microsoft and access the full publishing experience.

Publishing updates for attaining co-sell-ready status

For your solution to be discoverable to Microsoft sellers and partners, it must meet the co-sell ready requirements. For a Microsoft seller to be a Co-sell incentive, your solution must meet the incentive-eligible requirements. Complete these requirements on the co-sell tab in Partner Center (see this image later in this article).

> **NOTE**
>
> In commercial marketplace, your solutions are referred to as "offers" throughout the publishing experience.

After you've enrolled in the commercial marketplace, prepare to migrate your solutions from OCP GTM. We have created a digital migration interface that provides a single view of the OCP GTM solutions for your organization. From this interface, you will be able to take the action to merge the solution with a similar offer already published and live in commercial marketplace, or discard it.

Follow these steps before importing your solutions from OCP GTM:

1. Visit your company's publisher list. It includes the account owner, managers, and developers who have publishing access. Learn more about Partner Center user roles.
2. Ask one of the listed contacts to add users to the commercial marketplace as *managers* or *developers*, since

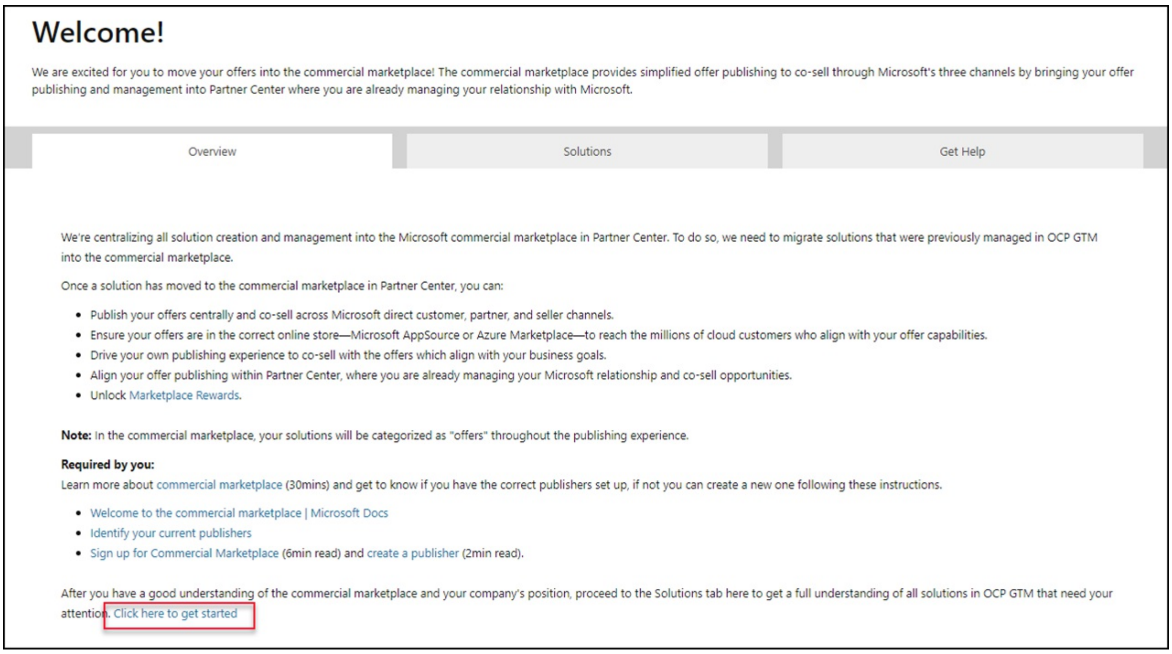
only these roles can edit and publish solutions.

3. Work with your developers to move your solutions from your OCP GTM account to the commercial marketplace.
4. Decide which of the following you want to do:
   a. If you have a solution in OCP GTM that you want to migrate to Partner Center - *to retain referral pipeline, collateral, co-sell status and incentives* - there are two scenarios for you to choose from:
      - If there is no similar offer in commercial marketplace
        - Step 1. Create an offer
        - Step 2. Publish it in the commercial marketplace
        - Step 3. Request merge the solution in OCP GTM GTM to newly published marketplace offer.
      - If there is already a similar offer in Commercial marketplace
        - Step 1. Request merge of solution in OCP GTM to published marketplace offer
   b. If you have a solution in OCP GTM that is no longer relevant, then discard this solution.

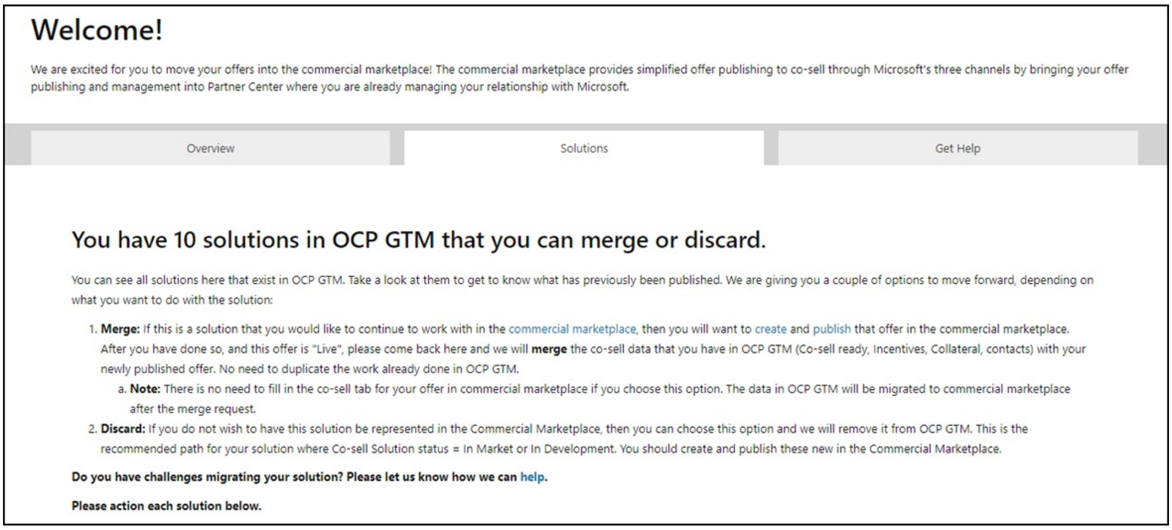
> **IMPORTANT**
>
> On May 17, 2021, the migrate option below was removed. If you previously used the Migration option and have an offer that was migrated to the commercial marketplace as a draft offer, it is important that you complete the publishing process in the commercial marketplace.
>
> - Learn more about How to review and publish an offer to Microsoft commercial marketplace | Microsoft Docs
> - Publishing in the commercial marketplace training deck
>
> 
>

Begin the migration of your solutions from OCP GTM

1. Begin the migration here.
2. Select the **Overview** page, then **Click here to get started**.



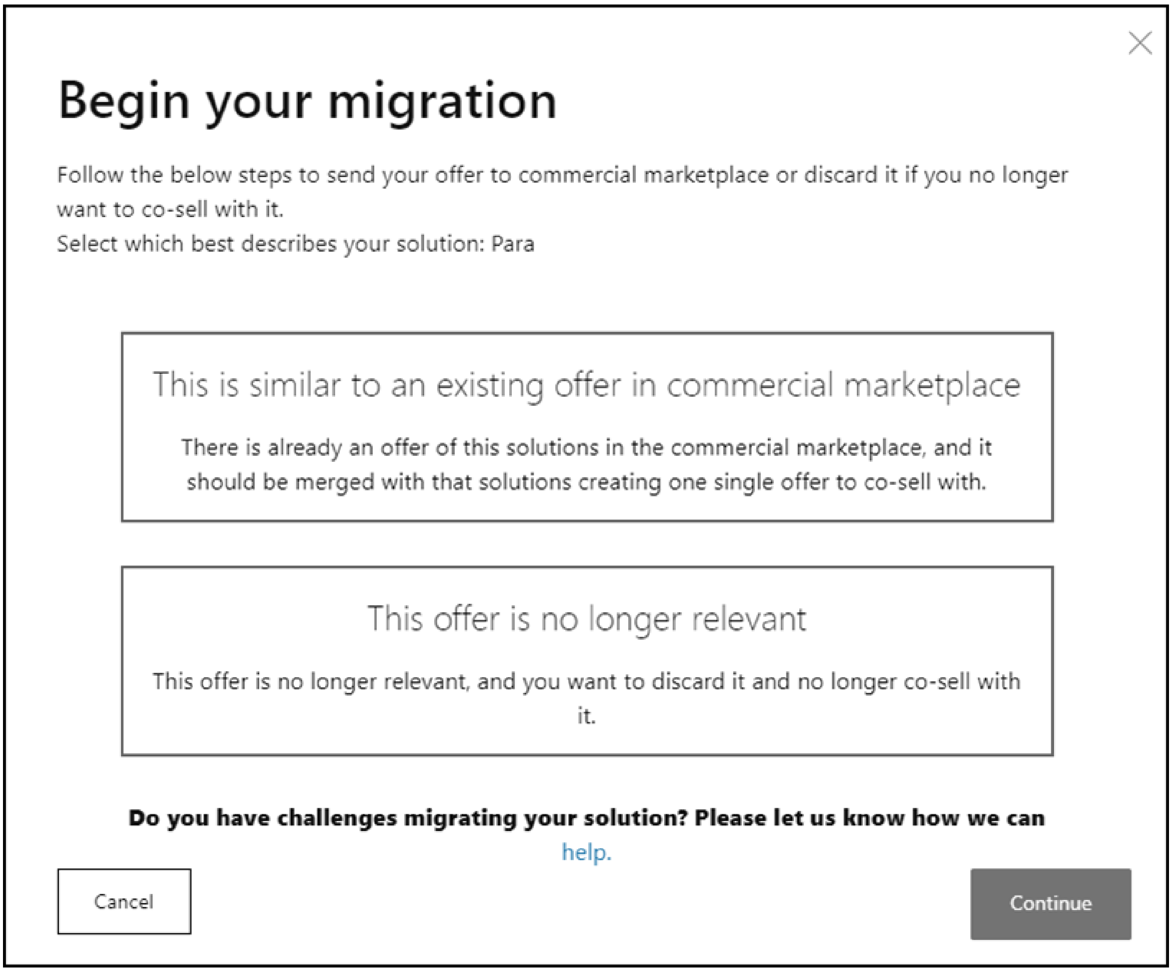
3. To begin migrating, select the **Solutions** tab, which displays all the solutions associated to your MPN IDs.



> **NOTE**
>
> This tab will note if there aren't any solutions pending to migrate to the commercial marketplace. To continue co-selling with Microsoft, ensure the migrated solutions are published to the commercial marketplace.

Learn more about the solution status by reviewing the tool tips. All solutions pending action are listed under **Action**.

4. Select **Begin migration** (see image above) for the solution you want to migrate, then select one of the following options:



Merge solution

What is the value of merging your OCP GTM solution into an existing published and live offer in the commercial marketplace?

- Partners currently co-selling with offers in OCP GTM are encouraged to migrate their solutions to the commercial marketplace to take advantage of its capabilities and simplify the publishing experience.

If you have a solution in OCP GTM that you want to migrate to Partner Center there are two scenarios for you to choose from. At the end of this merge process your offer will retain referral pipeline, collateral, co-sell status and incentives.

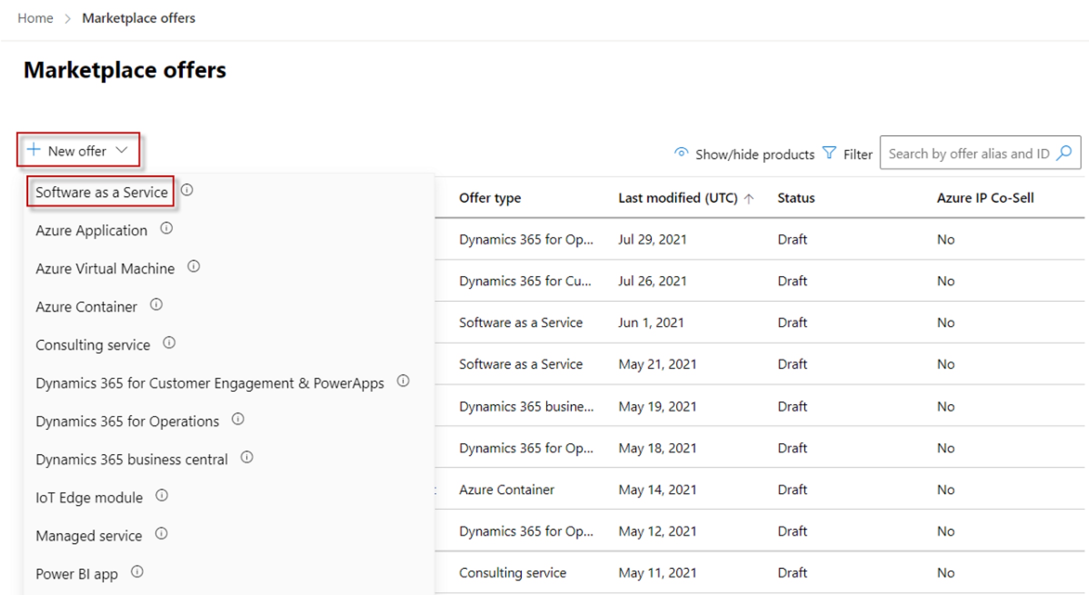
Step 1: Similar offer does not exist in commercial marketplace please follow these steps

- Workspaces view
- Current view

If you do not have an offer already in the commercial marketplace to merge a solution in OCP GTM with you will first need to create AND PUBLISH an offer in the commercial marketplace (this will retain its co-sell status, incentives, and referral pipeline.)

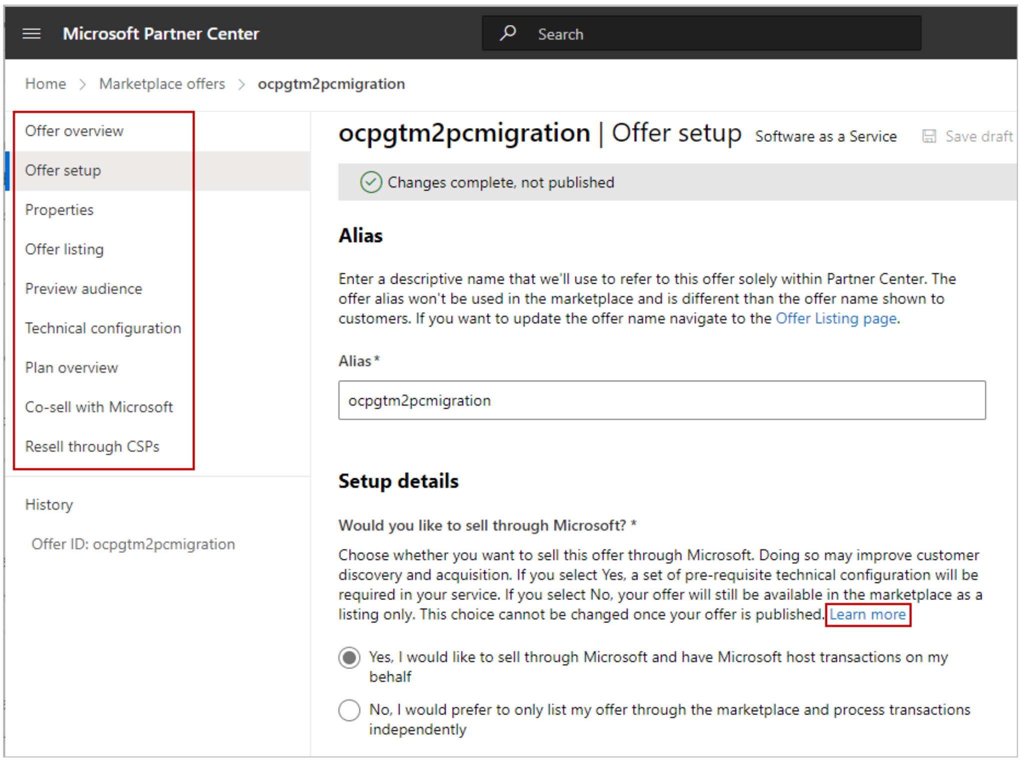
1. Create a draft offer in commercial marketplace

   a. On the commercial marketplace Overview page, select **+ New Offer**, and then select the offer type you want.



   b. Complete the required information in each tab.

   - The **Learn more** links and tooltips will guide you through the requirements and details.
   - Optionally, complete the **Resell through CSPs** page (in the left-nav menu below) to resell through the Cloud Solution Provider (CSP) program.



c. Select **Save Draft**.

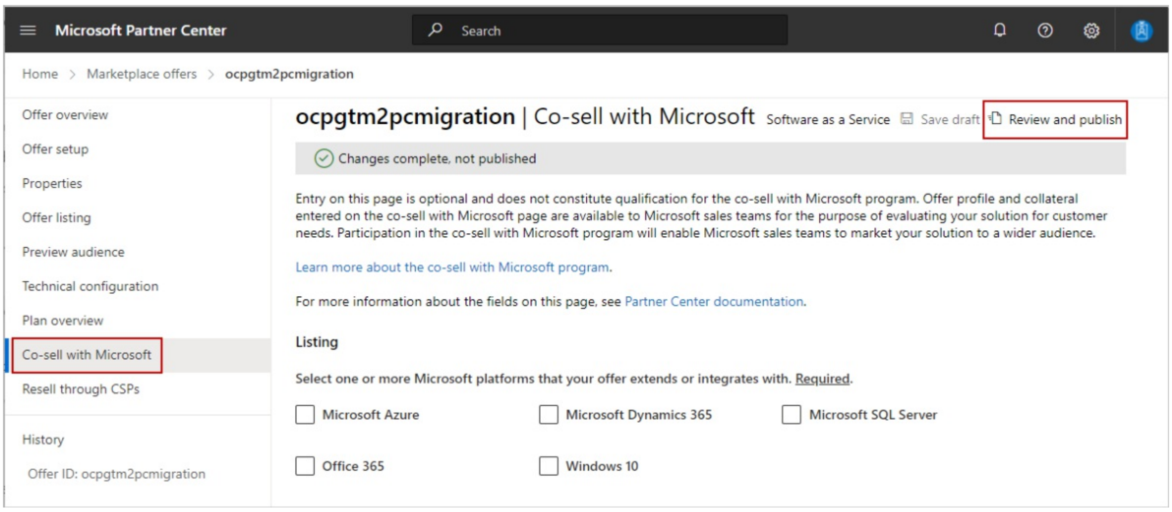
- For detailed instructions on the information you need to provide before your offer can be published, read the appropriate publishing guide.
- Review the eligibility requirements in the corresponding article for your offer type to finalize the selection and configuration of your offer.
- Review the publishing patterns for each online store for examples on how your solution maps to an offer type and configuration.
- Offer listing best practices - Microsoft commercial marketplace | Microsoft Docs

TIP

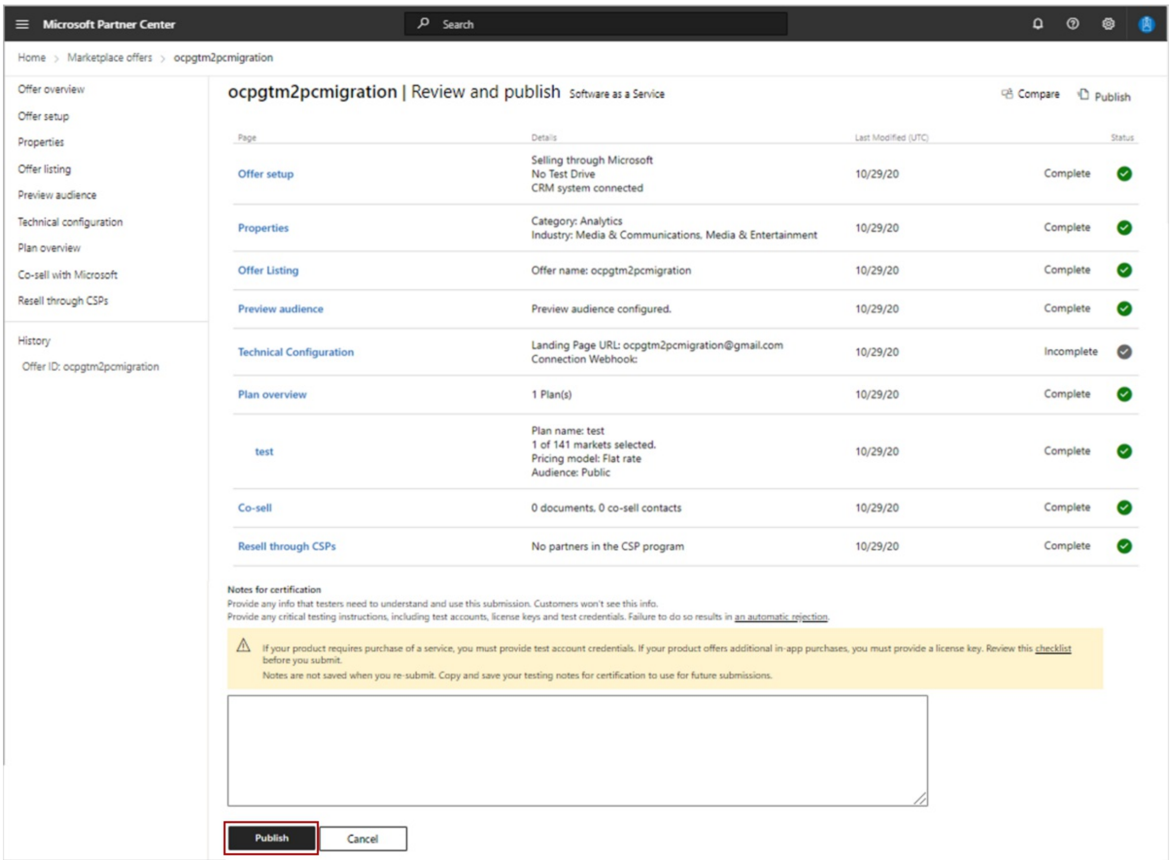
We recommend that you *do not fill out* the data in the **Co-sell with Microsoft** tab. To save you time we will take care of populating this data for you with your existing collateral in OCP GTM during the merge process.

After the merge is complete you can return to the Co-sell with Microsoft tab and make updates if needed. For more information, see Configure co-sell for a commercial marketplace offer.

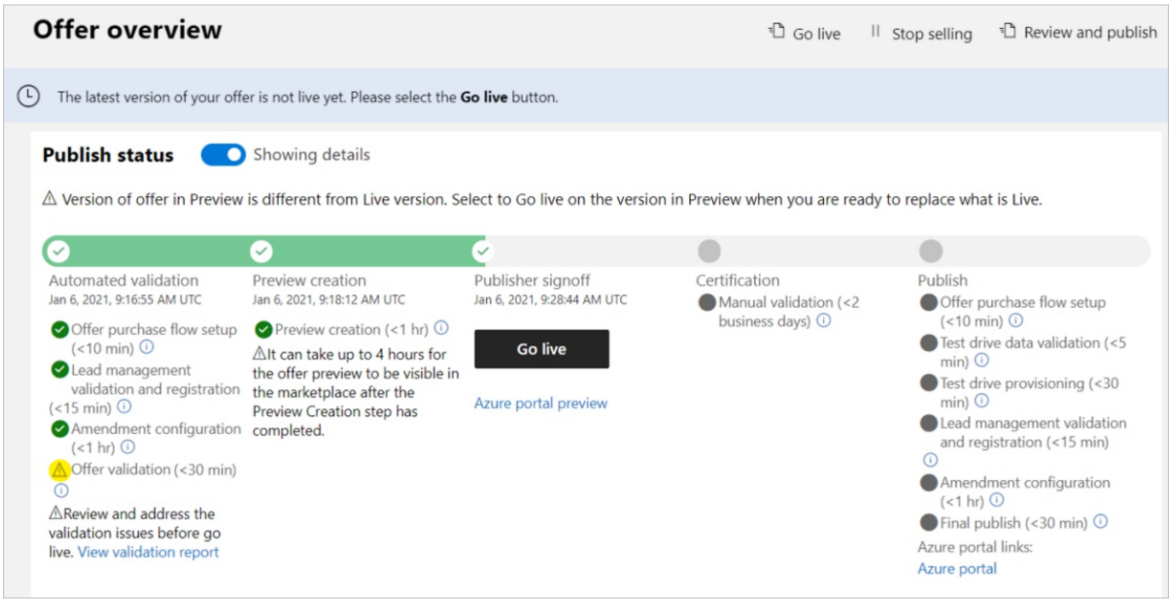
2. When complete, select **Review and publish**.



3. After reviewing all submitted information, select **Publish** to submit your draft offer for certification review. Learn more about the certification phase.



4. Track the status of your submission on the Overview tab.



5. We will notify you when our certification review is complete. If we provide actionable feedback, address it, then select **Publish** to initiate a recertification.

6. Once your offer passes certification, preview the offer with the link provided and make any final adjustments you may want. When you're ready, select **Go live** (see button above) to publish your offer to relevant commercial marketplace storefront(s).

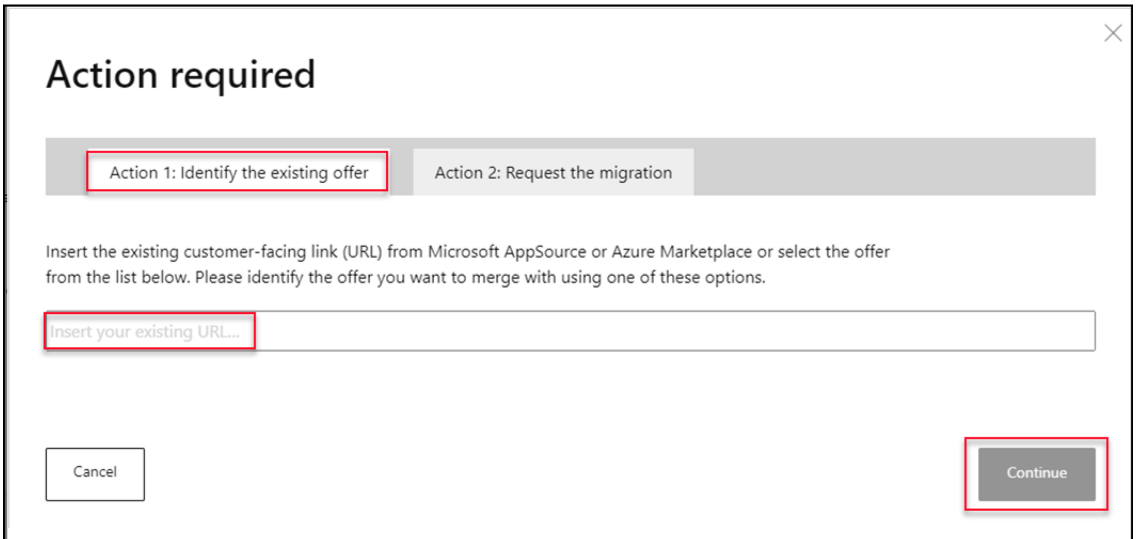
7. **Continue to Scenario 2 below to complete the merge process.**

Scenario 2: Similar offer exists in commercial marketplace please follow these steps

Select this option if the solution is already published and live in the commercial marketplace and the solution in

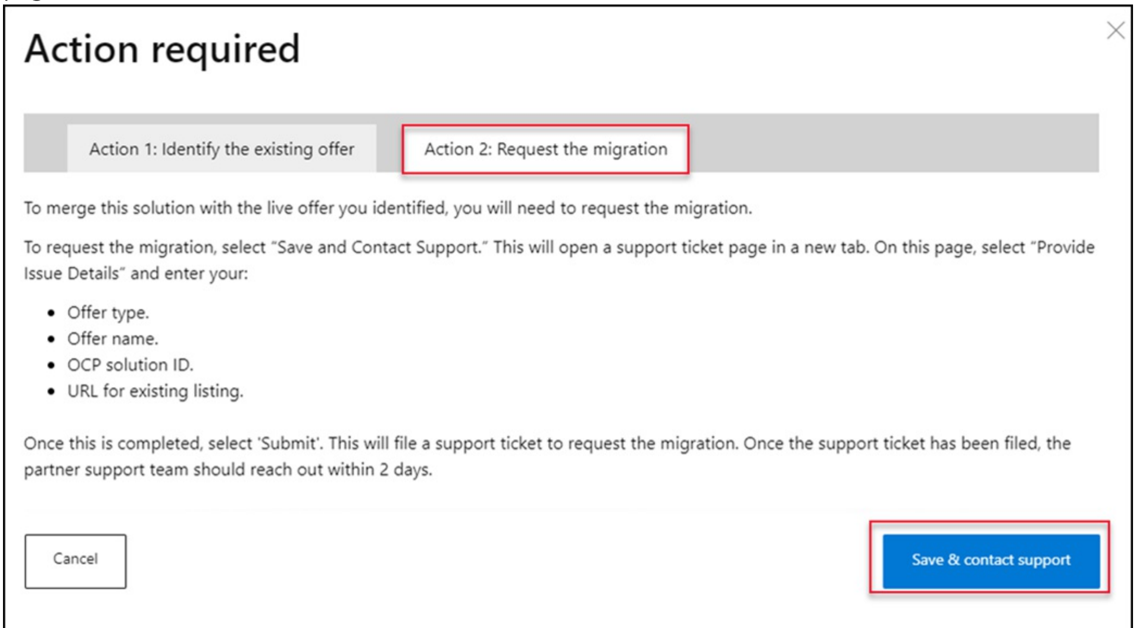
OCP GTM and the offer in the commercial marketplace should be merged into a single offer. This will avoid creating duplicate offers.

1. Identify the existing offer.
   a. Select **This is similar to an existing offer in commercial marketplace** (see **Begin your migration** image above).
   b. The **Action 1** tab shows live commercial marketplace offers that your OCP GTM solution can be associated with. Select the live offer from the list if you have one. If there is no list of offers to choose from, enter the customer-facing address (URL) from Microsoft AppSource or Azure Marketplace.
   c. Select **Continue**.



The Action 1 tab of the merge process.

2. Request the merge.
   a. The **Action 2** tab shows directions to request the merge of your OCP GTM solution with the one you identified. To request the merge, select **Save & Contact support**, which opens a partner support page in a browser.



The Action 2 tab of the merge process.

   b. Select **Provide Issue Details** and enter the following:
      a. Offer Type
      b. Offer name
      c. OCP solution ID
      d. URL for existing listing
   c. Select **Submit**. The partner support team will contact you within two business days.

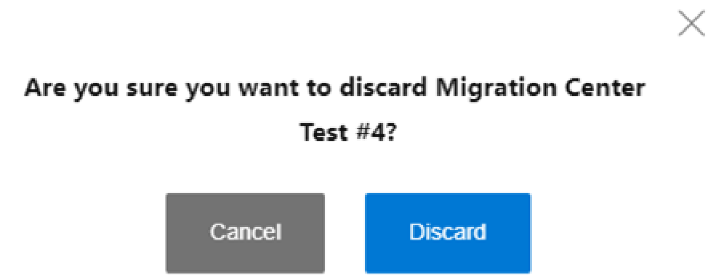
d. Partner support will work with you to ensure a successful merge of this offer so it published as a live offer.

Discard this solution

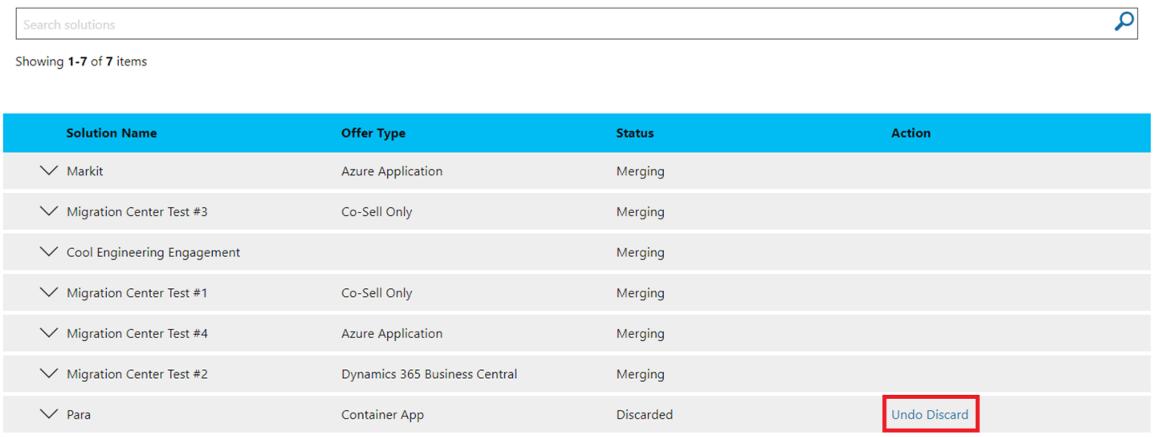
We recommend that you take the time to assess the viability and relevance of your solutions to optimize your presence and discoverability in the commercial marketplace with high quality offers that meet customer demand.

Select this option when a solution in OCP GTM solutions is no longer relevant. You will be asked to confirm the discard, and you can also undo it later.

1. Select **I want to discard this solution** (see **Action required** image above), then **Continue**.
2. Select **Discard**.



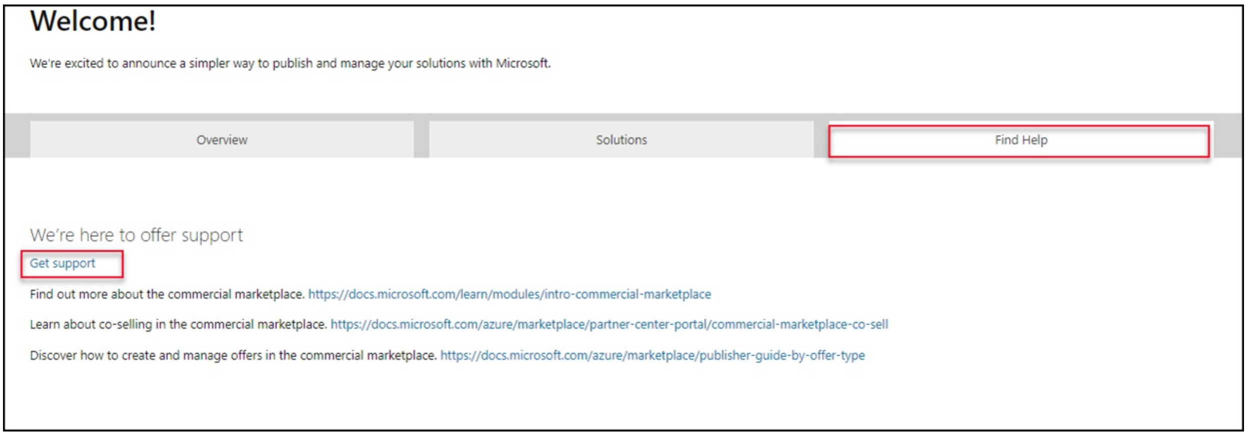
3. To undo your discard, select **Undo Discard**.



Solution Name	Offer Type	Status	Action
Markit	Azure Application	Merging	
Migration Center Test #3	Co-Sell Only	Merging	
Cool Engineering Engagement		Merging	
Migration Center Test #1	Co-Sell Only	Merging	
Migration Center Test #4	Azure Application	Merging	
Migration Center Test #2	Dynamics 365 Business Central	Merging	
Para	Container App	Discarded	Undo Discard

Additional Help

If you need additional help, select the **Get Help** tab to contact the partner support team.



Next steps

- Resell through CSP Partners
- Configure co-sell for a commercial marketplace offer
- View these FAQs (PDF)

Cloud Solution Provider program

11/22/2021 • 6 minutes to read • Edit Online

This article explains how to configure your offer to be available to the Cloud Solution Provider (CSP) program. In addition to publishing your offers through commercial marketplace online stores, you can also sell through the CSP program to reach millions of qualified Microsoft customers that the program serves.

You can configure new or existing offers for availability in the CSP program on an opt-in basis, which allows CSP partners to sell your products and create bundled solutions for customers.

Publishers are responsible for providing break-fix support to end customers and for providing a mechanism for partners in the CSP program and/or customers to contact you for support. It is a best practice to provide partners in the CSP program with user documentation, training, and service health/outage notifications (as applicable) so that partners in the CSP program are equipped to handle tier 1 support requests from customers.

The following offers are eligible to be opted in to be sold by partners in the CSP program:

- Software-as-a-Service (SaaS) transact offers
- Virtual Machines (VMs)
- Solution templates
- Managed applications

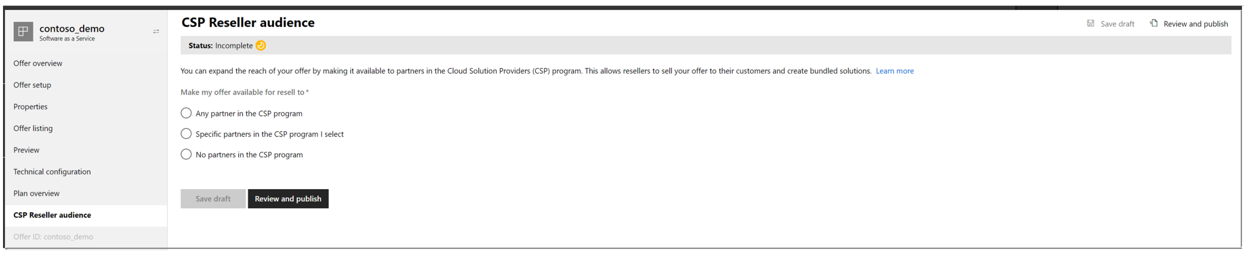
> **NOTE**
> Containers and Bring Your Own License (BYOL) VM plans are opted in to be sold by partners in the CSP program by default.

How to configure an offer

Configure the CSP program opt-in setting when you create the offer in Partner Center.

Partner Center opt-in

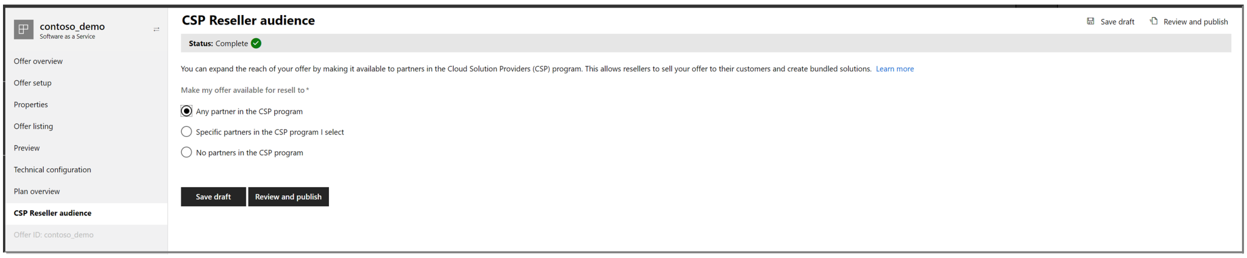
The opt-in experience is located under the CSP Reseller audience module:



Choose from three options:

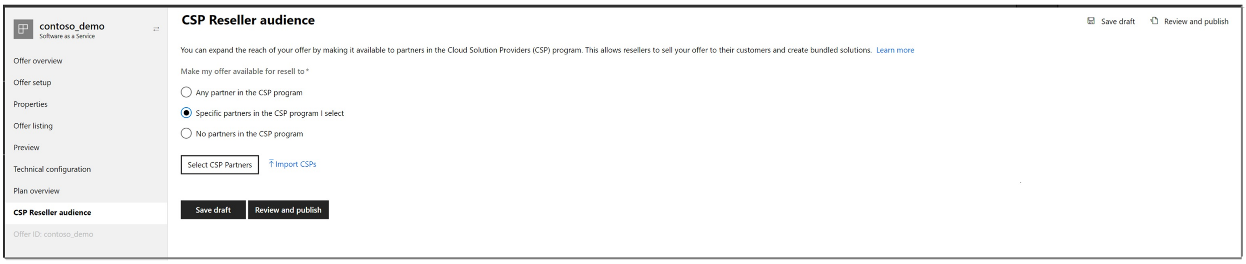
1. Any partner in the CSP program.
2. Specific partners in the CSP program I select.
3. No partners in the CSP program.

Option 1: Any partner in the CSP program



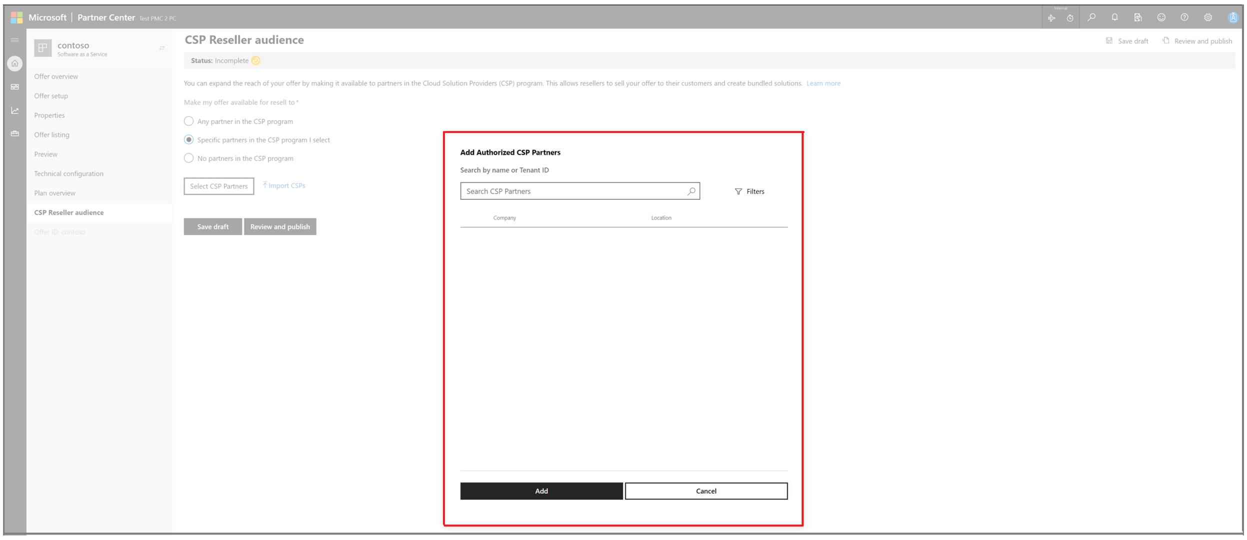
By choosing this option, all partners in the CSP program are eligible to resell your offer to their customers.

Option 2: Specific partners in the CSP program I select

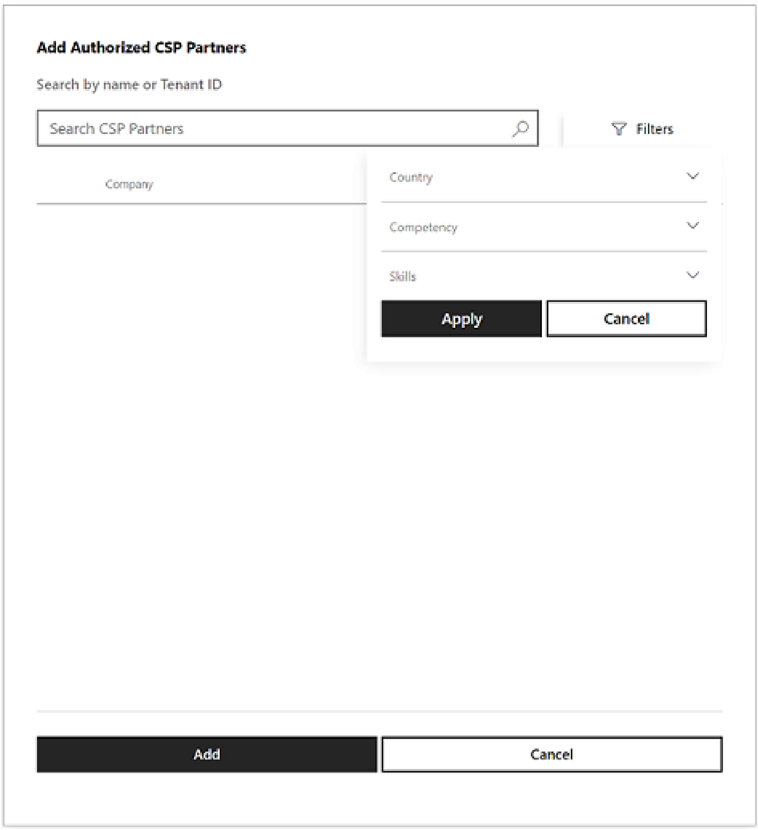


By choosing this option, you authorize which partners in the CSP program are eligible to resell your offer.

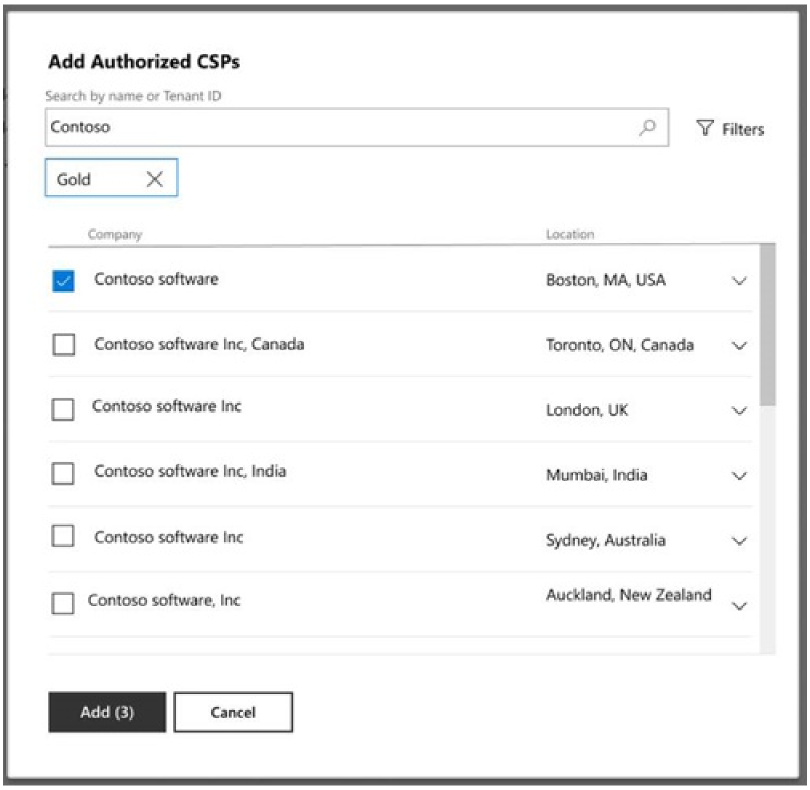
To authorize partners, select **Select CSP Partners** and a menu appears that lets you search by partner name or CSP Azure Active Directory (Azure AD) tenant ID.



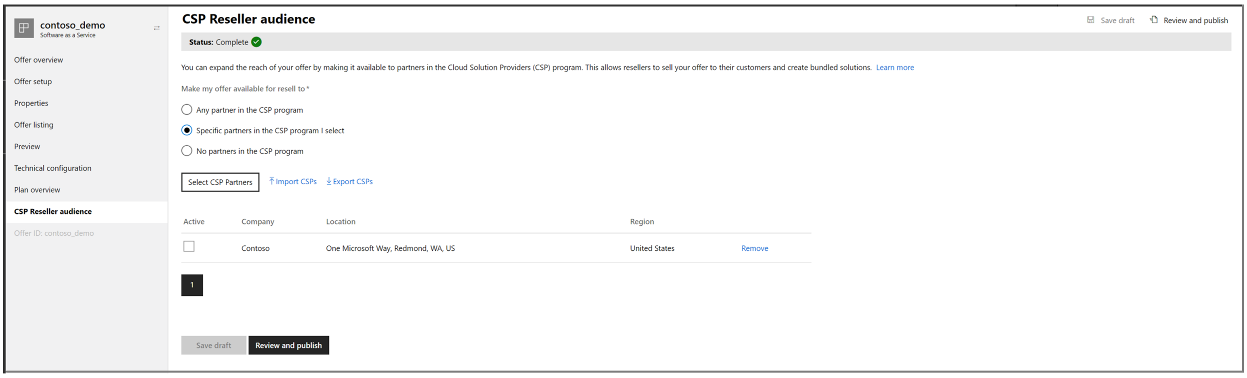
You can apply search filters, such as **Country**, **Competency**, or **Skill**.



Once you've chosen the list of partners, select **Add**.



A table showing the list of partners you selected appears on the CSP Reseller audience page.



Select **Save draft** to register your changes.

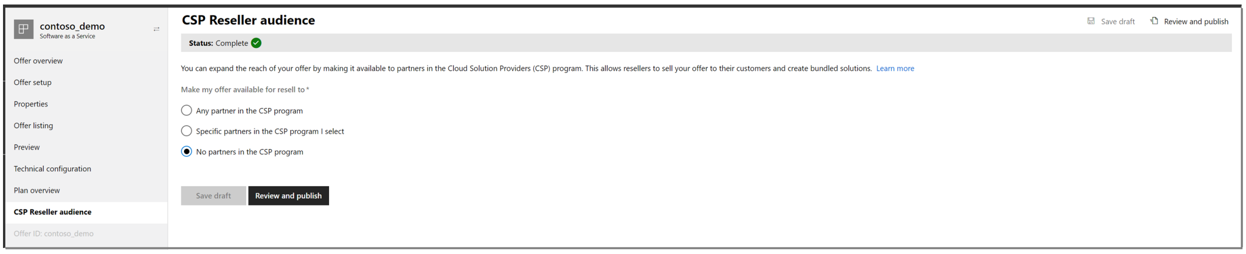
If this offer is unpublished, you'll need to publish your offer to make it available to your selected partners.

> **NOTE**
>
> If you authorize a partner in the CSP program in a given region, they can sell the offer to any customer that belongs to that particular region. For more information on how CSP offers are classified under regions, see Cloud Solution Provider program regional markets and currency.

If you're updating the CSP list of an already published offer, add the additional partners and select **Sync CSP audience**.

If you have an offer that already has a list of authorized partners and you'd like to use the same list for another offer, use **Import/Export**. Navigate to the offer that has the CSP list and select **Export CSPs**. The function develops a .csv file that can be imported into another offer.

Option 3: No partners in the CSP program



By choosing this option, you're opting your offer out of the CSP program. You can change this selection at any time.

Deauthorize Partners in the CSP program

If you've authorized a partner in the CSP program and that partner has already resold the product to their customers, you won't be allowed to deauthorize that partner.

If a partner in the CSP program has not sold your product to their customers and you'd like to remove the CSP after your offer has been published, use the following instructions:

1. Go to the Support request page. The first few dropdown menus are automatically filled in for you.

   > **NOTE**
   >
   > Don't change the pre-populated dropdown menu selections.

2. For **Select the product version**, select **Live offer management**.
3. For **Select a category that best describe the issue**, choose the category that refers to your offer.

4. For **Select a problem that best describes the issue**, select **Update existing offer**.
5. Select **Next** to be directed to the **Issue details page** to enter more details about your issue.
6. Use **Deauthorize CSP** as the issue title and fill out the rest of the required sections.

Navigate between options

Use this section to navigate between the three CSP reseller options.

Navigate from Option one: Any partner in the CSP program

If your offer is currently **Option 1: Any partner in the CSP program** and you'd like to navigate to either of the other two options, use the following instructions to create a request:

1. Go to the Support request page. The first few dropdown menus are automatically filled in for you.

   > **NOTE**
   >
   > Don't change the pre-populated dropdown menu selections.

2. For **Select the product version**, select **Live offer management**.
3. For **Select a category that best describe the issue**, choose the category that refers to your offer.
4. For **Select a problem that best describes the issue**, select **Update existing offer**.
5. Select **Next** to be directed to the **Issue details page** to enter more details about your issue.
6. Use **Deauthorize CSP** as the issue title and fill out the rest of the required sections.

> **NOTE**
>
> If you're trying to navigate to Option two and a partner in the CSP program has already resold the offer to their customers, that partner is by default already in your list of authorized partners.

Navigate from Option two: Specific partners in the CSP program I select

If your offer is currently **Option 2: Specific partners in the CSP program I select** and you'd like to navigate to **Option one: Any partner in the CSP program**, use the following instructions to create a request:

1. Go to the Support request page. The first few dropdown menus are automatically filled in for you.

   > **NOTE**
   >
   > Don't change the pre-populated dropdown menu selections.

2. For **Select the product version**, select **Live offer management**.
3. For **Select a category that best describe the issue**, choose the category that refers to your offer.
4. For **Select a problem that best describes the issue**, select **Update existing offer**.
5. Select **Next** to be directed to the **Issue details page** to enter more details about your issue.
6. Use **Deauthorize CSP** as the issue title and fill out the rest of the required sections.

If your offer is currently **Option 2: Specific partners in the CSP program I select** and you'd like to navigate to **Option 3: No partners in the CSP program**, you'll only be able to navigate to that option if the partners in the CSP program you'd previously authorized have not resold your offer to end customers. Use the following instructions to create a request:

1. Go to the Support request page. The first few dropdown menus are automatically filled in for you.

> **NOTE**
> Don't change the pre-populated dropdown menu selections.

2. For **Select the product version**, select **Live offer management**.
3. For **Select a category that best describe the issue**, choose the category that refers to your offer.
4. For **Select a problem that best describes the issue**, select **Update existing offer**.
5. Select **Next** to be directed to the **Issue details page** to enter more details about your issue.
6. Use **Deauthorize CSP** as the issue title and fill out the rest of the required sections.

Navigate from Option 3: No partners in the CSP program

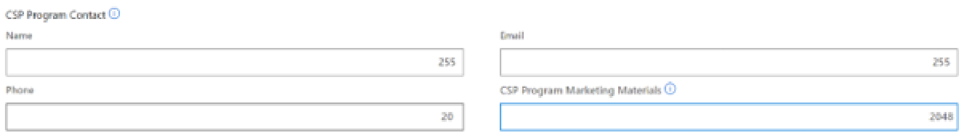
If your offer is currently **Option 3: No partners in the CSP program**, you can navigate to either of the other two options at any time.

Sharing sales and support materials with partners in the CSP program

To help partners in the Cloud Solution Provider program most effectively represent your offer and engage with your organization, you must submit sales and support materials that will be available to the resellers. These resources will not be exposed to customers in the online stores.

Partner Center CSP channel

If you've opted into the CSP channel in Partner Center, publishers must enter a URL that hosts relevant marketing materials and channel contact information under the offer listing module.



Next steps

- Learn more about Go-to-market services.
- Sign in to Partner Center to create and configure your offer.

Microsoft Business Applications Independent Software Vendor (ISV) Connect Program onboarding guide

11/22/2021 • 2 minutes to read • Edit Online

The Business Applications ISV Connect Program aims to accelerate the growth and overall success of Independent Software Vendors (ISVs) building modern, cloud-based, line-of-business (LOB) solutions with Dynamics 365 Customer Engagement and Power Apps (Dynamics CE applications) or Dynamics 365 Finance and Operations (Dynamics Ops applications).

To enroll and take advantage of all the technical, marketing, and sales enablement benefits of the Business Applications ISV Connect Program, complete the following sections in this article.

> **IMPORTANT**
>
> It's necessary to complete all the steps in this article before publishing changes to a new or existing offer.

Set up your Microsoft Partner Center account

To set up and manage your account for the ISV Connect program complete the steps from the article: Create a commercial marketplace account in Partner Center. This article provides all the steps to create a new account as well as information on adding new publishers to the commercial marketplace program.

> **NOTE**
>
> This step requires an *Owner* or *Manager* role in Partner Center.

Accept the Business Applications ISV Program Addendum

Participation in this program requires you to review and accept the Business Applications Addendum.

> **NOTE**
>
> This step requires an *Owner* or *Manager* role in Partner Center for your account to sign legal agreements.

1. Sign in to Partner Center.
2. Select **Settings** (gear icon) > **Account Settings**.
3. Select **Agreements**.
4. Select the version link and view the agreement.
5. To agree and accept the agreement, select **Accept Agreement**.

Set up your billing information

Set up billing information for the Business Applications ISV Connect Program.

> **NOTE**
>
> This step requires an *Owner* or *Manager* role in Partner Center for your account to update billing information.

1. Sign in to Partner Center.
2. Select **Settings** (gear icon) > **Account Settings**.
3. Under **Organization profile**, select **Billing profile** and then the **Developer** tab.
4. Review the primary contact and billing information that is populated from your legal entity.
5. To make changes, select **Update**.
6. If applicable, provide Tax ID/VAT ID settings.
7. To save your changes, select **Update**.

> **NOTE**
>
> You can update your billing profile at any time. However, *Company Name* and billing address *Country* cannot be changed later.

Publish and certify your application

After you have completed the steps above, your existing Dynamics 365 CE and/or Dynamics 365 Ops applications will be available for editing in the Partner Center. You will also have the option to create new applications.

The final step for enrollment in the Business Applications ISV Connect program is to publish and certify your existing applications. To publish and certify your application to AppSource, follow the appropriate link:

- For Dynamics 365 Customer Engagement
- For Dynamics 365 for Finance and Operations

> **IMPORTANT**
>
> You need to re-certify your apps every 6 months to keep them live on AppSource. For details, see marketplace policy Commercial Marketplace Certification Policies.

Next steps

Ask your Account Manager or contact Microsoft Partner Support for assistance with your account. For general information on the Business Applications ISV Connect Program, see:

- Business Applications partner information (website)
- ISV Connect program guide (PDF)
- ISV Connect program partner FAQ (PDF)
- ISV Connect program changes (blog post)

Azure Consumption Commitment enrollment

11/22/2021 • 2 minutes to read • Edit Online

This article is for commercial marketplace publishers and describes Microsoft Azure Consumption Commitment (MACC), a contractual commitment customers make with Microsoft for specific amounts of Azure spend over time. For information about how MACC benefits customers, see Azure Consumption Commitment benefit.

> **TIP**
>
> To see the customer's view of consumption commitment benefits in Azure Marketplace, see Azure consumption commitment benefit.

MACC program

The *Microsoft Azure Consumption Commitment (MACC)* program is for transactable offers that are published to Azure Marketplace. Azure Marketplace purchases of transactable offers that are enrolled in this program contribute towards an organization's Microsoft Azure Consumption Commitment.

Requirements for an offer to be enrolled in MACC

An offer must meet the following requirements to be enrolled in the MACC program:

- Transactable with a pricing plan greater than $0

  > **NOTE**
  >
  > Free and BYOL (bring your own license) offers are NOT considered transactable.

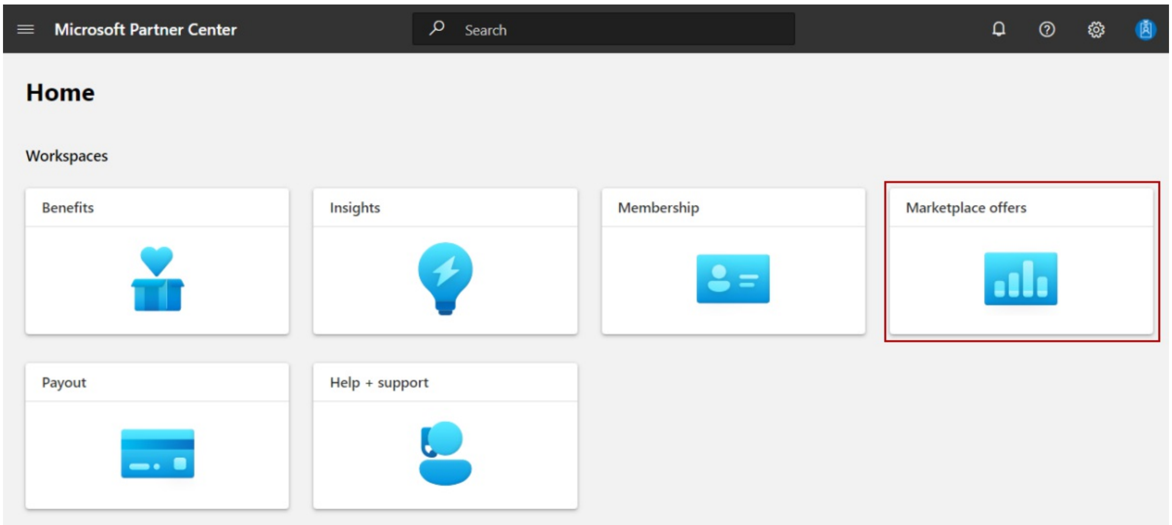
- Azure IP Co-sell Incentivized
- Published live in Azure Marketplace

How to see if your offer is enrolled in the MACC program

> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select the offer you want to see.

4. On the **Offer overview** page, in the **Marketplace programs** section the **Microsoft Azure consumption commitment** status will show either *Enrolled* or *Not Enrolled*.

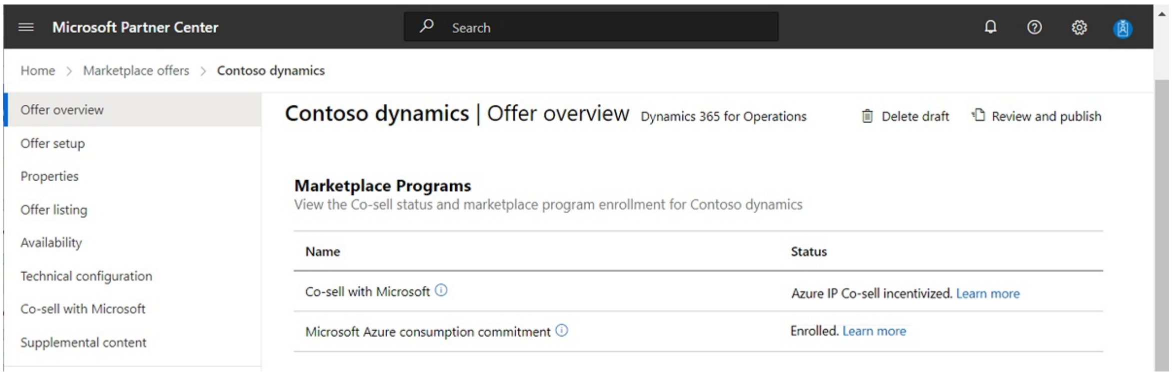


Figure 1: Offer that is enrolled in the MACC program

NOTE

MACC program status for offers published to Azure Marketplace is updated weekly on Mondays. This means that if you publish an offer that meets the eligibility requirements for the MACC program, the status in Partner Center will not show the Enrolled status until the following Monday.

Next steps

- To learn more about how the MACC program benefits customers and how they can find solutions that are enabled for MACC, see Azure Consumption Commitment benefit.
- To learn more about how your organization can leverage Azure Marketplace, complete our Microsoft Learn module: Simplify cloud procurement and governance with Azure Marketplace
- Commercial marketplace transact capabilities

Microsoft preferred solution badge

11/22/2021 • 2 minutes to read • Edit Online

TIP

To see the customer's view of preferred solutions in the commercial marketplace, see What is Azure Marketplace? and What is Microsoft AppSource?.

What is the Microsoft preferred solution badge?

The preferred solution badge is awarded as a commercial marketplace benefit to:

- Offers published to the commercial marketplace with an Azure IP co-sell incentive
- Offers enrolled in the Microsoft Business Applications ISV Connect program with co-sell ready status

The Microsoft preferred solution badge is visible in the online stores of the commercial marketplace: Microsoft AppSource and Azure Marketplace.

How does the badge benefit customers?

Offers with the Microsoft preferred solution badge have been validated by a team of Microsoft experts, have a focus on specific solution areas, and have proven to generate business impact, technology transformation, or cross-organizational improvements for customers. This badge allows customers browsing in Microsoft AppSource and Azure Marketplace to visually identify those offers.

How does the badge benefit partners?

For partners, the Microsoft preferred solution badge aligns offers published to Microsoft AppSource or Azure Marketplace to Microsoft’s go-to-market priorities.

What are the changes to the criteria to achieve the badge?

Until July 2021, publishers with at least one co-sell ready offer were eligible to receive the Microsoft preferred solution badge for all offers published to the commercial marketplace. Starting in August 2021, to improve discovery of offers that have achieved co-sell incentive status, the preferred solution badge is awarded only to offers that meet the business and technical requirements to earn an Azure IP co-sell incentive or the Business Applications co-sell incentive.

Next steps

- To configure an offer for co-sell, see Configure Co-sell for a commercial marketplace offer
- For information about co-sell incentive status, see Requirements for Azure IP Co-sell incentive status or Business Applications Co-sell incentive status

Publish an integrated solution

11/22/2021 • 3 minutes to read • Edit Online

This article explains the overall process and requirements for publishing an integrated solution to the commercial marketplace. In a single bundled offer, an integrated solution combines point-solution technologies from software vendors with the deployment and support of a services partner. The services partner lists the offer in Microsoft AppSource or Azure Marketplace as a consulting service.

Integrated solutions aim to address a specific customer need or scenario. Providers begin by understanding the industry challenge or pain points. They then integrate two or more best-of-breed technologies to create a unified and repeatable deployment experience for customers. Providers get customers up and running rapidly. They offer a single point of contact to the customer, providing relevant customization, consulting, and solution support. The outcome is an integrated solution, including technology and services.

Benefits of integrated solutions in the marketplace

- Customers can find packaged solutions that solve end-to-end business challenges through the marketplace. They get accelerated time to value because the technology is integrated up front. Customers avoid having to engage separately with multiple apps deployed in a fragmented way.
- IP is packaged along with other solutions and services that enhance the value of the technology that's delivered by expert services partners.
- Services partners create predefined, pre-integrated solutions with best-of-breed technology to scale, land, and expand in more customer accounts.
- Microsoft can use these pre-integrated, industry-aligned solutions to more easily co-sell to customers. Pricing and terms are sorted in advance.

Eligibility criteria

- Participating services providers should be co-sell ready.
- Participating software vendors should be IP co-sell ready.
- At least one participating partner must have Gold Competency in one of the following areas:
  - Application Development
  - Application Integration
  - Application Lifecycle Management
  - Cloud Platform
  - Data Analytics
  - Datacenter
  - Data Platform
  - DevOps
- The solution must include at least two partner organizations, bringing together IP and services for a complete customer solution and experience.
- The partner IP must be built on Azure, Dynamics 365, or Power Platform.
- The IP of the integrated solution needs to be differentiated from simply the IP of the software vendor and the basic services-provider offerings.
- All partners share the objective of creating a repeatable offering that can be listed and eventually

transacted through Microsoft AppSource, Azure Marketplace, or both.

Best practices when developing an integrated solution

1. Complete key business and technical discussions in a workshop format to define the solution and integration approach.

   Your discussion about the solution should involve the following points:

   - Scope
   - Target customers
   - Value proposition
   - Pricing
   - Licensing
   - Terms and conditions
   - Support approach
   - Marketing activities
   - Sales process
   - Activities

   Your discussion about the integration approach should involve the following points:

   - Integration points
   - Solution architecture
   - Authentication
   - User interface
   - Monitoring
   - Deployment mechanism
   - APIs
   - Unified data repository

2. Identify a cross-partner project manager to drive the project plan and timeline that you developed in the business and technical workshops.

3. Develop the complete technical integration of the solution.

4. Decide the solution pricing and a single price point to surface on Microsoft AppSource or Azure Marketplace.

5. Complete the required marketing collateral for the Microsoft AppSource or Azure Marketplace listing.

Publish your integrated solution

After you finish the technical integration and the marketing collateral, refer to the publisher guide for Consulting services for Microsoft AppSource and Azure Marketplace to determine whether your solution will be published in Microsoft AppSource or Azure Marketplace. We recommend using the guide to prepare your publishing artifacts and complete the publishing process.

Although five service types are available for consulting-service offers, an integrated solution must be either a proof of concept or a full implementation.

Go to market with your integrated solution

When your solution is live in Microsoft AppSource or Azure Marketplace, you'll want to drive awareness and demand through marketing activities. Take advantage of the go-to-market benefits for partners who publish in the marketplace.

Next steps

- Activate Marketplace Rewards

Marketplace Rewards

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Marketplace Rewards supports you at your specific stage of growth, starting with awareness activities to help you get your first customers. As you grow through the Microsoft commercial marketplace, you unlock new benefits designed to help you convert customers and close deals. For details on the program and benefits, see Marketplace Rewards (PPT).

The program creates a positive feedback loop: the benefits at each stage of growth help you progress to the next stage, helping you to grow your business to Microsoft customers, with Microsoft's field, and through Microsoft's channel by leveraging the commercial marketplace as your platform.

Your benefits are differentiated based on whether your offer is Contact Me, Free Trial, or Transact.

You will be contacted by a member of the Rewards team when your offer goes live, based on your eligibility.

For Transact partners, as you grow your billed sales through the commercial marketplace platform, you unlock greater benefits per tier.

The minimum requirement to publish in the online stores is an MPNID, so these benefits are available to all partners regardless of MPN competency status or partner type. Each partner is empowered to grow their business through the commercial marketplace as a platform.

You will get support in understanding the resources available to you and in implementing the best practices, which you can also review on your own.

To check your eligibility for the Marketplace Rewards program, see the Marketplace Rewards page in Partner Center.

Your steps to get started are easy:

1. Publish an offer in either Microsoft AppSource or Azure Marketplace.
2. To see your list of benefits, go to the Marketplace Rewards page in Partner Center, and select the **Sales and Marketing benefits** tab.
3. To activate sales and marketing benefit, you must first assign a company marketing contact. This contact will receive follow-up communications about your Marketplace Rewards.
4. To add or update your marketing contact information, go to the top of the Sales and Marketing benefits tab on Marketplace Rewards page, then select **Add, update, or change**. Next, do the following:
    a. Select a user from the list. If the user you want to assign is not in the list, you can add new users in **Account settings**.
    b. Provide an email address for the user that's different from the email address associated with your company's Partner Center account. We will email instructions for using your Marketplace Rewards benefit to your designated marketing contact's email address.
    c. Provide the contact phone and preferred language for this marketing contact. After you finish entering this information, select **Assign user**.
    d. After you've updated the marketing contact, select **Activate** for the benefit you want to start using. Once you activate a benefit, your marketing contact will be contacted by a member of the Rewards team within a week.

Technical benefits

1. You can use your technical benefit to request technical assistance during the pre-sales, design, deployment, and app development phases of your cloud and hybrid solutions. To request assistance, fill in the request form and then select **Submit request**.
2. How to make use of Azure sponsorship benefits will be shared via an email as you unlock these benefits.

> **NOTE**
>
> If your offer has been live for more than four weeks and you have not received a message, check in Partner Center to find who in your organization owns the offer. They should have the communication and next steps. If you cannot determine the owner, or if the owner has left your company, open a support ticket.

The scope of the activities available to you expands as you grow your offerings in the marketplace. All listings receive a base level of optimization recommendations and promotion as part of a self-serve email of resources and best practices.

Publishing guide by offer type

11/22/2021 • 3 minutes to read • Edit Online

This article describes the offer types that are available in the commercial marketplace. The *offer type* defines the offer structure, which includes the metadata, artifacts, and other content presented in the commercial marketplace.

After you decide on a publishing option, you must choose an offer type before you start creating your offer in Partner Center. The offer type will correspond to the type of solution, app, or service offer that you wish to publish, as well as its alignment to Microsoft products and services.

> **NOTE**
> After you select an offer type, you can't change the offer to another type. To create a different offer type, you need to create a new offer.

You can configure a single offer type in different ways to enable different publishing options, listing option, provisioning, or pricing. The publishing option and configuration of the offer type also align to the offer eligibility and technical requirements.

Be sure to review the online store and offer type eligibility requirements and the technical publishing requirements before creating your offer.

List of offer types

The following table shows the commercial marketplace offer types in Partner Center.

OFFER TYPE	DESCRIPTION

OFFER TYPE	DESCRIPTION
Azure Application	There are two kinds of Azure application plans: *solution template* and *managed application*. Both plan types support automating the deployment and configuration of a solution beyond a single virtual machine (VM). You can automate the process of providing multiple resources, including VMs, networking, and storage resources to provide complex solutions, such as IaaS solutions. Both plan types can employ many different kinds of Azure resources, including but not limited to VMs. • **Solution template** plans are one of the main ways to publish a solution in the commercial marketplace. Solution template plans are not transactable in the commercial marketplace, but they can be used to deploy paid VM offers that are billed through the commercial marketplace. Use the solution template plan type when the customer will manage the solution and the transactions are billed through another plan. • **Managed application** plans enable you to easily build and deliver fully managed, turnkey applications for your customers. They have the same capabilities as solution template plans, with some key differences: • The resources are deployed to a resource group and are managed by the publisher of the app. The resource group is present in the consumer's subscription, but an identity in the publisher's tenant has access to the resource group. • As the publisher, you specify the cost for ongoing support of the solution and transactions are supported through the commercial marketplace. Use the managed application plan type when you or your customer requires that the solution is managed by a partner or you will deploy a subscription-based solution.
Azure Container	Use the Azure Container offer type when your solution is a Docker container image provisioned as a Kubernetes-based Azure container service.
Azure virtual machine	Use the virtual machine offer type when you deploy a virtual appliance to the subscription associated with your customer.
Consulting service	Consulting services help to connect customers with services to support and extend their use of Azure, Dynamics 365, or Power Suite services.
Dynamics 365	Publish AppSource offers that build on or extend Dynamics 365 Business Central, Dynamics 365 Customer Engagement, Power Apps, and Finance and Operations apps.
IoT Edge module	Azure IoT Edge modules are the smallest computation units managed by IoT Edge, and can contain Microsoft services (such as Azure Stream Analytics), 3rd-party services, or your own solution-specific code.

OFFER TYPE	DESCRIPTION
Managed service	Create managed service offers and manage customer-delegated subscriptions or resource groups through Azure Lighthouse.
Power BI app Microsoft 365	Publish AppSource offers that build on or extend Power BI and Microsoft 365.
Software as a Service	Use the software as a service (SaaS) offer type to enable your customer to buy your SaaS-based, technical solution as a subscription. For information on single sign-on requirements for SaaS offers, see Azure AD and transactable SaaS offers in the commercial marketplace.

> **IMPORTANT**
>
> **SaaS Offers and Microsoft 365 Add-ins**: For specific details on how transact capabilities may affect how your offer can be viewed and purchased by marketplace customers, see Transacting in the commercial marketplace. For SaaS offers, the offer's transaction capability as well as the category selection will determine the online store where your offer will be published.

Next steps

- Review the eligibility requirements in the corresponding article for your offer type to finalize the selection and configuration of your offer.
- Review the publishing patterns for each online store for examples on how your solution maps to an offer type and configuration.

Marketplace categories and industries

11/22/2021 • 4 minutes to read • Edit Online

This article discusses and lists the categories and industries available to choose from when creating an offer in Partner Center for our two different online stores: Microsoft AppSource or Azure Marketplace.

Category and industry listings by offer type

Microsoft AppSource and Azure Marketplace are two different storefronts that serve different customer personas. Your offer will be published to Microsoft AppSource or Azure Marketplace depending on the category/subcategory selection, the offer type, and transaction capabilities.

Following are the categories and industries applicable to each online stores, by offer:

OFFER TYPE	CATEGORIES FOR AZURE MARKETPLACE	CATEGORIES FOR APPSOURCE	INDUSTRIES FOR APPSOURCE
Azure Application	✔		
Azure Container	✔		
Azure Virtual Machine	✔		
IoT Edge Module	✔		
Managed service	✔		
SaaS	✔	✔	✔
Consulting Service	✔		✔
Dynamics 365 Customer Engagement & Power Apps		✔	✔
Dynamics 365 for Operations		✔	✔
Dynamics 365 business central		✔	✔
Power BI app		✔	✔

Applicable store by offer type

Following are the combinations of options applicable to each online stores:

METERED BILLING	MICROSOFT 365 ADD-INS	PRIVATE-ONLY PLAN	PUBLIC-ONLY PLAN	PUBLIC & PRIVATE PLANS	APPLICABLE ONLINE STORE

METERED BILLING	MICROSOFT 365 ADD-INS	PRIVATE-ONLY PLAN	PUBLIC-ONLY PLAN	PUBLIC & PRIVATE PLANS	APPLICABLE ONLINE STORE
	✔				AppSource
✔		✔			Azure Marketplace
✔			✔		Azure Marketplace
✔				✔	Azure Marketplace[2]
		✔			Azure Marketplace
			✔		AppSource[1] Azure Marketplace[1]
				✔	AppSource[1] Azure Marketplace[1,2]
				✔	AppSource[1] Azure Marketplace[1]

[1] Depending on category/subcategory and industry selection.
[2] Offers with private plans will be published to the Azure portal.

NOTE

A listing plan and transactable plan cannot exist in the same offer.

Categories

Categories in Azure Marketplace target IT professionals and developers while categories in Microsoft AppSource target business users looking for business and/or industry SaaS applications, Dynamics 365 add-ins, Microsoft 365 add-ins, and Power Platform apps.

Select categories and subcategories that best align with the value proposition of your listing. You can select:

- A maximum of two categories, including a primary and a secondary (optional) category.
- A maximum of two subcategories for each primary and/or secondary category. If no subcategory is selected, you offer will be discoverable in the selected category only. Select a subcategory to make your offer discoverable within a smaller subset.

AZURE MARKETPLACE	MICROSOFT APPSOURCE
Analytics • Data Insights • Data Analytics • Big Data • Predictive Analytics • Real-time/Streaming Analytics	Analytics • Advanced Analytics • Visualization and Reporting
AI + Machine Learning • Bot Service • Cognitive Services • ML Service • Automated ML • Business/Robotic Process Automation • Data Labeling • Data Preparation • Knowledge Mining • ML Operations	AI + Machine Learning • AI for Business • Bot Apps
Blockchain • App Accelerators • Single-node Ledger • Multi-node Ledger • Tools	Collaboration • Contact and People • Meeting Management • Site Design and Management • Task and Project Management • Voice and Video Conferencing
Compute • Application Infrastructure • Operating Systems • Cache	Compliance and Legal • Tax and Audit • Legal • Data, Governance, and Privacy • Health and Safety
Containers • Get Started with Containers • Container Apps • Container Images	Customer Service • Contact Center • Face to Face Service • Back Office and Employee Service • Knowledge and Case Management • Social Media and Omnichannel Engagement
Databases • NoSQL Databases • Relational Databases • Ledger/Blockchain Databases • Data Lakes • Data Warehouse	Finance • Accounting • Asset Management • Analytics, Consolidation, and Reporting • Credit and Collections • Compliance and Risk Management
Developer Tools • Tools • Scripts • Developer Service	Geolocation • Maps • News and Weather

<table>
<tr><th>AZURE MARKETPLACE</th><th>MICROSOFT APPSOURCE</th></tr>
<tr><td>DevOps</td><td>Human Resources
• Talent Acquisition
• Talent Management
• HR Operations
• Workforce Planning and Analytics</td></tr>
<tr><td>Integration
• Messaging</td><td>IT and Management Tools
• Management Solutions
• Business Applications</td></tr>
<tr><td>IT and Management Tools
• Management Solutions
• Business Applications</td><td>Internet of Things
• Asset Management and Operations
• Connected Products
• Intelligent Supply Chain
• Predictive Maintenance
• Remote Monitoring
• Safety and Security
• Smart Infrastructure and Resources
• Vehicles and Mobility</td></tr>
<tr><td>Identity
• Access Management</td><td>Marketing
• Advertisement
• Analytics
• Campaign Management and Automation
• Email Marketing
• Events and Resource Management
• Research and Analysis
• Social Media</td></tr>
<tr><td>Internet of Things
• IoT Connectivity
• IoT Core Services
• IoT Edge Modules
• IoT Solutions
• Data Analytics and Visualization</td><td>Operations and Supply Chain
• Asset and Production Management
• Demand Forecasting
• Information Management and Connectivity
• Planning, Purchasing, and Reporting
• Quality and Service Management
• Sales and Order Management
• Transportation and Warehouse Management</td></tr>
<tr><td>Media
• Media Services
• Content Protection
• Live and On-Demand Streaming</td><td>Productivity
• Content Creation and Management
• Document Management
• Email Management
• Language and Translation
• Search and Reference
• Gamification</td></tr>
</table>

AZURE MARKETPLACE	MICROSOFT APPSOURCE
Monitoring and Diagnostics	Sales • Telesales • Configure, Price, Quote (CPQ) • Contract Management • CRM • E-commerce • Business Data Enrichment • Sales Enablement
Migration • Data Migration	(remaining cells in this column are blank)
Mixed Reality	
Networking • Appliance Managers • Connectivity • Firewalls • Load Balancers	
Security • Identity and Access Management • Threat Protection • Information Protection	
Storage • Backup and Recovery • Enterprise Hybrid Storage • File Sharing • Data Lifecycle Management	
Web • Blogs and CMSs • Starter Web Apps • E-commerce • Web App Frameworks • Web Apps	

Industries

Industry selection applies only for offers published to AppSource and Consulting Services published in Azure Marketplace. Select industries and/or verticals if your offer addresses industry-specific needs, calling out industry-specific capabilities in your offer description. You can select up to two industries and two verticals per industry.

NOTE

For consulting service offers in Azure Marketplace, there are no industry verticals.

INDUSTRIES	VERTICALS
Automotive	n/a
Financial Services	Banking Insurance Capital Markets
Government	Civilian Government Public Safety and Justice
Defense and Intelligence	n/a
Healthcare	Health Payor Health Provider Life Sciences
Education	Higher Education Primary and Secondary Edu/K-12 Libraries and Museums
Nonprofit and IGO	n/a
Manufacturing	Process Manufacturing Discrete Manufacturing Agriculture
Energy	n/a
Retail	Retail Customer Goods
Media and Communications	Media and Entertainment Telecommunications
Professional Services	Partner Professional Services Legal Architecture and Construction Real Estate
Distribution	Wholesale Parcel and Package Shipping
Hospitality and Travel	Travel & Transportation Hotels and Leisure Restaurants and Food Services

Applicable products

Select the applicable products your app works with for the offer to show up under selected products in

Microsoft AppSource.

Next steps

- To create an offer, sign in to Partner Center to create and configure your offer. If you haven't yet enrolled in Partner Center, create an account.
- For step-by-step instructions on publishing an offer, see the commercial marketplace publishing guide by offer type.

Plan an Azure Application offer

11/22/2021 • 12 minutes to read • Edit Online

This article explains the different options and requirements for publishing an Azure Application offer to the commercial marketplace.

Before you begin

Designing, building, and testing Azure application offers requires technical knowledge of both the Azure platform and the technologies used to build the offer. Your engineering team should have knowledge about the following Microsoft technologies:

- Basic understanding of Azure Services.
- How to design and architect Azure applications.
- Working knowledge of Azure Virtual Machines, Azure Storage, and Azure Networking.
- Working knowledge of Azure Resource Manager.
- Working knowledge of JSON.

Technical documentation and resources

Review the following resources as you plan your Azure application offer for the commercial marketplace.

- Understand Azure Resource Manager Templates
- Quickstarts:
  - Azure Quickstart templates
  - Azure templates best practices guide
  - Publish application definition
  - Deploy service catalog app
- Tutorials:
  - Create definition files
- Samples:
  - Azure CLI
  - Azure PowerShell
  - Managed application solutions

The video Building Solution Templates, and Managed Applications for Azure Marketplace gives a comprehensive introduction to the Azure application offer type:

- What offer types are available
- What technical assets are required
- How to author an Azure Resource Manager template
- Developing and testing the app UI
- How to publish the app offer
- The application review process

Suggested tools

Choose one or both of the following scripting environments to help manage your Azure application:

- Azure PowerShell
- Azure CLI

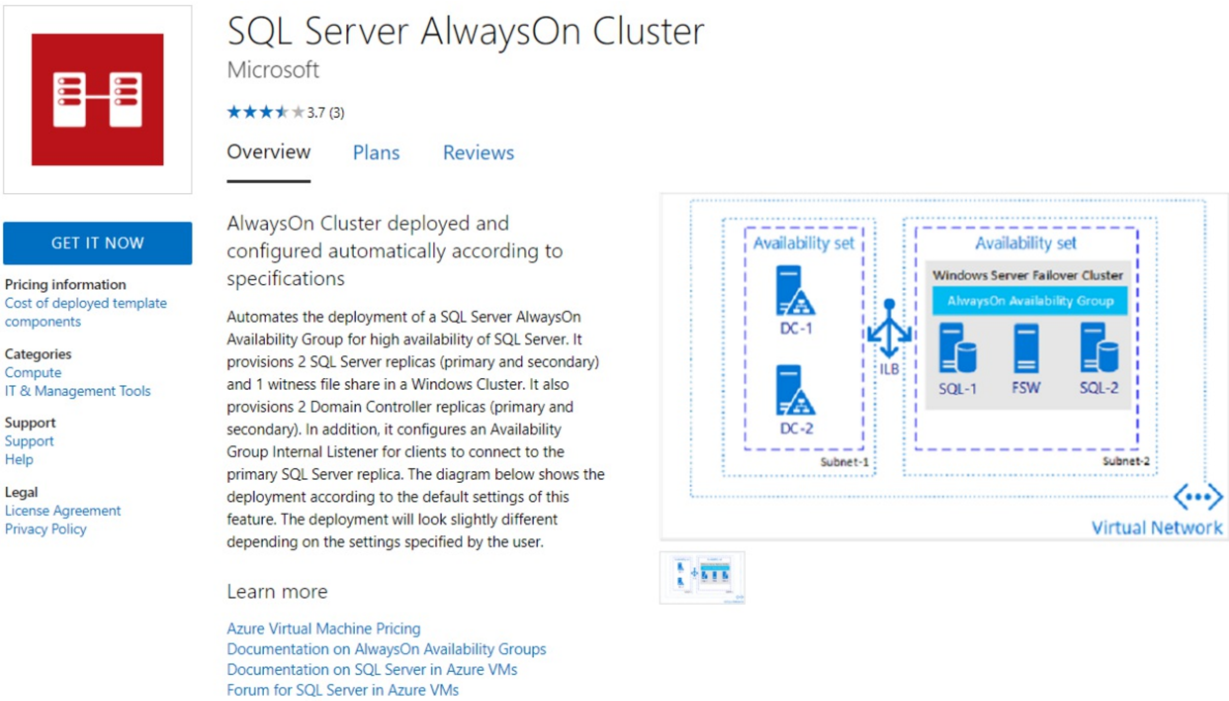
We recommend adding the following tools to your development environment:

- Azure Storage Explorer
- Visual Studio Code with the following extensions:
  - Extension: Azure Resource Manager Tools
  - Extension: Beautify
  - Extension: Prettify JSON

You can review the available tools in the Azure Developer Tools page. If you are using Visual Studio, see the Visual Studio Marketplace.

Listing options

After your offer is published, the listing options for your offer appear as a button in the upper-left corner of your offer's listing page. For example, the following screenshot shows an offer listing page in Azure Marketplace with the *Get It Now* button. If you had chosen to offer a test drive, the *Test Drive* button would also be shown.



Test drive

You can choose to enable a test drive for your Azure Application offer that lets customers try your offer before purchasing it. To learn more about test drives, see What is a test drive?. For information about configuring different kinds of test drives, see Test drive technical configuration.

You can also read about test drive best practices and download the Test drives overview PDF (make sure your pop-up blocker is off).

> **NOTE**
>
> Information the user should notice even if skimmingBecause all Azure applications are implemented using an Azure Resource Manager template, the only type of test drive available for an Azure Application is an Azure Resource Manager based test drive.

Customer leads

You must connect your offer to your customer relationship management (CRM) system to collect customer information. The customer will be asked for permission to share their information. These customer details, along with the offer name, ID, and online store where they found your offer, will be sent to the CRM system that you've configured. The commercial marketplace supports a variety of CRM systems, along with the option to use an Azure table or configure an HTTPS endpoint using Power Automate.

You can add or modify a CRM connection at any time during or after offer creation. For detailed guidance, see Customer leads from your commercial marketplace offer.

Categories and subcategories

You can choose at least one and up to two categories for grouping your offer into the appropriate commercial marketplace search areas. You can choose up to two subcategories for each primary and secondary category. For a full list of categories and subcategories, see Offer Listing Best Practices.

Legal contracts

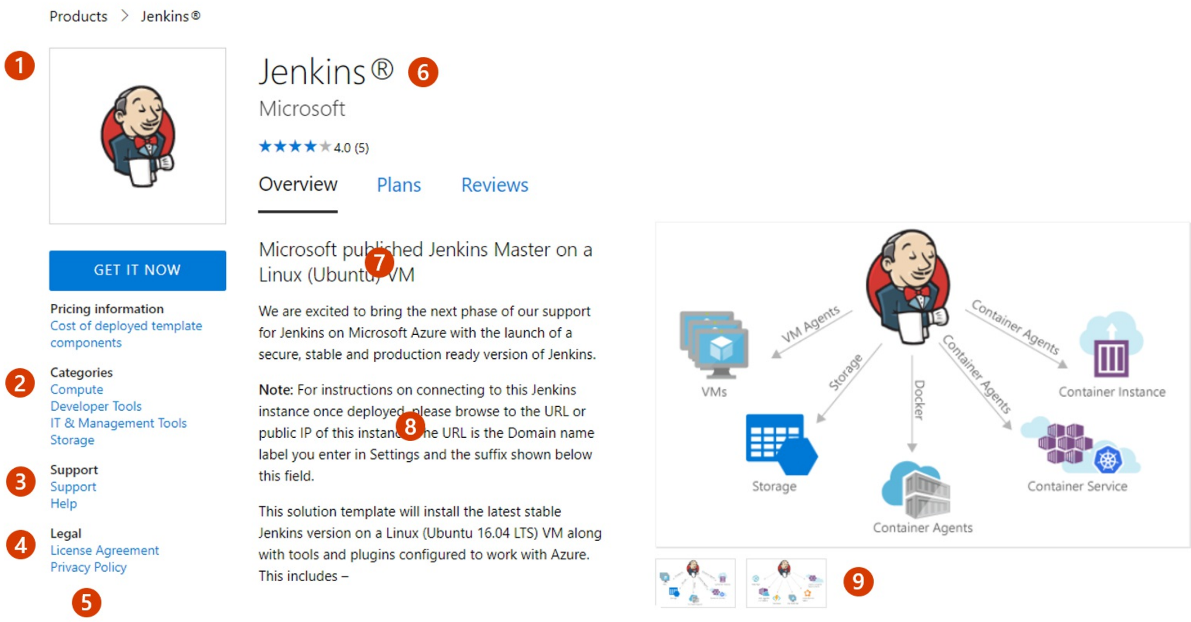
To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions.

If you choose to use the standard contract, you have the option to add universal amendment terms and up to 10 custom amendments to the standard contract. You can also use your own terms and conditions instead of the standard contract. You will manage these details in the **Properties** page. For detailed information, see Standard contract for Microsoft commercial marketplace.

> **NOTE**
> After you publish an offer using the standard contract for the commercial marketplace, you cannot use your own custom terms and conditions. It is an "or" scenario. You either offer your solution under the standard contract or your own terms and conditions. If you want to modify the terms of the standard contract you can do so through Standard Contract Amendments.

Offer listing details

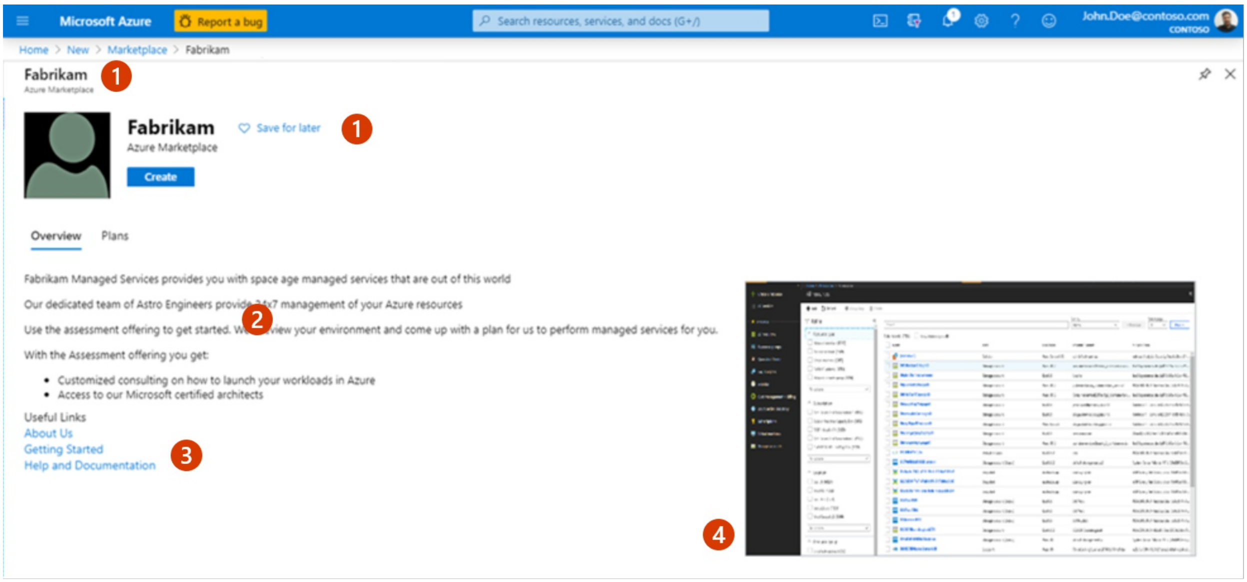
When you create a new Azure Application offer in Partner Center, you will enter text, images, optional videos, and other details on the Offer listing page. This is the information that customers will see when they discover your offer listing in Azure Marketplace, as shown in the following example.



Call-out descriptions

1. Logo
2. Categories
3. Support address (link)
4. Terms of use
5. Privacy policy address (link)
6. Offer name
7. Summary
8. Description
9. Screenshots/videos

The following screenshot shows how offer information appears in the Azure portal:



Call-out descriptions

1. Title
2. Description
3. Useful links
4. Screenshots

> **NOTE**
>
> Offer listing content is not required to be in English if the offer description begins with the phrase "This application is available only in [non-English language]".

To help create your offer more easily, prepare some of these items ahead of time. The following items are required unless otherwise noted.

- **Name**: This name will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It cannot contain emojis (unless they are the trademark and copyright symbols) and must be limited to 50 characters.
- **Search results summary**: Describe the purpose or function of your offer as a single sentence, in plain text with no line breaks, in 100 characters or less. This summary is used in the commercial marketplace listing(s) search results.
- **Short description**: Provide up to 256 characters of plain text. This summary will appear on your offer's details page.
- **Description**: This description will be displayed in the Azure Marketplace listing(s) overview. Consider including a value proposition, key benefits, intended user base, any category or industry associations, in-app purchase opportunities, customer need or pain that the offer addresses, any required disclosures, and a link to learn more.

  This text box has rich text editor controls that you can use to make your description more engaging. You can also use HTML tags to format your description. You can enter up to 3,000 characters of text in this box, which includes HTML markup and spaces. For additional tips, see Write a great app description and HTML tags supported in the commercial marketplace offer descriptions.
- **Search keywords** (optional): Provide up to three search keywords that customers can use to find your offer in the online store. For best results, also use these keywords in your description. You don't need to include the offer **Name** and **Description**. That text is automatically included in search.
- **Privacy policy link**: The URL for your company's privacy policy. You must provide a valid privacy policy and are responsible for ensuring your app complies with privacy laws and regulations.
- **Useful links** (optional): You can provide links to various resources for users of your offer. For example, forums, FAQs, and release notes.
- **Contact information**: You must designate the following contacts from your organization:
  - **Support contact**: Provide the name, phone, and email for Microsoft partners to use when your customers open tickets. You must also include the URL for your support website.
  - **Engineering contact**: Provide the name, phone, and email for Microsoft to use directly when there are problems with your offer. This contact information isn't listed in the commercial marketplace.
  - **CSP Program contact** (optional): Provide the name, phone, and email if you opt in to the Cloud Solution Provider (CSP) program, so those partners can contact you with any questions. You can also include a URL to your marketing materials.
- **Media – Logos**: Provide a PNG file for the **Large** size logo. Partner Center will use this to create a **Small** and a **Medium** logo. You can optionally replace these with different images later.
  - Large (from 216x216 to 350x350 px, required)
  - Medium (90x90 px, optional)
  - Small (48x48 px, optional)

  These logos are used in different places in the online stores:

- The Small logo appears in Azure Marketplace search results.
- The Medium logo appears when you create a new resource in Microsoft Azure.
- The Large logo appears on your offer listing page in Azure Marketplace.

Follow these guidelines for your logos:

- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The theme colors of the portal are white and black. Don't use these colors as the background color for your logo. Use a color that makes your logo prominent in the portal. We recommend simple primary colors.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat and avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name. Blurry images will cause your submission to be rejected.
- Make sure the logo isn't stretched.

- **Media - Screenshots** (optional): We recommend that you add screenshots that show how your offer works. You can add up to five screenshots with the following requirements, that show how your offer works:
  - 1280x720 pixels
  - .PNG file
  - Must include a caption
- **Media – Videos** (optional): You can add up to five videos with the following requirements, that demonstrate your offer:
  - Name
  - URL: Must be hosted on YouTube or Vimeo only.
  - Thumbnail: 1280x720 .PNG file

> **NOTE**
>
> Your offer must meet the general commercial marketplace certification policies to be published to the commercial marketplace.

Preview audience

A preview audience can access your offer prior to being published live in the online stores in order to test the end-to-end functionality before you publish it live.

> **NOTE**
>
> A preview audience differs from a private plan. A private plan is one you make available only to a specific audience you choose. This enables you to negotiate a custom plan with specific customers.

You define the preview audience using Azure subscription IDs, along with an optional description for each. Neither of these fields can be seen by customers.

Technical configuration

For managed applications that emit metering events using the Marketplace metering service APIs, you must provide the identity that your service will use when emitting metering events.

This configuration is required if you want to use Batch usage event. In case you want to submit usage event, you can also use the instance metadata service to get the JSON web token (JWT) bearer token).

- **Azure Active Directory tenant ID** (required): Inside the Azure portal, you must create an Azure Active Directory (AD) app so we can validate the connection between our two services is behind an authenticated communication. To find the tenant ID for your Azure Active Directory (Azure AD) app, to the App registrations blade in your Azure Active Directory. In the **Display name** column, select the app. Then look for **Properties**, and then for the **Directory (tenant) ID** (for example `50c464d3-4930-494c-963c-1e951d15360e`).
- **Azure Active Directory application ID** (required): You also need your application ID and an authentication key. To find your application ID, go to the App registrations blade in your your Azure Active Directory. In the **Display name** column, select the app and then look for the **Application (client) ID** (for example `50c464d3-4930-494c-963c-1e951d15360e`). To find the authentication key, go to **Settings** and select **Keys**. You will need to provide a description and duration and will then be provided a number value.

> **NOTE**
>
> The Azure application ID will be associated to your publisher ID and can only be re-used within this publisher account.

Additional sales opportunities

You can choose to opt into Microsoft-supported marketing and sales channels. When creating your offer in Partner Center, you will see two tabs toward the end of the process:

- **Resell through CSPs**: Use this option to allow Microsoft Cloud Solution Providers (CSP) partners to resell your solution as part of a bundled offer. See Cloud Solution Provider program for more information.
- **Co-sell with Microsoft**: This option lets Microsoft sales teams consider your IP co-sell eligible solution when evaluating their customers' needs. For detailed information on how to prepare your offer for evaluation, see Co-sell option in the commercial marketplace. For details about IP co-sell requirements, see Requirements for co-sell status. For more information about marketing your offer through the Microsoft CSP partner channels, see Cloud Solution Providers.

To learn more, see Grow your cloud business with Azure Marketplace.

Plans

Azure Application offers require at least one plan. A plan defines the solution scope and limits, and the associated pricing, if applicable. You can create multiple plans for your offer to give your customers different technical and pricing options.

For general guidance about plans, including pricing models, and private plans, see Plans and pricing for commercial marketplace offers. The following sections discuss additional information specific to Azure Application plans.

Types of plans

There are two kinds of Azure application plans: *solution template* and *managed application*. Both plan types support automating the deployment and configuration of a solution beyond a single virtual machine (VM). You can automate the process of providing multiple resources, including VMs, networking, and storage resources to provide complex solutions, such as IaaS solutions. Both plan types can employ many different kinds of Azure resources, including but not limited to VMs.

- **Solution template** plans are one of the main ways to publish a solution in the commercial marketplace. Solution template plans are not transactable in the commercial marketplace, but they can be used to deploy paid VM offers that are billed through the commercial marketplace. Use the solution template plan type when the customer will manage the solution and the transactions are billed through another plan. For more information about building solution templates, see What is Azure Resource Manager?

- **Managed application** plans enable you to easily build and deliver fully managed, turnkey applications for your customers. They have the same capabilities as solution template plans, with some key differences:
  - The resources are deployed to a resource group and are managed by the publisher of the app. The resource group is present in the consumer's subscription, but an identity in the publisher's tenant has access to the resource group.
  - As the publisher, you specify the cost for ongoing support of the solution and transactions are supported through the commercial marketplace.

  Use the managed application plan type when you or your customer requires that the solution is managed by a partner or you will deploy a subscription-based solution. For more information about the advantages and types of managed applications, see Azure managed applications overview.

Next steps

- To plan a solution template, see Plan a solution template for an Azure application offer.
- To plan an Azure managed application, see Plan an Azure managed application for an Azure application offer.

Plan a solution template for an Azure application offer

11/22/2021 • 4 minutes to read • Edit Online

This article explains the requirements for publishing a solution template plan for an Azure Application offer. A solution template plan is one of the two types of plans supported by Azure Application offers. For information about the difference between these two plan types, see Types of plans. If you haven't already done so, read Plan an Azure application offer.

The solution template plan type requires an Azure Resource Manager template (ARM template) to automatically deploy your solution infrastructure.

Solution template requirements

REQUIREMENTS	DETAILS
Billing and metering	Solution template plans are not transactable, but they can be used to deploy paid VM offers that are billed through the Microsoft commercial marketplace. The resources that the solution's ARM template deploys are set up in the customer's Azure subscription. Pay-as-you-go virtual machines are transacted with the customer via Microsoft and billed via the customer's Azure subscription. For bring-your-own-license (BYOL) billing, although Microsoft bills infrastructure costs that are incurred in the customer subscription, you transact your software licensing fees with the customer directly.
Azure-compatible virtual hard disk (VHD)	VMs must be built on Windows or Linux. For more information, see: • Create an Azure VM technical asset (for Windows VHDs) • Linux distributions endorsed on Azure (for Linux VHDs).
Customer usage attribution	Enabling customer usage attribution is required on all solution templates that are published on Azure Marketplace. For more information about customer usage attribution and how to enable it, see Azure partner customer usage attribution.
Use managed disks	Managed disks is the default option for persisted disks of infrastructure as a service (IaaS) VMs in Azure. You must use managed disks in solution templates. • To update your solution templates, follow the guidance in Use managed disks in Azure Resource Manager templates, and use the provided samples. • To publish the VHD as an image in Azure Marketplace, import the underlying VHD of the managed disks to a storage account by using either Azure PowerShell or the Azure CLI

REQUIREMENTS	DETAILS
Deployment package	You'll need a deployment package that will let customers deploy your plan. If you create multiple plans that require the same technical configuration, you can use the same plan package. For details, see the next section: Deployment package.

Deployment package

The deployment package contains all of the template files needed for this plan, as well as any additional resources, packaged as a .zip file.

All Azure applications must include these two files in the root folder of a .zip archive:

- A Resource Manager template file named mainTemplate.json. This template defines the resources to deploy into the customer's Azure subscription. For examples of Resource Manager templates, see the Azure Quickstart Templates gallery or the corresponding GitHub: Azure Resource Manager Quickstart Templates repo.
- A user interface definition for the Azure application creation experience named createUiDefinition.json. In the user interface, you specify elements that enable consumers to provide parameter values.

Maximum file sizes supported are:

- Up to 1 Gb in total compressed .zip archive size
- Up to 1 Gb for any individual uncompressed file within the .zip archive

All new Azure application offers must also include an Azure partner customer usage attribution GUID.

Azure regions

You can publish your plan to the Azure public region, Azure Government region, or both. Before publishing to Azure Government, test and validate your plan in the environment as certain endpoints may differ. To set up and test your plan, request a trial account from Microsoft Azure Government trial.

You, as the publisher, are responsible for any compliance controls, security measures, and best practices. Azure Government uses physically isolated data centers and networks (located in the U.S. only).

For a list of countries and regions supported by the commercial marketplace, see Geographic availability and currency support.

Azure Government services handle data that is subject to certain government regulations and requirements. For example, FedRAMP, NIST 800.171 (DIB), ITAR, IRS 1075, DoD L4, and CJIS. To bring awareness to your certifications for these programs, you can provide up to 100 links that describe them. These can be either links to your listing on the program directly or links to descriptions of your compliance with them on your own websites. These links visible to Azure Government customers only.

Choose who can see your plan

You can configure each plan to be visible to everyone (public) or to only a specific audience (private). You can create up to 100 plans and up to 45 of them can be private. You may want to create a private plan to offer different pricing options or technical configurations to specific customers.

You grant access to a private plan using Azure subscription IDs with the option to include a description of each subscription ID you assign. You can add a maximum of 10 subscription IDs manually or up to 10,000 subscription IDs using a .CSV file. Azure subscription IDs are represented as GUIDs and letters must be lowercase.

> **NOTE**
>
> If you publish a private plan, you can change its visibility to public later. However, once you publish a public plan, you cannot change its visibility to private.

For solution template plans, you can also choose to hide the plan from Azure Marketplace. You might want to do this if the plan is only deployed indirectly through another solution template or managed application.

> **NOTE**
>
> Private plans are not supported with Azure subscriptions established through a reseller of the Cloud Solution Provider program (CSP).

For more information, see Private offers in the Microsoft commercial marketplace.

Next steps

- Create an Azure application offer

Plan an Azure managed application for an Azure application offer

11/22/2021 • 10 minutes to read • Edit Online

An Azure *managed application* plan is one way to publish an Azure application offer in Azure Marketplace. If you haven't already done so, read Plan an Azure Application offer for the commercial marketplace.

Managed applications are transact offers that are deployed and billed through Azure Marketplace. The listing option that a user sees is Get It Now.

Use an Azure Application: Managed application plan when the following conditions are required:

- You will deploy a subscription-based solution for your customer using either a virtual machine (VM) or an entire infrastructure as a service (IaaS)-based solution.
- You or your customer requires the solution to be managed by a partner. For example, a partner can be a systems integrator or a managed service provider (MSP).

Managed application offer requirements

REQUIREMENTS	DETAILS
An Azure subscription	Managed applications must be deployed to a customer's subscription, but they can be managed by a third party.
Billing and metering	The resources are provided in a customer's Azure subscription. VMs that use the pay-as-you-go payment model are transacted with the customer via Microsoft and billed via the customer's Azure subscription. For bring-your-own-license VMs, Microsoft bills any infrastructure costs that are incurred in the customer subscription, but you transact software licensing fees with the customer directly.
Azure-compatible virtual hard disk (VHD)	VMs must be built on Windows or Linux. For more information, see: * Create an Azure VM technical asset (for Windows VHDs). * Linux distributions endorsed on Azure (for Linux VHDs).
Customer usage attribution	All new Azure application offers must also include an Azure partner customer usage attribution GUID. For more information about customer usage attribution and how to enable it, see Azure partner customer usage attribution.
Deployment package	You'll need a deployment package that will let customers deploy your plan. If you create multiple plans that require the same technical configuration, you can use the same package. For details, see the next section: Deployment package.

> **NOTE**
>
> Managed applications must be deployable through Azure Marketplace. If customer communication is a concern, reach out to interested customers after you've enabled lead sharing.

Usage of Azure Kubernetes Service (AKS) and containers in managed application

Azure application offers fall into two categories

- Solution template – not accessible by the publisher
- Managed application – accessible by the publisher via pre-defined authorization that is granted by the customer at the time of deployment

Solution templates: The Solution Template offers are not changeable by the publisher after customer deployment. Therefore, containers and Azure Kubernetes Service (AKS) resources are not currently allowed in this offer category.

Managed applications: The Managed Application offers allow the publisher to access and control the resources created during deployment in the customer's subscription. Therefore, containers and Azure Kubernetes Service (AKS) resources *are provisionally allowed* in this offer category.

Rules and known issues for AKS and containers in managed applications

- AKS Node Resource Group does not inherit the Deny Assignments as a part of the Azure Managed Application. This means the customer will have full access to the AKS Node Resource Group that is created by the AKS resource when it is included in the managed application while the Managed Resource Group will have the proper Deny Assignments.
- The publisher can include Helm charts and other scripts as part of the Azure Managed Application. However, the offer will be treated like a regular managed application deployment and there will be no automatic container-specific processing or Helm chart installation at deployment time. It is the publisher's responsibility to execute the relevant scripts, either at deployment time, using the usual techniques such as VM custom script extension or Azure Deployment Scripts, or after deployment.
- Same as with the regular Azure Managed Application, it is the publisher's responsibility to ensure that the solution deploys successfully and that all components are properly configured, secured, and operational. For example, publishers can use their own container registry as the source of the images but are fully responsible for the container security and ongoing vulnerability scanning.

> **NOTE**
>
> The support for containers and AKS in Azure Managed Application offer may be withdrawn when an official Container Application offer type is made available in Marketplace. At that time, it might be a requirement to publish all future offers using the new offer type and the existing offers may need to be migrated to the new offer type and retired.

Deployment package

The deployment package contains all the template files needed for this plan, as well as any additional resources, packaged as a .zip file.

All Azure applications must include these two files in the root folder of a .zip archive:

- A Resource Manager template file named mainTemplate.json. This template defines the resources to deploy into the customer's Azure subscription. For examples of Resource Manager templates, see Azure Quickstart

Templates gallery or the corresponding GitHub: Azure Resource Manager Quickstart Templates repo.

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You grant access to a private plan using Azure subscription IDs with the option to include a description of each subscription ID you assign. You can add a maximum of 10 subscription IDs manually or up to 10,000 subscription IDs using a .CSV file. Azure subscription IDs are represented as GUIDs and letters must be lowercase.

Private plans are not supported with Azure subscriptions established through a reseller of the Cloud Solution Provider program (CSP). For more information, see Private offers in the Microsoft commercial marketplace.

> **NOTE**
> If you publish a private plan, you can change its visibility to public later. However, once you publish a public plan, you cannot change its visibility to private.

Define pricing

You must provide the per-month price for each plan. This price is in addition to any Azure infrastructure or pay-as-you-go software costs incurred by the resources deployed by this solution.

In addition to the per-month price, you can also set prices for consumption of non-standard units using metered billing. You may set the per-month price to zero and charge exclusively using metered billing if you like.

Prices are set in USD (USD = United States Dollar) are converted into the local currency of all selected markets using the current exchange rates when saved. But you can choose to set customer prices for each market.

Just in time (JIT) access

JIT access enables you to request elevated access to a managed application's resources for troubleshooting or maintenance. You always have read-only access to the resources, but for a specific time period you can have greater access. For more information, see Enable and request just-in-time access for Azure Managed Applications.

> **NOTE**
> Be sure to update your `createUiDefinition.json` file in order to support this feature.

Deployment mode

You can configure a managed application plan to use either the **Complete** or **Incremental** deployment mode. In complete mode, a redeployment of the application by the customer results in removal of resources in the managed resource group if the resources are not defined in the mainTemplate.json. In incremental mode, a redeployment of the application leaves existing resources unchanged. To learn more, see Azure Resource Manager deployment modes.

Notification endpoint URL

You can optionally provide an HTTPS Webhook endpoint to receive notifications about all CRUD operations on managed application instances of a plan.

Azure appends `/resource` to the end of your webhook URI before calling it. So, your webhook URL must end in `/resource`, although it should not be included in the URI entered into the **Notification Endpoint URL** box in Partner Center. For example, entering `https://contoso.com` as the Notification Endpoint URI results in a call to `https://contoso.com/resource`.

When listening for events from your managed app notifications, make sure you listen to `https://<url>/resource` and not the set URL alone. For a sample notification, see Notification schema.

Customize allowed customer actions (optional)

You can optionally specify which actions customers can perform on the managed resources in addition to the `*/read` actions that is available by default.

If you choose this option, you need to provide either the control actions or the allowed data actions, or both. For more information, see Understanding deny assignments for Azure resources. For available actions, see Azure Resource Manager resource provider operations. For example, to permit consumers to restart virtual machines, add `Microsoft.Compute/virtualMachines/restart/action` to the allowed actions.

Choose who can manage the application

You must indicate who can manage a managed application in each of the selected clouds: *Public Azure* and *Azure Government Cloud*. Collect the following information:

- **Azure Active Directory Tenant ID** – The Azure AD Tenant ID (also known as directory ID) containing the identities of the users, groups, or applications you want to grant permissions to. You can find your Azure AD Tenant ID on the Azure portal, in Properties for Azure Active Directory.
- **Authorizations** – Add the Azure Active Directory object ID of each user, group, or application that you want

to be granted permission to the managed resource group. Identify the user by their Principal ID, which can be found at the Azure Active Directory users blade on the Azure portal.

For each principal ID, you will associate one of the Azure AD built-in roles (Owner or Contributor). The role you select describes the permissions the principal will have on the resources in the customer subscription. For more information, see Azure built-in roles. For more information about role-based access control (RBAC), see Get started with RBAC in the Azure portal.

> **NOTE**
> Although you may add up to 100 authorizations per Azure region, it's generally easier to create an Active Directory user group and specify its ID in the "Principal ID." This lets you add more users to the management group after the plan is deployed and reduce the need to update the plan just to add more authorizations.

Policy settings

You can apply Azure Policies to your managed application to specify compliance requirements for the deployed solution. For policy definitions and the format of the parameter values, see Azure Policy Samples.

You can configure a maximum of five policies, and only one instance of each Policy type. Some policy types require additional parameters.

POLICY TYPE	POLICY PARAMETERS REQUIRED
Azure SQL Database Encryption	No
Azure SQL Server Audit Settings	Yes
Azure Data Lake Store Encryption	No
Audit Diagnostic Setting	Yes
Audit Resource Location compliance	No

For each policy type you add, you must associate Standard or Free Policy SKU. The Standard SKU is required for audit policies. Policy names are limited to 50 characters.

Next steps

- Create an Azure application offer

Create an Azure application offer

11/22/2021 • 3 minutes to read • Edit Online

As a commercial marketplace publisher, you can create an Azure application offer so potential customers can buy your solution. This article explains the process to create an Azure application offer for the Microsoft commercial marketplace.

If you haven't already done so, read Plan an Azure application offer for the commercial marketplace. It will provide the resources and help you gather the information and assets you'll need when you create your offer.

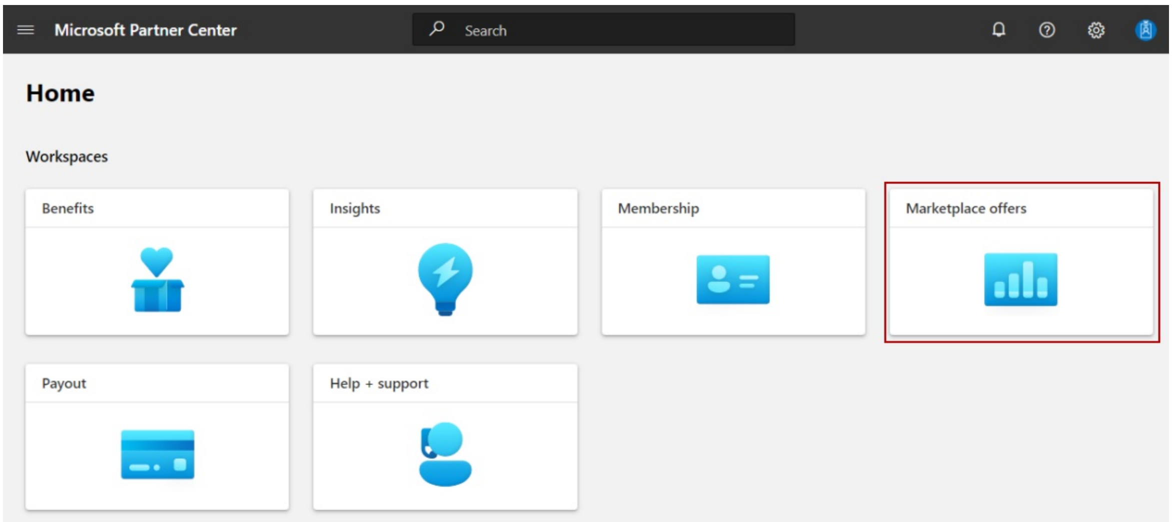
Create a new offer

NOTE

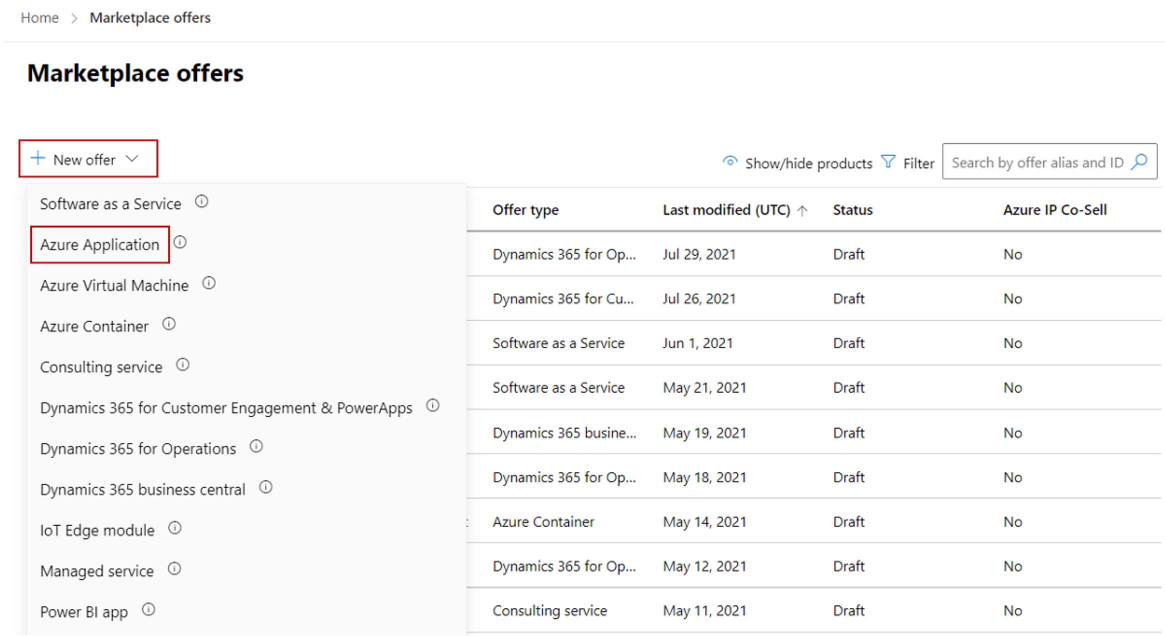
The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Azure Application**.



4. In the **New Azure Application** dialog box, enter an **Offer ID**. This is a unique identifier for each offer in your account. This ID is visible in the URL of the commercial marketplace listing and Azure Resource Manager templates, if applicable. For example, if you enter test-offer-1 in this box, the offer web address will be `https://azuremarketplace.microsoft.com/marketplace/../test-offer-1`.

   - Each offer in your account must have a unique offer ID.
   - Use only lowercase letters and numbers. It can include hyphens and underscores, but no spaces, and is limited to 50 characters.
   - The Offer ID can't be changed after you select **Create**.

5. Enter an **Offer alias**. This is the name used for the offer in Partner Center.

   - This name is only visible in Partner Center and it's different from the offer name and other values shown to customers.
   - The Offer alias can't be changed after you select **Create**.

6. To generate the offer and continue, select **Create**.

Configure your Azure application offer setup details

On the **Offer setup** tab, under **Setup details**, you'll choose whether to configure a test drive. You'll also connect your customer relationship management (CRM) system with your commercial marketplace offer.

Enable a test drive (optional)

A test drive is a great way to showcase your offer to potential customers by giving them access to a preconfigured environment for a fixed number of hours. Offering a test drive results in an increased conversion rate and generates highly qualified leads. To Learn more about test drives, see Test drive.

To enable a test drive

- Under **Test drive**, select the **Enable a test drive** check box.

Customer lead management

Connect your customer relationship management (CRM) system with your commercial marketplace offer so you can receive customer contact information when a customer expresses interest or deploys your product.

To configure the connection details in Partner Center

1. Under **Customer leads**, select the **Connect** link.

2. In the **Connection details** dialog box, select a lead destination from the list.

3. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint
   - Configure your offer to send leads to Marketo
   - Configure your offer to send leads to Salesforce
4. To validate the configuration you provided, select the **Validate** link, if applicable.
5. To close the dialog box, select **Connect**.
6. Select **Save draft** before continuing to the next tab: Properties.

> **NOTE**
>
> Make sure the connection to the lead destination stays up to date so you don't lose any leads. Make sure you update these connections whenever something has changed.

Next steps

- Configure Azure application properties

Configure Azure application offer properties

11/22/2021 • 3 minutes to read • Edit Online

This article describes how to configure the properties for an Azure Application offer in the commercial marketplace.

On the **Properties** page, you'll define the categories applicable to your offer, and legal contracts. Be sure to provide complete and accurate details about your offer on this page, so that it's displayed appropriately and offered to the right set of customers.

Select a category for your offer

Under **Categories**, select the **Categories** link and then choose at least one and up to two categories for grouping your offer into the appropriate commercial marketplace search areas. Select up to two subcategories for each primary and secondary category. If no subcategory is applicable to your offer, select **Not applicable**.

Provide terms and conditions

Under **Legal**, provide terms and conditions for your offer. You have two options:

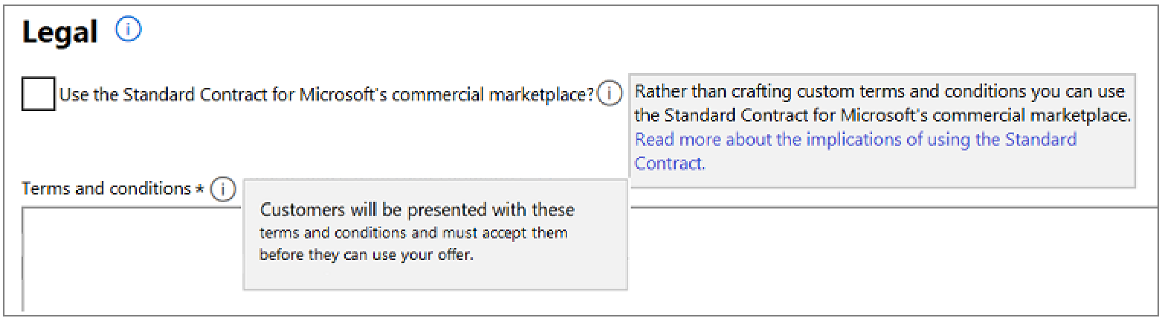
- Use the standard contract with optional amendments
- Use your own terms and conditions

To learn about the standard contract and optional amendments, see Standard Contract for the Microsoft commercial marketplace. You can download the Standard Contract PDF (make sure your pop-up blocker is off).

Use the standard contract

To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions.

1. Select the **Use the Standard Contract for Microsoft's commercial marketplace** checkbox.



2. In the **Confirmation** dialog box, select **Accept**. You may have to scroll up to see it.

3. Select **Save draft** before continuing.

> **NOTE**
>
> After you publish an offer using the Standard Contract for the commercial marketplace, you can't use your own custom terms and conditions. Either offer your solution under the standard contract with optional amendments or under your own terms and conditions.

Add amendments to the standard contract (optional)

There are two kinds of amendments available: *universal* and *custom*.

Add universal amendment terms

In the **Universal amendment terms to the standard contract for Microsoft's commercial marketplace** box, enter your universal amendment terms. You can enter an unlimited number of characters in this box. These terms are displayed to customers in AppSource, Azure Marketplace, and/or Azure portal during the discovery and purchase flow.

Add one or more custom amendments

1. Under **Custom amendments terms to the Standard Contract for Microsoft's commercial marketplace**, select the **Add custom amendment term (Max 10)** link.

2. In the **Custom amendment terms** box, enter your amendment terms.

3. In the **Tenant ID** box, enter a tenant ID. Only customers associated with the tenant IDs you specify for these custom terms will see them in the offer's purchase flow in the Azure portal.

   > **TIP**
   >
   > A tenant ID identifies your customer in Azure. You can ask your customer for this ID and they can find it by going to **https://portal.azure.com** > **Azure Active Directory** > **Properties**. The directory ID value is the tenant ID (for example, `50c464d3-4930-494c-963c-1e951d15360e`). You can also look up the organization's tenant ID of your customer by using their domain name URL at What is my Microsoft Azure and Office 365 tenant ID?.

4. In the **Description** box, optionally enter a friendly description for the tenant ID. This description helps you identify the customer you're targeting with the amendment.

5. To add another tenant ID, select the **Add a customer's tenant ID** link and repeat steps 3 and 4. You can add up to 20 tenant IDs.

6. To add another amendment term, repeat steps 1 through 5. You can provide up to ten custom amendment terms per offer.

7. Select **Save draft** before continuing.

Use your own terms and conditions

You can choose to provide your own terms and conditions, instead of the standard contract. Customers must accept these terms before they can try your offer.

1. Under **Legal**, make sure the **Use the Standard Contract for Microsoft's commercial marketplace** check box is cleared.
2. In the **Terms and conditions** box, enter up to 10,000 characters of text.
3. Select **Save draft** before continuing to the next tab: Offer listing.

Next steps

- Configure Azure application listing details

Configure your Azure application offer listing details

11/22/2021 • 4 minutes to read • Edit Online

The information you provide on the **Offer listing** page for your Azure Application offer will be displayed in the Microsoft commercial marketplace online stores. This includes the descriptions of your offer, screenshots, and your marketing assets. To see what this looks like, see Offer listing details.

> **NOTE**
>
> Offer listing content (such as the description, documents, screenshots, and terms of use) is not required to be in English if the offer description begins with the phrase, "This application is available only in [non-English language]." It is also acceptable to provide a *Useful Link* URL to offer content in a language other than the one used in the offer listing content.

Marketplace details

On the **Offer listing** page, under **Marketplace details**, complete the following steps. To learn more about these required details, see Offer listing details.

1. The **Name** box is prefilled with the name you entered earlier in the **New offer** dialog box. You can change the name at any time. The name you enter here will be shown to customers as the title of your offer listing.
2. In the **Search results summary** box, enter up to 100 characters of text. This summary is used in the marketplace listing search results.
3. In the **Short description** box, enter up to 256 characters of plain text. This summary will appear on your offer's details page.
4. In the **Description** box, enter a description for your offer. This text box has rich text editor controls that you can use to make your description more engaging. You can also use HTML tags to format your description. You can enter up to 3,000 characters of text in this box, which includes HTML markup and spaces. For information about HTML formatting, see HTML tags supported in the commercial marketplace offer descriptions.
5. (Optional) In the **Search keywords** boxes, enter up to three search keywords that customers can use to find your offer in the commercial marketplace. You don't need to include the offer **Name** and **Description** because that text is automatically included in search.
6. In the **Privacy policy link** box, enter a link (starting with https) to your organization's privacy policy. You're responsible to ensure your app complies with privacy laws and regulations, and for providing a valid privacy policy.

Add supplemental links (optional)

Complete these steps to add links to supplemental online documentation.

1. To add optional supplemental online documents about your app or related services, under **Useful links**, select **Add a link**.
2. In the fields that appear, enter a title (up to 255 characters) and the link (starting with `https://`) to the online document.
3. To enter another link, repeat steps 1 through 2.

Enter your contact information

Under **Contact information**, provide information for the following contacts:

- **Support contact** (required) – For general support questions.
- **Engineering contact** (required) – For technical questions. We will use this information to contact you when there are issues with your offer, including certification issues.
- **CSP Program contact** (optional) – For support and business issues. This information is only shown to CSP partners.

For each contact, you'll provide a name, phone number, and email address (these won't be displayed publicly). A Support URL is required for the Support Contact (this will be displayed publicly).

1. In the **Support contact** boxes, enter a name, email address, phone number, and the URL to your support page.

2. In the **Engineering contact** boxes, enter a name, email address, and phone number.

3. (Optional) In the **CSP Program Contact** boxes, enter a name, email address, and phone number.

4. To extend your offer to the Cloud Solution Provider (CSP) program, in the **CSP Program Marketing Materials** box, provide a link to your marketing materials.

   > **NOTE**
   >
   > The CSP program extends your offer to a broader range of qualified customers by enabling CSP partners to bundle, market, and resell your offer. These resellers will need access to materials for marketing your offer. For more information, see Go-to-market with Microsoft.

Add marketplace media

Store logos

Under **Logos**, upload a **Large** logo in PNG format between 216 x 216 and 350 x 350 pixels. Partner Center will automatically create **Small** (48 x 48) and **Medium** (90 x 90) logos, which you can replace later if you want.

All three logo sizes are used in different places in the online stores.

- The large logo appears on your offer listing page in Azure Marketplace.
- The medium logo appears when you create a new resource in Microsoft Azure.
- The small logo appears in Azure Marketplace search results.

Add screenshots (optional)

Add up to five screenshots that demonstrate your offer. All images must be 1280 x 720 pixels in size and in .PNG format.

1. Under **Screenshots**, drag and drop your .PNG file onto the **Screenshot** box.
2. Next to **Add image caption**, click the Edit icon.
3. In the dialog box that appears, enter a caption and click **OK**.
4. Repeat steps 1 through 3 to add additional screenshots.

Add videos (optional)

You can add links to YouTube or Vimeo videos that demonstrate your offer. These videos are shown to customers along with your offer. You must enter a thumbnail image of the video, sized to 1280 x 720 pixels in size and in .PNG format. You can add a maximum of four videos per offer.

1. Under **Videos**, select the **Add video** link.
2. In the boxes that appear, enter the name and link for your video.

3. Drag and drop a .PNG file (1280 x 720 pixels) onto the gray **Thumbnail** box.
4. To add another video, repeat steps 1 through 3.

> **TIP**
>
> If you have an issue uploading files, make sure your local network does not block the https://upload.xboxlive.com service used by Partner Center.

Select **Save draft** before continuing to the next tab: Preview audience.

Next steps

- Add a preview audience to this offer

Add a preview audience for an Azure Application offer

11/22/2021 • 2 minutes to read • Edit Online

This article describes how to configure a preview audience for an Azure Application offer in the commercial marketplace. You need to define a preview audience who can review your offer listing before it goes live.

Define a preview audience

On the **Preview audience** page, you can define a limited audience who can review your Azure Application offer before you publish it live to the broader marketplace audience. You define the preview audience using Azure subscription IDs, along with an optional description for each. Neither of these fields can be seen by customers. You can find your Azure subscription ID on the **Subscriptions** page in the Azure portal.

Add a minimum of one and up to 10 Azure subscription IDs, either individually (up to 10) or by uploading a CSV file (up to 100) to define who can preview your offer before it is published live. If your offer is already live, you may still define a preview audience for testing offer changes or updates to your offer.

> **NOTE**
> A preview audience differs from a private audience. A preview audience is allowed access to your offer before it's published live in the online stores. They can see and validate all plans, including those which will be available only to a private audience after your offer is fully published to the marketplace. You can make a plan available only to a private audience. A private audience (defined in a plan's **Availability** tab) has exclusive access to a particular plan.

Add subscription IDs manually

1. On the **Preview audience** page, add a single Azure Subscription ID and an optional description in the boxes provided.
2. To add another ID, select the **Add ID (Max 10)** link.
3. Select **Save draft** before continuing to the next tab: Technical configuration.
4. Go to Next steps.

Add subscription IDs with a CSV file

1. On the **Preview Audience** page, select the **Export Audience (csv)** link.
2. Open the .CSV file in a suitable application such as Microsoft Excel.
3. In the .CSV file, in the **ID** column, enter the Azure Subscription IDs you want to add to the preview audience.
4. In the **Description** column, you can optionally add a description for each email address.
5. For each Subscription ID you enter in column B, enter a **Type** in column A of "SubscriptionID".
6. Save as a .CSV file.
7. On the **Preview audience** page, select the **Import Audience (csv)** link.
8. In the **Confirm** dialog box, select **Yes**.
9. Select the .CSV file and then **Open**.
10. Select **Save draft** before continuing to the next tab: Technical configuration.

Next steps

- Add technical details to this offer

Add technical details for an Azure application offer

11/22/2021 • 2 minutes to read • Edit Online

This article describes how to enter technical details that help the Microsoft commercial marketplace connect to your solution. This connection enables us to provision your offer for the customer if they choose to acquire and manage it.

Complete this section only if your offer includes a managed application that will emit metering events using the Marketplace metered billing APIs and have a service which will be authenticating with an Azure AD security token. For more information, see Marketplace metering service authentication strategies on the different authentication options.

Technical configuration (offer-level)

The **Technical configuration** tab applies to you only if you will create a managed application that emits metering events using the Marketplace metered billing APIs. If so, then complete the following steps. Otherwise, go to Next steps.

For more information about these fields, see Plan an Azure Application offer for the commercial marketplace.

1. On the **Technical configuration** tab, provide the **Azure Active Directory tenant ID** and **Azure Active Directory application ID** used to validate the connection between our two services is behind an authenticated communication.
2. Select **Save draft** before continuing to the next tab: Plan overview.

Next steps

- Create plans for this offer

Create plans for an Azure application offer

11/22/2021 • 4 minutes to read • Edit Online

Offers sold through the Microsoft commercial marketplace must have at least one plan to list your offer in the commercial marketplace. You can create a variety of plans with different options within the same offer. These plans (sometimes referred to as SKUs) can differ in terms of plan type (*solution template* or *managed application*), monetization, or audience. For general guidance on plans, see Plans and pricing for commercial marketplace offers.

Create a plan

1. Near the top of the **Plan overview** tab, select **+ Create new plan**.
2. In the dialog box that appears, in the **Plan ID** box, enter a unique plan ID. This ID will be visible to customers in the product URL. Use up to 50 lowercase alphanumeric characters, dashes, or underscores. You cannot modify the plan ID after you select **Create**.
3. In the **Plan name** box, enter a unique name for this plan. Customers will see this name when deciding which plan to select within your offer. Use a maximum of 50 characters.
4. Select **Create**.

Define the plan setup

The **Plan setup** tab enables you to set the type of plan, whether it reuses the technical configuration from another plan, and what Azure regions the plan should be available in. Your answers on this tab will affect which fields are displayed on other tabs for this plan.

Select the plan type

- From the **Type of plan** list, select either **Solution template** or **Managed application**.

A **Solution template** plan is managed entirely by the customer. A **Managed application** plan enables publishers to manage the application on behalf of the customer. For details on these two plan types, see Types of plans.

To re-use a technical configuration

1. Select the **This plan reuses the technical configuration from another plan of the same type** check box.
2. In the list that appears, select the base plan you want.

> **NOTE**
> When you re-use packages from another plan, the entire **Technical configuration** tab disappears from this plan. The Technical configuration details from the other plan, including any updates that you make in the future, are used for this plan as well.

Select Azure regions (clouds)

Your plan must be made available in at least one Azure region. After your plan is published and available in a specific Azure region, you can't remove that region from your offer.

Azure Global region

The **Azure Global** check box is selected by default. This makes your plan available to customers in all Azure Global regions that have commercial marketplace integration. For Managed Application plans, you can select with markets you want to make your plan available.

To remove your offer from this region, clear the **Azure Global** check box.

Azure Government region

This region provides controlled access for customers from U.S. federal, state, local, or tribal entities, as well as partners eligible to serve them. You, as the publisher, are responsible for any compliance controls, security measures, and best practices. Azure Government uses physically isolated data centers and networks (located in the U.S. only).

Azure Government services handle data that is subject to certain government regulations and requirements. For example, FedRAMP, NIST 800.171 (DIB), ITAR, IRS 1075, DoD L4, and CJIS. To bring awareness to your certifications for these programs, you can provide up to 100 links that describe them. These can be either links to your listing on the program directly or links to descriptions of your compliance with them on your own websites. These links are visible to Azure Government customers only.

To select the Azure Government region

1. Select the **Azure Government** check box.
2. Under **Azure Government certifications**, select **+ Add certification (max 100)**.
3. In the boxes that appear, provide a name and link to a certification.
4. To add another certification, repeat steps 2 and 3.

Select **Save draft** before continuing to the next tab: Plan listing.

Define the plan listing

The **Plan listing** tab is where you configure listing details of the plan. This tab displays specific information that shows the difference between plans in the same offer. You can define the plan name, summary, and description as you want them to appear in the commercial marketplace.

1. In the **Plan name** box, the name you provided earlier for this plan appears here. You can change it at any time. This name will appear in the commercial marketplace as the title of your offer's software plan and is limited to 100 characters.
2. In the **Plan summary** box, provide a short summary of your plan (not the offer). This summary is limited to 100 characters.
3. In the **Plan description** box, explain what makes this software plan unique and any differences from other plans within your offer. Don't describe the offer, just the plan. This description may contain up to 2,000 characters.
4. Select **Save draft** before continuing.

Next steps

Do one of the following:

- Configure a solution template plan
- Configure a managed application plan

Configure a solution template plan

11/22/2021 • 4 minutes to read • Edit Online

This article applies only to solution template plans for an Azure application offer. If you are configuring a managed application plan, go to Configure a managed application plan.

Re-use technical configuration (optional)

If you've created more than one plan of the same type within this offer and the technical configuration is identical between them, you can reuse the technical configuration from another plan. This setting cannot be changed after this plan is published.

To re-use a technical configuration:

1. Select the **This plan reuses the technical configuration from another plan of the same type** check box.
2. In the list that appears, select the base plan you want.

> **NOTE**
> If a plan is currently reusing or has reused the technical configuration from another plan of the same type, go to that base plan to view history of previously published packages.

Choose who can see your plan

You can configure each plan to be visible to everyone or to only a specific audience. You grant access to a private audience using Azure subscription IDs with the option to include a description of each subscription ID you assign. You can add a maximum of 10 subscription IDs manually or up to 10,000 subscription IDs using a .CSV file. Azure subscription IDs are represented as GUIDs and letters must be lowercase.

> **NOTE**
> If you publish a private plan, you can change its visibility to public later. However, once you publish a public plan, you cannot change its visibility to private.

On the **Availability** tab, under **Plan visibility**, do one of the following:

- To make the plan public, select the **Public** option button (also known as a *radio button*).
- To make the plan private, select the **Private** option button and then add the Azure subscription IDs manually or with a CSV file.

  > **NOTE**
  > A private or restricted audience is different from the preview audience you defined on the **Preview** tab. A preview audience can access your offer before its published live in the marketplace. While the private audience choice only applies to a specific plan, the preview audience can view all plans (private or not) for validation purposes.

Manually add Azure subscription IDs for a private plan

1. Under **Plan visibility**, select the **Private** option button.

2. In the **Azure Subscription ID** box that appears, enter the Azure subscription ID of the audience you want to grant access to this private plan. A minimum of one subscription ID is required.
3. (Optional) Enter a description of this audience in the **Description** box.
4. To add another subscription ID, select the **Add ID (Max 10)** link and repeat steps 2 and 3.

Use a .CSV file to add Azure subscription IDs for a private plan

1. Under **Plan visibility**, select the **Private** option button.
2. Select the **Export Audience (csv)** link.
3. Open the .CSV file and add the Azure subscription IDs you want to grant access to the private offer to the **ID** column.
4. Optionally, enter a description for each audience in the **Description** column.
5. Add "SubscriptionId" in the **Type** column, for each row with a subscription ID.
6. Save the .CSV file.
7. On the **Availability** tab, under **Plan visibility**, select the **Import Audience (csv)** link.
8. In the dialog box that appears, select **Yes**.
9. Select the .CSV file and then select **Open**. A message appears indicating that the .CSV file was successfully imported.

Hide your plan

If your solution template is intended to be deployed only indirectly when referenced though another solution template or managed application, select the check box under **Hide plan** to publish your solution template but hide it from customers who search and browse for it directly.

Select **Save draft** before continuing to the next section: Define the technical configuration.

Define the technical configuration

On the **Technical configuration** tab, you'll upload the deployment package that lets customers deploy your plan and provide a version number for the package.

Assign a version number for the package

In the **Version** box provide the current version of the technical configuration. Increment this version each time you publish a change to this page. The version number must be in the format: integer.integer.integer. For example, `1.0.2`.

Upload a package file

Under **Package file (.zip)**, drag your package file to the gray box or select the **browse for your file(s)** link.

> **NOTE**
>
> If you have an issue uploading files, make sure your local network does not block the `https://upload.xboxlive.com` service used by Partner Center.

Previously published packages

After you publish your offer live, the **Previously published packages** sub-tab appears on the **Technical configuration** page. This tab lists all previously published versions of your technical configuration.

View your plans

- Select **Save draft**, and then in the upper left of the page, select **Plan overview** to return to the **Plan overview** page.

After you create one or more plans, you'll see your plan name, plan ID, plan type, availability (Public or Private), current publishing status, and any available actions on the **Plan overview** tab.

The actions that are available in the **Action** column of the **Plan overview** tab vary depending on the status of your plan, and may include the following:

- If the plan status is **Draft**, the link in the **Action** column will say **Delete draft**.
- If the plan status is **Live**, the link in the **Action** column will be either **Stop distribution** or **Sync private audience**. The **Sync private audience** link will publish only the changes to your private audiences, without publishing any other updates you might have made to the offer.
- To create another plan for this offer, at the top of the **Plan overview** tab, select **+ Create new plan**. Then repeat the steps in How to create plans for your Azure application offer. Otherwise, if you're done creating plans, go to the next section: Next steps.

Next steps

- Test and publish this offer
- Sell this offer through the **Co-sell with Microsoft** and/or **Resell through CSPs** programs

Configure a managed application plan

11/22/2021 • 10 minutes to read • Edit Online

This article applies only to managed application plans for an Azure application offer. If you're configuring a solution template plan, go to Configure a solution template plan.

Re-use technical configuration (optional)

If you've created more than one plan of the same type within this offer and the technical configuration is identical between them, you can reuse the technical configuration from another plan. This setting cannot be changed after this plan is published.

To re-use a technical configuration:

1. Select the **This plan reuses the technical configuration from another plan of the same type** check box.
2. In the list that appears, select the base plan you want.

> **NOTE**
> If a plan is currently reusing or has reused the technical configuration from another plan of the same type, go to that base plan to view history of previously published packages.

Define markets, pricing, and availability

Every plan must be available in at least one market. On the **Pricing and availability** tab, you can configure the markets this plan will be available in, the price, and whether to make the plan visible to everyone or only to specific customers (also called a private plan).

1. Under **Markets**, select the **Edit markets** link.
2. In the dialog box that appears, select the market locations where you want to make your plan available. You must select a minimum of one and maximum of 141 markets.

   > **NOTE**
   > This dialog box includes a search box and an option to filter on only "Tax Remitted" countries, in which Microsoft remits sales and use tax on your behalf.

3. Select **Save**, to close the dialog box.

Define pricing

In the **Price** box, provide the per-month price for this plan. This price is in addition to any Azure infrastructure or usage-based costs incurred by the resources deployed by this solution.

In addition to the per-month price, you can also set prices for consumption of non-standard units using metered billing. You may set the per-month price to zero and charge exclusively using metered billing if you like.

Prices are set in USD (USD = United States Dollar) are converted into the local currency of all selected markets using the current exchange rates when saved. Validate these prices before publishing by exporting the pricing spreadsheet and reviewing the price in each market. If you would like to set custom prices in an individual market, modify and import the pricing spreadsheet.

Add a custom meter dimension (optional)

1. Under **Marketplace Metering Service dimensions**, select the **Add a Custom Meter Dimension (Max 18)** link.
2. In the **ID** box, enter the immutable identifier reference while emitting usage events.
3. In the **Display Name** box, enter the display name associated with the dimension. For example, "text messages sent".
4. In the **Unit of Measure** box, enter the description of the billing unit. For example, "per text message" or "per 100 emails".
5. In the **Price per unit in USD** box, enter the price for one unit of the dimension.
6. In the **Monthly quantity included in base** box, enter the quantity (as an integer) of the dimension that's included each month for customers who pay the recurring monthly fee. To set an unlimited quantity, select the check box instead.
7. To add another custom meter dimension, repeat steps 1 through 7.

Set custom prices (optional)

Prices set in USD (USD = United States Dollar) are converted into the local currency of all selected markets using the current exchange rates when saved. Validate these prices before publishing by exporting the pricing spreadsheet and reviewing the price in each market. If you would like to set custom prices in an individual market, modify and import the pricing spreadsheet.

Review your prices carefully before publishing, as there are some restrictions on what can change after a plan is published.

> **NOTE**
> After a price for a market in your plan is published, it can't be changed later.

To set custom prices in an individual market, export, modify, and then import the pricing spreadsheet. You're responsible for validating this pricing and owning these settings. For detailed information, see Custom prices.

1. You must first save your pricing changes to enable export of pricing data. Near the bottom of the **Pricing and availability** tab, select **Save draft**.
2. Under **Pricing**, select the **Export pricing data** link.
3. Open the exportedPrice.xlsx file in Microsoft Excel.
4. In the spreadsheet, make the updates you want to your pricing information and then save the file.

   You may need to enable editing in Excel before you can update the file.
5. On the **Pricing and availability** tab, under **Pricing**, select the **Import pricing data** link.
6. In the dialog box that appears, click **Yes**.
7. Select the exportedPrice.xlsx file you updated, and then click **Open**.

Choose who can see your plan

You can configure each plan to be visible to everyone or to only a specific audience. You grant access to a private audience using Azure subscription IDs with the option to include a description of each subscription ID you assign. You can add a maximum of 10 subscription IDs manually or up to 10,000 subscription IDs using a .CSV file. Azure subscription IDs are represented as GUIDs and letters must be lowercase.

> **NOTE**
>
> If you publish a private plan, you can change its visibility to public later. However, once you publish a public plan, you cannot change its visibility to private.

Under **Plan visibility**, do one of the following:

- To make the plan public, select the **Public** option button (also known as a *radio button*).
- To make the plan private, select the **Private** option button and then add the Azure subscription IDs manually or with a CSV file.

> **NOTE**
>
> A private or restricted audience is different from the preview audience you defined on the **Preview** tab. A preview audience can access your offer before its published live in the marketplace. While the private audience choice only applies to a specific plan, the preview audience can view all plans (private or not) for validation purposes.

Manually add Azure subscription IDs for a private plan

1. Under **Plan visibility**, select the **Private** option button.
2. In the **Azure Subscription ID** box that appears, enter the Azure subscription ID of the audience you want to grant access to this private plan. A minimum of one subscription ID is required.
3. (Optional) Enter a description of this audience in the **Description** box.
4. To add another subscription ID, select the **Add ID (Max 10)** link and repeat steps 2 and 3.

Use a .CSV file to add Azure subscription IDs for a private plan

1. Under **Plan visibility**, select the **Private** option button.
2. Select the **Export Audience (csv)** link.
3. Open the .CSV file and add the Azure subscription IDs you want to grant access to the private offer to the **ID** column.
4. Optionally, enter a description for each audience in the **Description** column.
5. Add "SubscriptionId" in the **Type** column, for each row with a subscription ID.
6. Save the .CSV file.
7. On the **Availability** tab, under **Plan visibility**, select the **Import Audience (csv)** link.
8. In the dialog box that appears, select **Yes**.
9. Select the .CSV file and then select **Open**. A message appears indicating that the .CSV file was successfully imported.

Define the technical configuration

On the **Technical configuration** tab, you'll upload the deployment package that lets customers deploy your plan and provide a version number for the package. You'll also provide other technical information.

> **NOTE**
>
> This tab won't be visible if you chose to re-use packages from another plan on the **Plan setup** tab. If so, go to View your plans.

Assign a version number for the package

In the **Version** box provide the current version of the technical configuration. Increment this version each time you publish a change to this page. The version number must be in the format: integer.integer.integer. For example, `1.0.2`.

Upload a package file

Under **Package file (.zip)**, drag your package file to the gray box or select the **browse for your file(s)** link.

> **NOTE**
>
> If you have an issue uploading files, make sure your local network does not block the `https://upload.xboxlive.com` service used by Partner Center.

Previously published packages

The **Previously published packages** sub-tab enables you to view all published versions of your technical configuration.

Enable just-in-time (JIT) access (optional)

To enable JIT access for this plan, select the **Enable just-in-time (JIT) access** check box. To require that consumers of your managed application grant your account permanent access, leave this option unchecked. To learn more about this option, see Just in time (JIT) access.

Select a deployment mode

Select either the **Complete** or **Incremental** deployment mode.

- In **Complete** mode, a redeployment of the application by the customer will result in removal of resources in the managed resource group if the resources are not defined in the mainTemplate.json.
- In **Incremental** mode, a redeployment of the application leaves existing resources unchanged.

To learn more about deployment modes, see Azure Resource Manager deployment modes.

Provide a notification endpoint URL

In the **Notification Endpoint URL** box, provide an HTTPS Webhook endpoint to receive notifications about all CRUD operations on managed application instances of this plan version.

Azure appends `/resource` to the end of your webhook URI before calling it. So, your webhook URL must end in `/resource`, but don't include `/resource` in the URL you enter into the **Notification Endpoint URL** box. For more information about the webhook URL, see Plan a managed application.

Customize allowed customer actions (optional)

1. To specify which actions customers can perform on the managed resources in addition to the "`*/read`" actions that is available by default, select the **Customize allowed customer actions** box.
2. In the boxes that appear, provide the additional control actions and allowed data actions you want to enable your customer to perform, separated by semicolons. For example, to permit consumers to restart virtual machines, add `Microsoft.Compute/virtualMachines/restart/action` to the **Allowed control actions** box.

Choose who can manage the application

Indicate who should have management access to this managed application in each selected Azure region: *Global Azure* and *Azure Government Cloud*. You will use Azure AD identities to identify the users, groups, or applications that you want to grant permission to the managed resource group. For more information, see Plan an Azure managed application for an Azure Application offer.

Complete the following steps for Global Azure and Azure Government Cloud, as applicable.

1. In the **Azure Active Directory Tenant ID** box, enter the Azure AD Tenant ID (also known as directory ID) containing the identities of the users, groups, or applications you want to grant permissions to.
2. In the **Principal ID** box, provide the Azure AD object ID of the user, group, or application that you want to be granted permission to the managed resource group. Identify the user by their Principal ID, which can be

found at the Azure Active Directory users blade on the Azure portal.

3. From the **Role definition** list, select an Azure AD built-in role. The role you select describes the permissions the principal will have on the resources in the customer subscription.
4. To add another authorization, select the **Add authorization (max 100)** link, and repeat steps 1 through 3.

Policy settings (optional)

You can configure a maximum of five policies, and only one instance of each Policies option. Some policies require additional parameters.

1. Under **Policy settings**, select the **+ Add policy (max 5)** link.

2. In the **Name** box, enter the policy assignment name (limited to 50 characters).

3. From the **Policies** list box, select the Azure Policy definition that will be applied to resources created by the managed application in the customer subscription.

4. In the **Policy parameters** box, provide the parameter on which the auditing and diagnostic settings policies should be applied.

5. From the **Policy SKU** list box, select the policy SKU type.

> **NOTE**
>
> The *Standard policy* SKU is required for audit policies.

View your plans

- Select **Save draft**, and then in the upper left of the page, select **Plan overview** to return to the **Plan overview** page.

After you create one or more plans, you'll see your plan name, plan ID, plan type, availability (Public or Private), current publishing status, and any available actions on the **Plan overview** tab.

The actions that are available in the **Action** column of the **Plan overview** tab vary depending on the status of your plan, and may include the following:

- If the plan status is **Draft**, the link in the **Action** column will say **Delete draft**.
- If the plan status is **Live**, the link in the **Action** column will be either **Stop distribution** or **Sync private audience**. The **Sync private audience** link will publish only the changes to your private audiences, without publishing any other updates you might have made to the offer.
- To create another plan for this offer, at the top of the **Plan overview** tab, select **+ Create new plan**. Then repeat the steps in How to create plans for your Azure application offer. Otherwise, if you're done creating plans, go to the next section: Next steps.

Next steps

- Test and publish Azure application offer.
- Sell an Azure application offer through the **Co-sell with Microsoft** and/or **Resell through CSPs** programs.

Test and publish an Azure application offer

11/22/2021 • 4 minutes to read • Edit Online

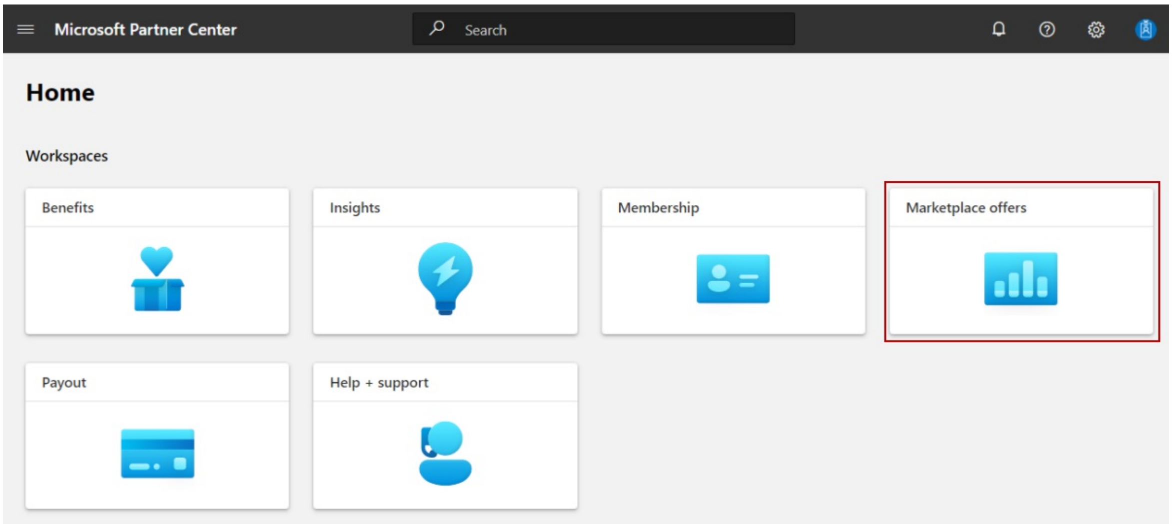
This article explains how to use Partner Center to submit your Azure Application offer for publishing, preview your offer, test it, and then publish it live to the commercial marketplace. You must have already created an offer that you want to publish.

Submit the offer for publishing

- Workspaces view
- Current view

1. Sign in to Partner Center.

2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select the offer you want to publish.

4. In the upper-right corner of the portal, select **Review and publish**.

5. Make sure that the **Status** column for each page says **Complete**. The three possible statuses are as follows:

   - **Not started** – The page is incomplete.
   - **Incomplete** – The page is missing required information or has errors that need to be fixed. You'll need to go back to the page and update it.
   - **Complete** – The page is complete. All required data has been provided and there are no errors.

6. If any of the pages have a status other than **Complete**, select the page name, correct the issue, save the page, and then select **Review and publish** again to return to this page.

7. After all the pages are complete, in the **Notes for certification** box, provide testing instructions to the certification team to ensure that your app is tested correctly. Provide any supplementary notes helpful for understanding your app.

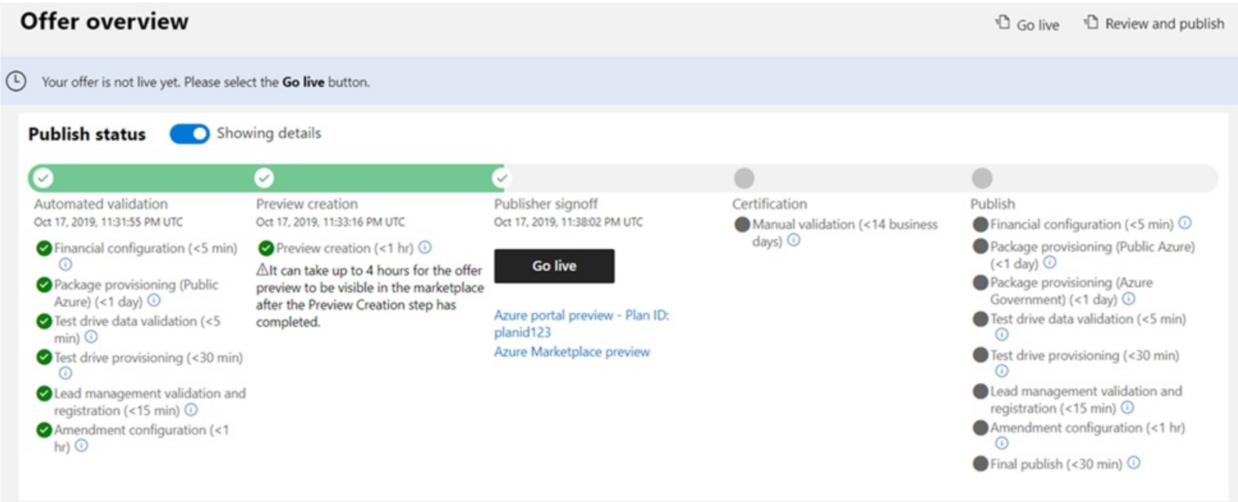
8. To start the publishing process for your offer, select **Publish**. The **Offer overview** page appears and shows the offer's **Publish status**.

Your offer's publish status will change as it moves through the publication process. For detailed information on this process, see Validation and publishing steps.

Preview and test the offer

When the offer is ready for your sign off, we'll send you an email to request that you review and approve your offer preview. You can also refresh the **Offer overview** page in your browser to see if your offer has reached the Publisher sign-off phase. If it has, the **Go live** button and preview link will be available. If you chose to sell your offer through Microsoft, anyone who has been added to the preview audience can test the acquisition and deployment of your offer to ensure it meets your requirements during this stage.

The following screenshot shows the **Offer overview** page for an offer, with two preview links under the **Go live** button. The validation steps you'll see on this page vary depending on the selections you made when you created the offer.



Use the following steps to preview your offer:

1. On the **Offer overview** page, select a preview link under the **Go live** button.
2. To validate the end-to-end purchase and setup flow, purchase your offer while it's in preview. First, notify Microsoft with a support ticket to ensure we don't process a charge.
3. If your Azure application supports metered billing using the commercial marketplace metering service, review and follow the testing best practices detailed in Marketplace metered billing APIs.
4. If you need to make changes after previewing and testing the offer, you can edit and resubmit to publish a new preview. For more information, see Update an existing offer in the commercial marketplace.

Publish your offer live

After completing all tests on your preview, select **Go live** to publish your offer live to the commercial marketplace.

> **TIP**
>
> If your offer is already live in the commercial marketplace, any updates you make won't go live until you select **Go live**.

Now that you've chosen to make your offer available in the commercial marketplace, we perform a series of final validation checks to ensure the live offer is configured just like the preview version of the offer. For details about these validation checks, see Publish phase.

After these validation checks are complete, your offer will be live in the marketplace.

Errors and review feedback

The **Manual validation** step in the publishing process represents an extensive review of your offer and its associated technical assets (especially the Azure Resource Manager template) issues are typically presented as pull request (PR) links. An explanation of how to view and respond to these PRs, see Handling review feedback.

If you have errors in one or more of the publishing steps, correct them before republishing your offer.

Next step

- Access analytic reports for the commercial marketplace
- Sell your Azure application offer through the **Co-sell with Microsoft** and **Resell through CSPs** programs.

Sell an Azure Application offer

11/22/2021 • 2 minutes to read • Edit Online

This article describes additional options you can choose if you're selling your Azure Application offer through Microsoft. You can co-sell your offer with Microsoft, resell it through the Cloud Solution Providers (CSP) program, or both.

Co-sell with Microsoft

Providing information on the **Co-sell with Microsoft** tab is entirely optional. But it's required to achieve *Co-sell Ready* and *IP Co-sell Ready* status. The Microsoft sales teams use this information to learn more about your solution when evaluating its fit for customer needs. The information you provide on this tab isn't available directly to customers.

For details and instructions to configure the **Co-sell with Microsoft** tab, see Co-sell option in the commercial marketplace.

Resell through CSPs

If you elect to make your offer available in the Cloud Solution Provider (CSP) program, CSPs can sell your product as part of a bundled solution to their customers. For more information about reselling your offer through the CSP program and step-by-step instructions to configure the **Resell through CSPs** tab, see Cloud Solution Provider program.

Next steps

- Test and publish an Azure application offer
- Active marketplace rewards

Managed application metered billing

11/22/2021 • 6 minutes to read • Edit Online

With the Marketplace metering service, you can create managed application plans for Azure Application offers that are charged according to non-standard units. Before publishing this offer, you define the billing dimensions such as bandwidth, tickets, or emails processed. Customers then pay according to their consumption of these dimensions. Your system will inform Microsoft via the Marketplace metering service API of billable events as they occur.

Prerequisites for metered billing

In order for a managed application plan to use metered billing, it must:

- Meet all of the offer requirements as outlined in Create an Azure application offer.
- Configure **Pricing** for charging customers the per-month cost for your service. Price can be zero if you don't want to charge a fixed fee and instead rely entirely on metered billing.
- Set **Billing dimensions** for the metering events the customer will pay for on top of the flat rate.
- Integrate with the Marketplace metering service APIs to inform Microsoft of billable events.

How metered billing fits in with pricing

When it comes to defining the offer along with its pricing models, it is important to understand the offer hierarchy.

- Each Azure Application offer can have Solution template or managed application plans.
- Metered billing is implemented only with managed application plans.
- Each managed application plan has a pricing model associated with it.
- Pricing model has a monthly recurring fee, which can be set to $0.
- In addition to the recurring fee, the plan can also include optional dimensions used to charge customers for usage not included in the flat rate. Each dimension represents a billable unit that your service will communicate to Microsoft using the Marketplace metering service API.

> **IMPORTANT**
>
> You must keep track of the usage in your code and only send usage events to Microsoft for the usage that is above the base fee.

Sample offer

As an example, Contoso is a publisher with a managed application service called Contoso Analytics (CoA). CoA allows customers to analyze large amount of data for reporting and data warehousing. Contoso is registered as a publisher in Partner Center for the commercial marketplace program to publish offers to Azure customers. There are two plans associated with CoA, outlined below:

- Base plan
  - Analyze 100 GB and generate 100 reports for $0/month
  - Beyond the 100 GB, pay $10 for every 1 GB

  - Beyond the 100 reports, pay $1 for every report
- Premium plan
  - Analyze 1000 GB and generate 1000 reports for $350/month
  - Beyond the 1000 GB, pay $100 for every 1 TB
  - Beyond the 1000 reports, pay $0.5 for every report

An Azure customer subscribing to CoA service can analyze and generate reports per month based on the plan selected. Contoso measures the usage up to the included quantity without sending any usage events to Microsoft. When customers consume more than the included quantity, they do not have to change plans or do anything different. Contoso will measure the overage beyond the included quantity and start emitting usage events to Microsoft for additional usage using the Marketplace metering service API. Microsoft in turn will charge the customer for the additional usage as specified by the publisher.

Billing dimensions

Billing dimensions are used to communicate to the customer on how they will be billed for using the software. These dimensions are also used to communicate usage events to Microsoft. They are defined as follows:

- **Dimension identifier**: the immutable identifier referenced while emitting usage events.
- **Dimension name**: the display name associated with the dimension, for example "text messages sent".
- **Unit of measure**: the description of the billing unit, for example "per text message" or "per 100 emails".
- **Price per unit**: the price for one unit of the dimension.
- **Included quantity for monthly term**: quantity of dimension included per month for customers paying the recurring monthly fee, must be an integer.

Billing dimensions are shared across all plans for an offer. Some attributes apply to the dimension across all plans, and other attributes are plan-specific.

The attributes, which define the dimension itself, are shared across all plans for an offer. Before you publish the offer, a change made to these attributes from the context of any plan will affect the dimension definition across all plans. Once you publish the offer, these attributes will no longer be editable. The attributes are:

- Identifier
- Name
- Unit of measure

The other attributes of a dimension are specific to each plan and can have different values from plan to plan. Before you publish the plan, you can edit these values and only this plan will be affected. Once you publish the plan, these attributes will no longer be editable. The attributes are:

- Price per unit
- Included quantity for monthly customers
- Included quantity for annual customers

Dimensions also have two special concepts, "enabled" and "infinite":

- **Enabled** indicates that this plan participates in this dimension. You might want to leave this option un-checked if you are creating a new plan that does not send usage events based on this dimension. Also, any new dimensions added after a plan was first published will show up as "not enabled" on the already published plan. A disabled dimension will not show up in any lists of dimensions for a plan seen by customers.
- **Infinite**, represented by the infinity symbol "°", indicates that this plan participates in this dimension, without metered usage against this dimension. If you want to indicate to your customers that the functionality represented by this dimension is included in the plan, but with no limit on usage. A dimension with infinite

usage will show up in lists of dimensions for a plan seen by customers. This plan will never incur a charge.

> **NOTE**
>
> The following scenarios are explicitly supported:
> - You can add a new dimension to a new plan. The new dimension will not be enabled for any already published plans.
> - You can publish a plan with a fixed monthly fee and without any dimensions, then add a new plan and configure a new dimension for that plan. The new dimension will not be enabled for already published plans.

Constraints

Locking behavior

A dimension used with the Marketplace metering service represents an understanding of how a customer will be paying for the service. All details of a dimension are no longer editable once an offer is published. Before publishing your offer, it's important that you have your dimensions fully defined.

Once an offer is published with a dimension, the offer-level details for that dimension can no longer be changed:

- Identifier
- Name
- Unit of measure

Once a plan is published, the plan-level details can no longer be changed:

- Price per unit
- Included quantity for monthly term
- Whether the dimension is enabled for the plan

> **NOTE**
>
> Metered billing using the marketplace metering service is not yet supported on the Azure Government Cloud.

Upper limits

The maximum number of dimensions that can be configured for a single offer is 30 unique dimensions.

Get support

If you have one of the following issues, you can open a support ticket.

- Technical issues with marketplace metering service API.
- An issue that needs to be escalated because of an error or bug on your side (ex. wrong usage event).
- Any other issues related to metered billing.

Follow the instruction in Support for the commercial marketplace program in Partner Center to understand publisher support options and open support ticket with Microsoft.

Next steps

- See Marketplace metering service APIs for more information.

Marketplace metered billing APIs

11/22/2021 • 9 minutes to read • Edit Online

The metered billing APIs should be used when the publisher creates custom metering dimensions for an offer to be published in Partner Center. Integration with the metered billing APIs is required for any purchased offer that has one or more plans with custom dimensions to emit usage events.

> **IMPORTANT**
>
> You must keep track of the usage in your code and only send usage events to Microsoft for the usage that is above the base fee.

For more information on creating custom metering dimensions for SaaS, see SaaS metered billing.

For more information on creating custom metering dimensions for an Azure Application offer with a Managed app plan, see Configure your Azure application offer setup details.

Enforcing TLS 1.2 Note

TLS version 1.2 version is enforced as the minimal version for HTTPS communications. Make sure you use this TLS version in your code. TLS version 1.0 and 1.1 are deprecated and connection attempts will be refused.

Metered billing single usage event

The usage event API should be called by the publisher to emit usage events against an active resource (subscribed) for the plan purchased by the specific customer. The usage event is emitted separately for each custom dimension of the plan defined by the publisher when publishing the offer.

Only one usage event can be emitted for each hour of a calendar day. For example, at 8:15am today, you can emit one usage event. If this event is accepted, the next usage event will be accepted from 9:00 am today. If you send an additional event between 8:15 and 8:59:59 today, it will be rejected as a duplicate. You should accumulate all units consumed in an hour and then emit it in a single event.

Only one usage event can be emitted for each hour of a calendar day per resource. If more than one unit is consumed in an hour, then accumulate all the units consumed in the hour and then emit it in a single event. Usage events can only be emitted for the past 24 hours. If you emit a usage event at any time between 8:00 and 8:59:59 (and it is accepted) and send an additional event for the same day between 8:00 and 8:59:59, it will be rejected as a duplicate.

POST: `https://marketplaceapi.microsoft.com/api/usageEvent?api-version=<ApiVersion>`

Query parameters:

PARAMETER	RECOMMENDATION
`ApiVersion`	Use 2018-08-31.

Request headers:

CONTENT-TYPE	USE `APPLICATION/JSON`
`x-ms-requestid`	Unique string value for tracking the request from the client, preferably a GUID. If this value is not provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	Unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the ISV that is making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained for • SaaS in Get the token with an HTTP POST. • Managed application in Authentication strategies.

Request body example:

```
{
  "resourceId": <guid>, // unique identifier of the resource against which usage is emitted.
  "quantity": 5.0, // how many units were consumed for the date and hour specified in effectiveStartTime,
must be greater than 0, can be integer or float value
  "dimension": "dim1", // custom dimension identifier
  "effectiveStartTime": "2018-12-01T08:30:14", // time in UTC when the usage event occurred, from now and
until 24 hours back
  "planId": "plan1", // id of the plan purchased for the offer
}
```

> **NOTE**
> `resourceId` has different meaning for SaaS app and for Managed app emitting custom meter.

For Azure Application Managed Apps plans, the `resourceId` is the Managed App `resource group Id`. An example script for fetching it can be found in using the Azure-managed identities token.

For SaaS offers, the `resourceId` is the SaaS subscription ID. For more details on SaaS subscriptions, see list subscriptions.

Responses

Code: 200
OK. The usage emission was accepted and recorded on Microsoft side for further processing and billing.

Response payload example:

```
{
  "usageEventId": <guid>, // unique identifier associated with the usage event in Microsoft records
  "status": "Accepted" // this is the only value in case of single usage event
  "messageTime": "2020-01-12T13:19:35.3458658Z", // time in UTC this event was accepted
  "resourceId": <guid>, // unique identifier of the resource against which usage is emitted. For SaaS it's
the subscriptionId.
  "quantity": 5.0, // amount of emitted units as recorded by Microsoft
  "dimension": "dim1", // custom dimension identifier
  "effectiveStartTime": "2018-12-01T08:30:14", // time in UTC when the usage event occurred, as sent by the
ISV
  "planId": "plan1", // id of the plan purchased for the offer
}
```

Code: 400
Bad request.

- Missing or invalid request data provided.
- `effectiveStartTime` is more than 24 hours in the past. Event has expired.
- SaaS subscription is not in Subscribed status.

Response payload example:

```
{
  "message": "One or more errors have occurred.",
  "target": "usageEventRequest",
  "details": [
    {
      "message": "The resourceId is required.",
      "target": "ResourceId",
      "code": "BadArgument"
    }
  ],
  "code": "BadArgument"
}
```

Code: 403

Forbidden. The authorization token isn't provided, is invalid or expired. Or the request is attempting to access a subscription for an offer that was published with a different Azure AD App ID from the one used to create the authorization token.

Code: 409
Conflict. A usage event has already been successfully reported for the specified resource ID, effective usage date and hour.

Response payload example:

```
{
  "additionalInfo": {
    "acceptedMessage": {
      "usageEventId": "<guid>", //unique identifier associated with the usage event in Microsoft records
      "status": "Duplicate",
      "messageTime": "2020-01-12T13:19:35.3458658Z",
      "resourceId": "<guid>", //unique identifier of the resource against which usage is emitted.
      "quantity": 1.0,
      "dimension": "dim1",
      "effectiveStartTime": "2020-01-12T11:03:28.14Z",
      "planId": "plan1"
    }
  },
  "message": "This usage event already exist.",
  "code": "Conflict"
}
```

Metered billing batch usage event

The batch usage event API allows you to emit usage events for more than one purchased resource at once. It also allows you to emit several usage events for the same resource as long as they are for different calendar hours. The maximal number of events in a single batch is 25.

POST: `https://marketplaceapi.microsoft.com/api/batchUsageEvent?api-version=<ApiVersion>`

Query parameters:

PARAMETER	RECOMMENDATION
`ApiVersion`	Use 2018-08-31.

Request headers:

CONTENT-TYPE	USE `APPLICATION/JSON`
`x-ms-requestid`	Unique string value for tracking the request from the client, preferably a GUID. If this value is not provided, one will be generated, and provided in the response headers.
`x-ms-correlationid`	Unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated, and provided in the response headers.
`authorization`	A unique access token that identifies the ISV that is making this API call. The format is `Bearer <access_token>` when the token value is retrieved by the publisher as explained for • SaaS in Get the token with an HTTP POST. • Managed application in Authentication strategies.

> **NOTE**
> In the request body, the resource identifier has different meanings for SaaS app and for Azure Managed app emitting custom meter. The resource identifier for SaaS App is `resourceID`. The resource identifier for Azure Application Managed Apps plans is `resourceUri`.

For SaaS offers, the `resourceId` is the SaaS subscription ID. For more details on SaaS subscriptions, see list subscriptions.

Request body example for SaaS apps:

```
{
  "request": [ // list of usage events for the same or different resources of the publisher
    { // first event
      "resourceId": "<guid1>", // Unique identifier of the resource against which usage is emitted.
      "quantity": 5.0, // how many units were consumed for the date and hour specified in
effectiveStartTime, must be greater than 0, can be integer or float value
      "dimension": "dim1", //Custom dimension identifier
      "effectiveStartTime": "2018-12-01T08:30:14",//Time in UTC when the usage event occurred, from now and
until 24 hours back
      "planId": "plan1", // id of the plan purchased for the offer
    },
    { // next event
      "resourceId": "<guid2>",
      "quantity": 39.0,
      "dimension": "email",
      "effectiveStartTime": "2018-11-01T23:33:10
      "planId": "gold", // id of the plan purchased for the offer
    }
  ]
}
```

For Azure Application Managed Apps plans, the `resourceUri` is the Managed App `resource group Id`. An example script for fetching it can be found in using the Azure-managed identities token.

Request body example for Azure Application managed apps:

```
{
  "request": [ // list of usage events for the same or different resources of the publisher
    { // first event
      "resourceUri": "<guid1>", // Unique identifier of the resource against which usage is emitted.
      "quantity": 5.0, // how many units were consumed for the date and hour specified in
effectiveStartTime, must be greater than 0, can be integer or float value
      "dimension": "dim1", //Custom dimension identifier
      "effectiveStartTime": "2018-12-01T08:30:14",//Time in UTC when the usage event occurred, from now and
until 24 hours back
      "planId": "plan1", // id of the plan purchased for the offer
    },
    { // next event
      "resourceId": "<guid2>",
      "quantity": 39.0,
      "dimension": "email",
      "effectiveStartTime": "2018-11-01T23:33:10
      "planId": "gold", // id of the plan purchased for the offer
    }
  ]
}
```

Responses

Code: 200
OK. The batch usage emission was accepted and recorded on Microsoft side for further processing and billing. The response list is returned with status for each individual event in the batch. You should iterate through the response payload to understand the responses for each individual usage event sent as part of the batch event.

Response payload example:

```
{
  "count": 2, // number of records in the response
  "result": [
    { // first response
      "usageEventId": "<guid>", // unique identifier associated with the usage event in Microsoft records
      "status": "Accepted" // see list of possible statuses below,
      "messageTime": "2020-01-12T13:19:35.3458658Z", // Time in UTC this event was accepted by Microsoft,
      "resourceId": "<guid1>", // unique identifier of the resource against which usage is emitted.
      "quantity": 5.0, // amount of emitted units as recorded by Microsoft
      "dimension": "dim1", // custom dimension identifier
      "effectiveStartTime": "2018-12-01T08:30:14",// time in UTC when the usage event occurred, as sent by
the ISV
      "planId": "plan1", // id of the plan purchased for the offer
    },
    { // second response
      "status": "Duplicate",
      "messageTime": "0001-01-01T00:00:00",
      "error": {
        "additionalInfo": {
          "acceptedMessage": {
            "usageEventId": "<guid>",
            "status": "Duplicate",
            "messageTime": "2020-01-12T13:19:35.3458658Z",
            "resourceId": "<guid2>",
            "quantity": 1.0,
            "dimension": "email",
            "effectiveStartTime": "2020-01-12T11:03:28.14Z",
            "planId": "gold"
          }
        },
        "message": "This usage event already exist.",
        "code": "Conflict"
      },
      "resourceId": "<guid2>",
      "quantity": 1.0,
      "dimension": "email",
      "effectiveStartTime": "2020-01-12T11:03:28.14Z",
      "planId": "gold"
    }
  ]
}
```

Description of status code referenced in `BatchUsageEvent` API response:

STATUS CODE	DESCRIPTION
`Accepted`	Accepted.
`Expired`	Expired usage.
`Duplicate`	Duplicate usage provided.
`Error`	Error code.
`ResourceNotFound`	The usage resource provided is invalid.
`ResourceNotAuthorized`	You are not authorized to provide usage for this resource.
`ResourceNotActive`	The resource is suspended or was never activated.

STATUS CODE	DESCRIPTION
`InvalidDimension`	The dimension for which the usage is passed is invalid for this offer/plan.
`InvalidQuantity`	The quantity passed is lower or equal to 0.
`BadArgument`	The input is missing or malformed.

Code: 400
Bad request. The batch contained more than 25 usage events.

Code: 403
Forbidden. The authorization token isn't provided, is invalid or expired. Or the request is attempting to access a subscription for an offer that was published with a different Azure AD App ID from the one used to create the authorization token.

Development and testing best practices

To test the custom meter emission, implement the integration with metering API, create a plan for your published SaaS offer with custom dimensions defined in it with zero price per unit. And publish this offer as preview so only limited users would be able to access and test the integration.

You can also use private plan for an existing live offer to limit the access to this plan during testing to limited audience.

Get support

Follow the instruction in Support for the commercial marketplace program in Partner Center to understand publisher support options and open a support ticket with Microsoft.

Next steps

For more information on metering service APIs , see Marketplace metering service APIs FAQ.

Configure prices for usage-based monthly billing

11/22/2021 • 2 minutes to read • Edit Online

The Usage-based monthly billing plan will charge the customer for their hourly use and is billed monthly. This is our "Pay as you go" plan, where customers are only billed for the hours that they've used. When you select this plan, choose one of the following pricing options:

- **Free** – Your VM offer is free.
- **Flat rate (recommended)** – Your VM offer is the same price regardless of the hardware it runs on.
- **Per core** – Your VM offer pricing is per CPU core count (you give us the price for one CPU core and we'll increment the pricing based on the size of the hardware).
- **Per core size** – Assign prices based on the number of CPU cores on the hardware it's deployed on.
- **Per market and core size** – Assign prices based on the number of CPU cores on the hardware it's deployed on and also for all markets (currency conversion is done by you the publisher, this option is easier if you use the import pricing feature).

Some things to consider when selecting a pricing option:

- In the first four options, Microsoft does the currency conversion.
- Microsoft suggests using a flat rate pricing for software solutions.
- Prices are fixed, so once published they cannot be adjusted. However, if you would like to reduce prices for your VM offers you can open a support ticket.

New offering pricing

Microsoft Azure is regularly adding new VM infrastructure. Occasionally we add a machine that has a CPU count that wasn't offered before. Microsoft determines the price for the new core size based on previous pricing and adds them as suggested prices.

Publishers receive an email when the price is set for new core sizes and will have some time to review and make adjustments as needed. After the deadline passes microsoft publishes the prices for the newly added core sizes.

If the publisher chose Free, Flat or Per core size, then the publisher has already provided the necessary details on how to price the offer for new core sizes and no further action is needed. However, if the publisher previously selected the Per core size, or Per market and core size, then they would need to contact Microsoft with their updated pricing information.

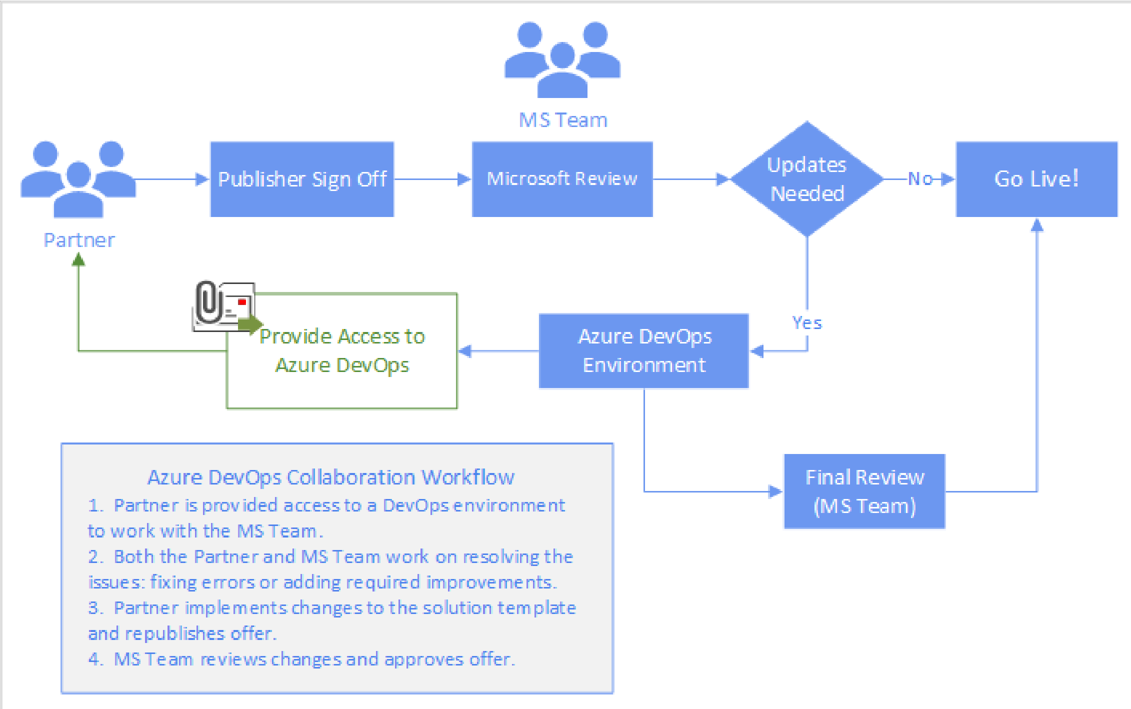
Next steps

- If you have any questions, open a ticket with support.

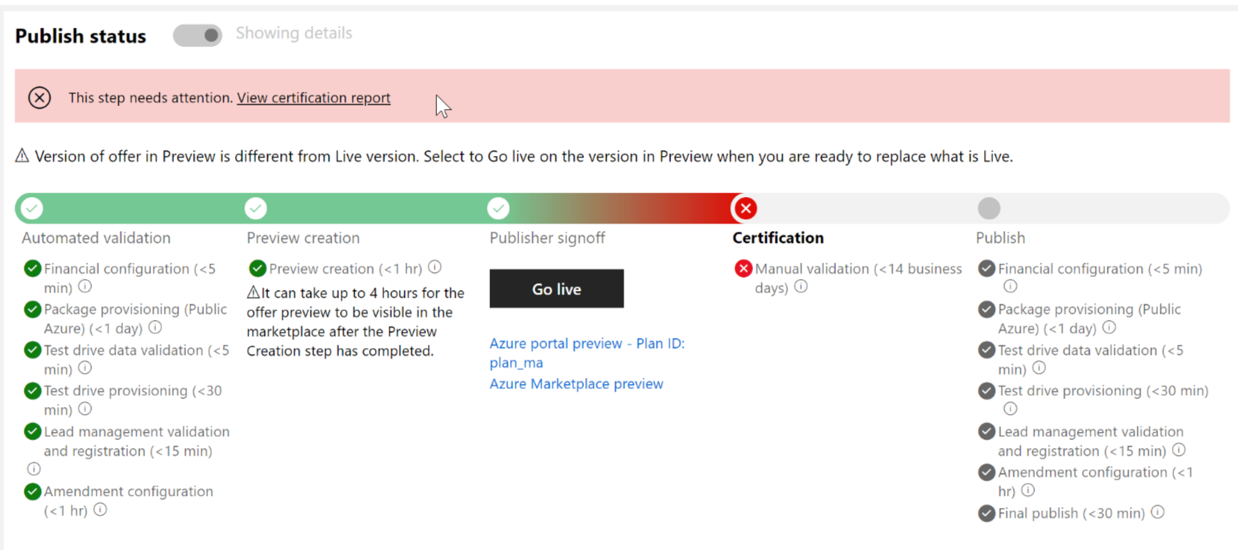
Handle review feedback for Azure application offers

11/22/2021 • 2 minutes to read • Edit Online

This article explains how to access feedback from the Microsoft Azure Marketplace review team in Azure DevOps. If critical issues are found in your Azure application offer during the **Microsoft review** step, you can sign into this system to view detailed information about these issues (review feedback). After you fix all issues, you must resubmit your offer to continue to publish it on Azure Marketplace. The following diagram illustrates how this feedback process relates to the publishing process.



Typically, review issues are referenced as a pull request (PR). Each PR is linked to an online Azure DevOps item, which contains details about the issue. The following image displays an example of the Partner Center experience if issues are found during reviews.



The PR that contains specific details about the submission will be mentioned in the “View Certification Report” link. For complex situations, the review and support teams may also email you.

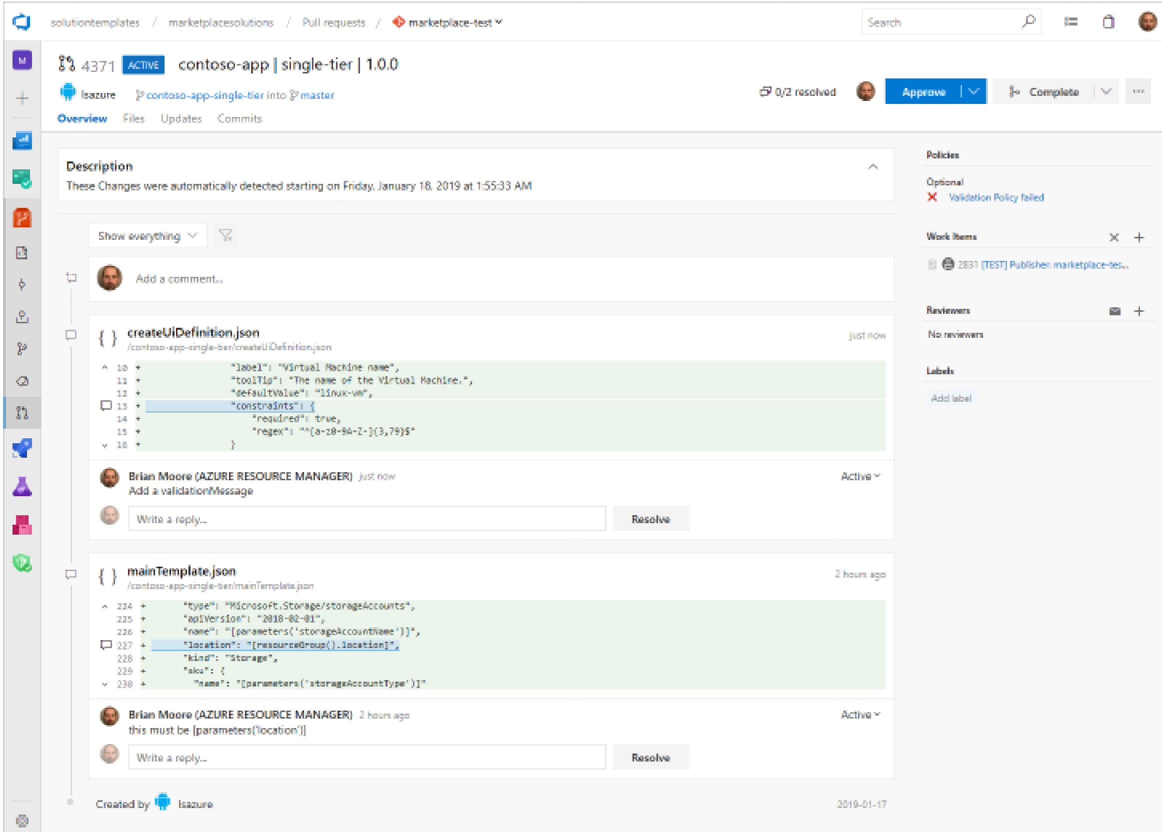
Azure DevOps access

All users with access to the “developer” role in Partner Center will have access to view the PR items referenced in review feedback.

Reviewing the pull request

Use the following procedure to review issues documented in the pull request.

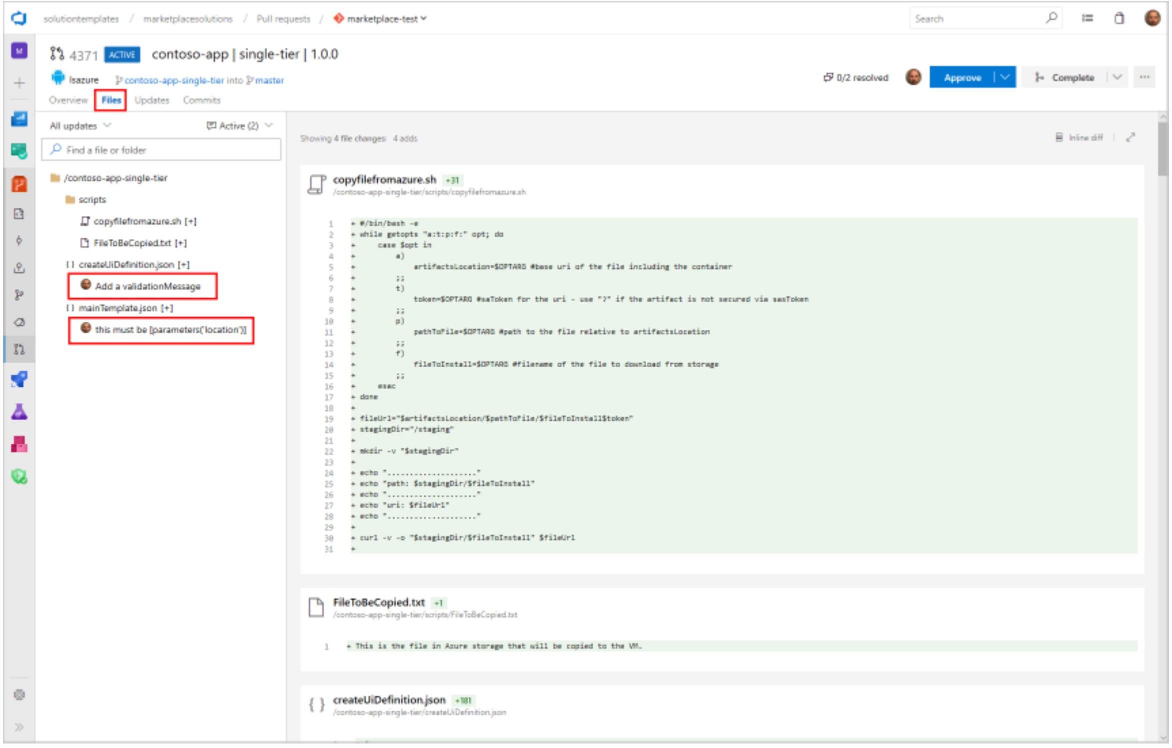
1. In the **Microsoft review** sections of Publishing steps form, select a PR link to launch your browser and navigate to the **Overview** (home) page for this PR. The following image depicts an example of the critical issue home page for the Contoso sample app offer. This page contains useful summary information about the review issues found in the Azure app.

   Click on this image to expand.

2. (Optional) On the right side of the window, in the section **Policies**, select the issue message (in this example: **Policy Validation failed**) to investigate the low-level details of the issue, including the associated log files. Errors are typically displayed at the bottom of the log files.

3. In the menu on the left-side of the home page, select **Files** to display the list files that comprise the technical assets for this offer. The Microsoft reviewers should have added comments describing the discovered critical issues. In the following example, two issues have been discovered.

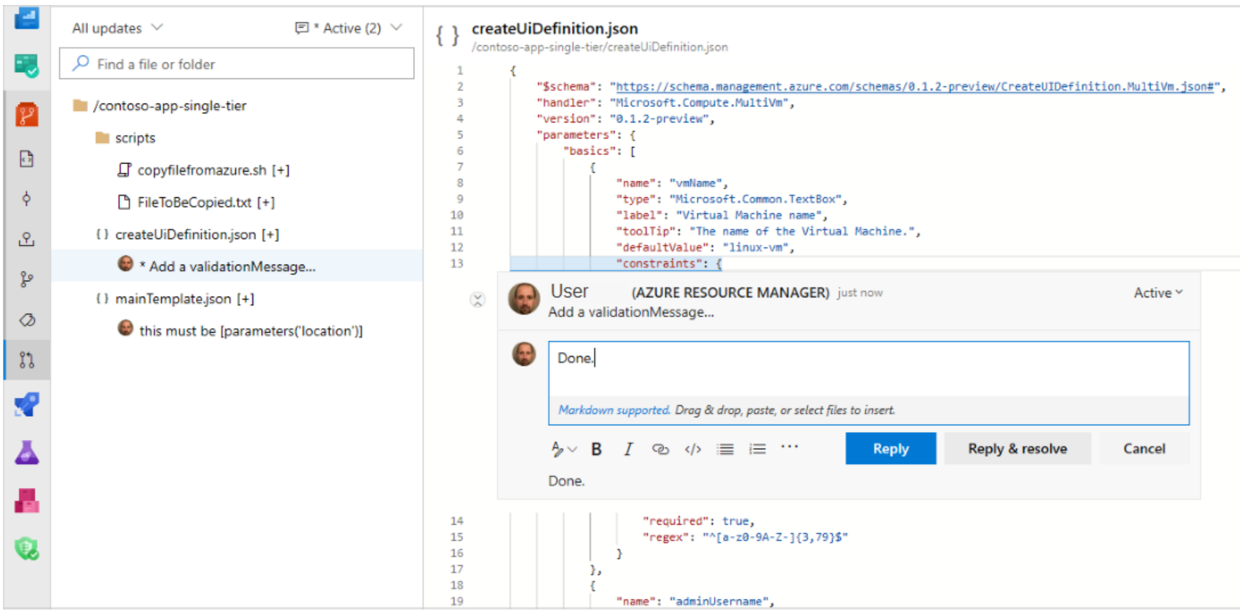


Click on this image to expand.

4. Select each comment node in the left tree to navigate to the comment in context of the surrounding code. Fix your source code in your team's project to correct the issue described by the comment.

> **NOTE**
>
> You cannot edit your offer's technical assets within the review team's Azure DevOps environment. For publishers, this is a read-only environment for the contained source code. However, you can leave replies to the comments for the benefit of the Microsoft review team.

In the following example, the publisher has reviewed, corrected, and replied to the first issue.



Next steps

- After you correct the critical issues documented in the review PR(s), you must republish your Azure app offer.

Partner Center submission API to onboard Azure apps in Partner Center

11/22/2021 • 3 minutes to read • Edit Online

Use the *Partner Center submission API* to programmatically query, create submissions for, and publish Azure offers. This API is useful if your account manages many offers and you want to automate and optimize the submission process for these offers.

API prerequisites

There are a few programmatic assets that you need in order to use the Partner Center API for Azure Products:

- an Azure Active Directory application.
- an Azure Active Directory (Azure AD) access token.

Step 1: Complete prerequisites for using the Partner Center submission API

Before you start writing code to call the Partner Center submission API, make sure that you have completed the following prerequisites.

- You (or your organization) must have an Azure AD directory and you must have Global administrator permission for the directory. If you already use Microsoft 365 or other business services from Microsoft, you already have Azure AD directory. Otherwise, you can create a new Azure AD in Partner Center at no additional charge.

- You must associate an Azure AD application with your Partner Center account and obtain your tenant ID, client ID and key. You need these values to obtain an Azure AD access token, which you will use in calls to the Microsoft Store submission API.

How to associate an Azure AD application with your Partner Center account

To use the Microsoft Store submission API, you must associate an Azure AD application with your Partner Center account, retrieve the tenant ID and client ID for the application, and generate a key. The Azure AD application represents the app or service from which you want to call the Partner Center submission API. You need the tenant ID, client ID and key to obtain an Azure AD access token that you pass to the API.

> **NOTE**
>
> You only need to perform this task once. After you have the tenant ID, client ID and key, you can reuse them any time you need to create a new Azure AD access token.

1. In Partner Center, associate your organization's Partner Center account with your organization's Azure AD directory.
2. Next, from the **Users** page in the **Account settings** section of Partner Center, add the Azure AD application that represents the app or service that you will use to access submissions for your Partner Center account. Make sure you assign this application the **Manager** role. If the application doesn't exist yet in your Azure AD directory, you can create a new Azure AD application in Partner Center.
3. Return to the **Users** page, click the name of your Azure AD application to go to the application settings, and copy down the **Tenant ID** and **Client ID** values.
4. Click **Add new key**. On the following screen, copy down the **Key** value. You won't be able to access this info again after you leave this page. For more information, see Manage keys for an Azure AD application.

Step 2: Obtain an Azure AD access token

Before you call any of the methods in the Partner Center submission API, you must first obtain an Azure AD access token that you pass to the **Authorization** header of each method in the API. After you obtain an access token, you have 60 minutes to use it before it expires. After the token expires, you can refresh the token so you can continue to use it in future calls to the API.

To obtain the access token, follow the instructions in Service to Service Calls Using Client Credentials to send an `HTTP POST` to the `https://login.microsoftonline.com/<tenant_id>/oauth2/token` endpoint. Here is a sample request:

JSONCopy

```
POST https://login.microsoftonline.com/<tenant_id>/oauth2/token HTTP/1.1
Host: login.microsoftonline.com
Content-Type: application/x-www-form-urlencoded; charset=utf-8

grant_type=client_credentials
&client_id=<your_client_id>
&client_secret=<your_client_secret>
&resource= https://api.partner.microsoft.com
```

For the *tenant_id* value in the `POST URI` and the *client_id* and *client_secret* parameters, specify the tenant ID, client ID and the key for your application that you retrieved from Partner Center in the previous section. For the *resource* parameter, you must specify `https://api.partner.microsoft.com`.

Step 3: Use the Microsoft Store submission API

After you have an Azure AD access token, you can call methods in the Partner Center submission API. To create or update submissions, you typically call multiple methods in the Partner Center submission API in a specific order. For information about each scenario and the syntax of each method, see the Ingestion API swagger.

https://apidocs.microsoft.com/services/partneringestion/

Next steps

- Create an Azure Container technical asset
- Create an Azure Container offer

Plan an Azure container offer

11/22/2021 • 6 minutes to read • Edit Online

Azure container offers help you publish your container image to Azure Marketplace. Use this guide to understand the requirements for this offer type.

Azure container offers are transaction offers that are deployed and billed through Azure Marketplace. The listing option a user sees is **Get It Now**.

Use the Azure Container offer type when your solution is a Docker container image that's set up as a Kubernetes-based Azure Container instance.

> **NOTE**
> An Azure Container instance is a run-time docker instance that provides the fastest and simplest way to run a container in Azure, without having to manage any virtual machines or adopt a higher-level service. Container instances can be deployed directly to Azure or orchestrated by Azure Kubernetes Services or Azure Kubernetes Service Engine.

Licensing options

These are the available licensing options for Azure Container offers:

LICENSING OPTION	TRANSACTION PROCESS
Free	List your offer to customers for free.
BYOL	The Bring Your Own Licensing option lets your customers bring existing software licenses to Azure.*

* As the publisher, you support all aspects of the software license transaction, including (but not limited to) order, fulfillment, metering, billing, invoicing, payment, and collection.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, you'll want to connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive; otherwise, connecting to a CRM is optional. Partner Center supports Azure table, Dynamics 365 Customer Engagement, HTTPS endpoint, Marketo, and Salesforce.

Legal contracts

To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions.

You can choose to provide your own terms and conditions, instead of the standard contract. Customers must accept these terms before they can try your offer.

Offer listing details

> **NOTE**
>
> Offer listing content is not required to be in English if the offer description begins with the phrase "This application is available only in [non-English language]".

To help create your offer more easily, prepare these items ahead of time. All are required except where noted.

- **Name** – The name will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It cannot contain emojis (unless they are the trademark and copyright symbols) and is limited to 50 characters.
- **Search results summary** – The purpose or function of your offer as a single sentence with no line breaks in 100 characters or less. This is used in the commercial marketplace listing(s) search results.
- **Short description** – Details of the purpose or function of the offer, written in plain text with no line breaks. This will appear on your offer's details page.
- **Description** – This description displays in the commercial marketplace listing(s) overview. Consider including a value proposition, key benefits, intended user base, any category or industry associations, in-app purchase opportunities, any required disclosures, and a link to learn more. This text box has rich text editor controls to make your description more engaging. Optionally, use HTML tags for formatting.
- **Privacy policy link** – The URL for your company's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations.
- **Useful links** (optional): Links to various resources for users of your offer. For example, forums, FAQs, and release notes.
- **Contact information**
  - **Support contact** – The name, phone, and email that Microsoft partners will use when your customers open tickets. Include the URL for your support website.
  - **Engineering contact** – The name, phone, and email for Microsoft to use directly when there are problems with your offer. This contact information isn't listed in the commercial marketplace.
  - **CSP Program contact** (optional): The name, phone, and email if you opt in to the CSP program, so those partners can contact you with any questions. You can also include a URL to your marketing materials.
- **Media**
  - **Logos** – A PNG file for the **Large** logo. Partner Center will use this to create other required logo sizes. You can optionally replace these with different images later.
  - **Screenshots** – At least one and up to five screenshots that show how your offer works. Images must be 1280 x 720 pixels, in PNG format, and include a caption.
  - **Videos** (optional) – Up to four videos that demonstrate your offer. Include a name, URL for YouTube or Vimeo, and a 1280 x 720 pixel PNG thumbnail.

> **NOTE**
>
> Your offer must meet the general commercial marketplace certification policies to be published to the commercial marketplace.

Preview audience

A preview audience can access your offer prior to being published live in the online stores in order to test the end-to-end functionality before you publish it live. On the **Preview audience** page, you can define a limited preview audience.

You can send invites to Azure subscription IDs. Add up to 10 IDs manually or import up to 100 with a .csv file. If your offer is already live, you can still define a preview audience for testing any changes or updates to your offer.

Plans and pricing

Container offers require at least one plan. A plan defines the solution scope and limits. You can create multiple plans for your offer to give your customers different technical and licensing options.

Containers support two licensing models: Free or Bring Your Own License (BYOL). BYOL means you'll bill your customers directly, and Microsoft won't charge you any fees. Microsoft only passes through Azure infrastructure usage fees. For more information, see Commercial marketplace transact capabilities.

Additional sales opportunities

You can choose to opt into Microsoft-supported marketing and sales channels. When creating your offer in Partner Center, you will see two tabs toward the end of the process:

- **Resell through CSPs** – Allow Microsoft Cloud Solution Providers (CSP) partners to resell your solution as part of a bundled offer. For more information about this program, see Cloud Solution Provider program.
- **Co-sell with Microsoft** – Let Microsoft sales teams consider your IP co-sell eligible solution when evaluating their customers' needs. For details about co-sell eligibility, see Requirements for co-sell status. For details on preparing your offer for evaluation, see Co-sell option in Partner Center.

Container offer requirements

REQUIREMENT	DETAILS
Billing and metering	Support either the free or BYOL billing model.
Image built from a Dockerfile	Container images must be based on the Docker image specification and built from a Dockerfile. For more information about building Docker images, see the "Usage" section of Dockerfile reference.
Hosting in an Azure Container Registry repository	Container images must be hosted in an Azure Container Registry repository. For more information about working with Azure Container Registry, see Quickstart: Create a private container registry by using the Azure portal.
Image tagging	Container images must contain at least one tag (maximum number of tags: 16). For more information about tagging an image, see the `docker tag` page on the Docker Documentation site.

Next steps

- Prepare technical assets

Prepare Azure container technical assets

11/22/2021 • 2 minutes to read • Edit Online

This article gives technical resources and recommendations to help you create a container offer on Azure Marketplace.

Before you begin

For Quickstarts, Tutorials, and Samples, see the Azure Container Instances documentation.

Fundamental technical knowledge

Designing, building, and testing these assets takes time and requires technical knowledge of both the Azure platform and the technologies used to build the offer.

In addition to your solution domain, your engineering team should have knowledge about the following Microsoft technologies:

- Basic understanding of Azure Services
- How to design and architect Azure applications
- Working knowledge of Azure Virtual Machines, Azure Storage, and Azure Networking
- Working knowledge of Azure Resource Manager
- Working Knowledge of JSON.

Suggested tools

Choose one or both of the following scripting environments to help manage your Container image:

- Azure PowerShell
- Azure CLI

We recommend adding these tools to your development environment:

- Azure Storage Explorer
- Visual Studio Code
  - Extension: Azure Resource Manager Tools
  - Extension: Beautify
  - Extension: Prettify JSON.

Review the available tools on the Azure Developer Tools page. If you're using Visual Studio, review the tools available in the Visual Studio Marketplace.

Create the container image

You can't deploy an image to Azure Container Instances from an on-premises registry.

- If you already have a working container in your local registry, create an Azure Registry and upload your container image to the Azure Container Registry. To learn more, see Tutorial: Build and deploy container images in the cloud with Azure Container Registry Tasks.

- If don't have a container image yet and need to containerize your existing application or create a new container based application, clone the application source code from GitHub, create a container image from the application source, and test the image in a local Docker environment. To learn more, see Tutorial: Create a container image for deployment to Azure Container Instances.

Next steps

- Create your container offer

Create an Azure Container offer

11/22/2021 • 3 minutes to read • Edit Online

This article describes how to create an Azure Container offer. All offers go through our certification process, which checks your solution for standard requirements, compatibility, and proper practices.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program.

Before you begin

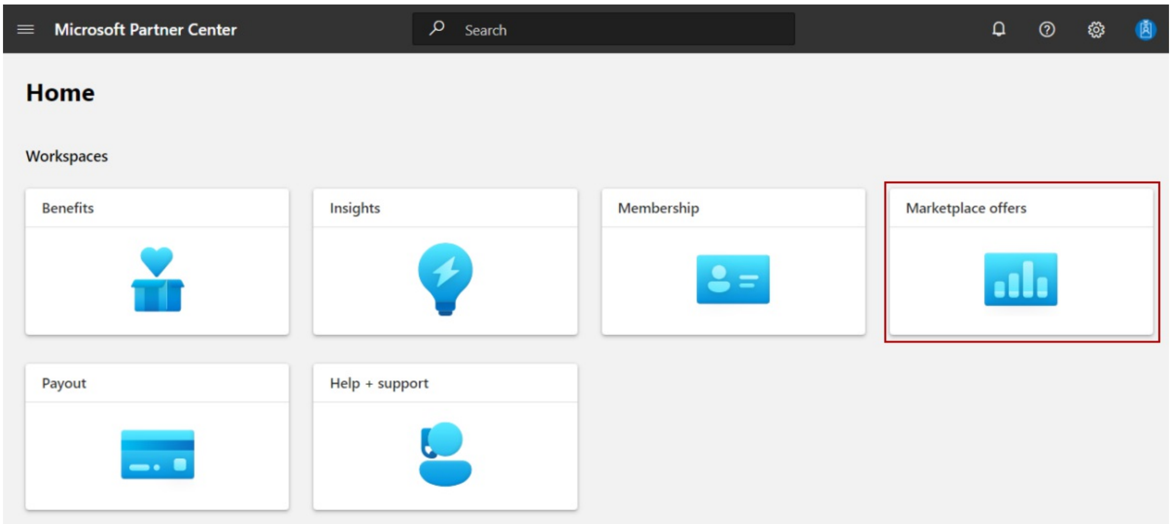
Review Plan an Azure Container offer. It will explain the technical requirements for this offer and list the information and assets you'll need when you create it.

Create a new offer

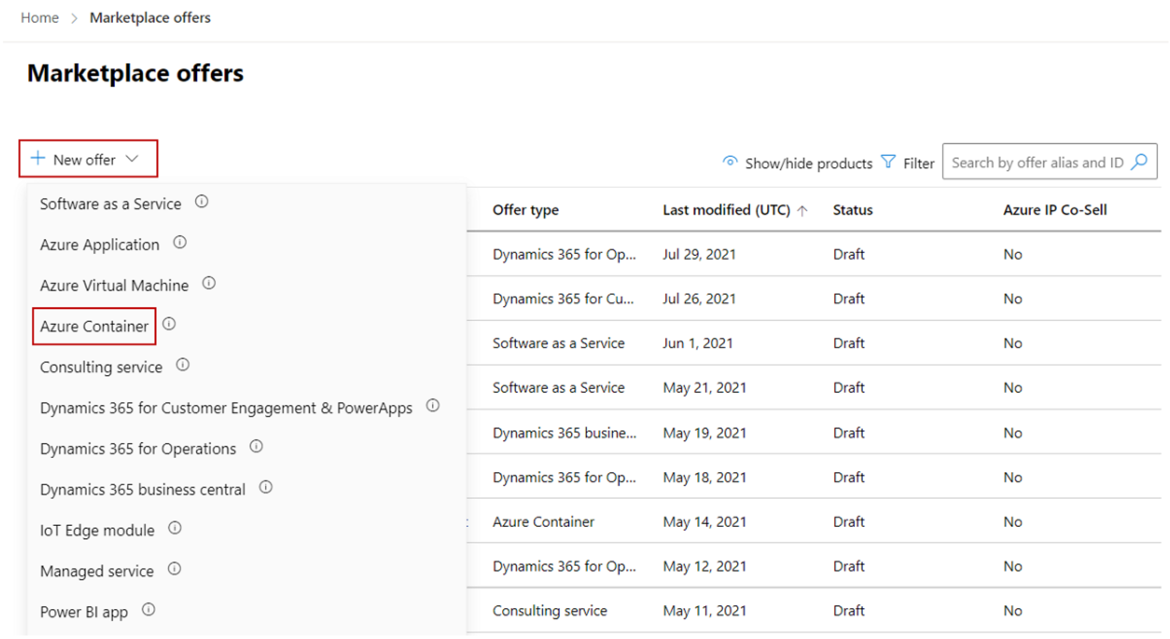
> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Azure Container**.



> **IMPORTANT**
>
> After an offer is published, any edits you make to it in Partner Center appear on Azure Marketplace only after you republish the offer. Be sure to always republish an offer after changing it.

New offer

Enter an **Offer ID**. This is a unique identifier for each offer in your account.

- This ID is visible to customers in the web address for the offer and in Azure Resource Manager templates, if applicable.
- Use only lowercase letters and numbers. The ID can include hyphens and underscores, but no spaces, and is limited to 50 characters. For example, if your Publisher ID is `testpublisherid` and you enter **test-offer-1**, the offer web address will be `https://appsource.microsoft.com/product/dynamics-365/testpublisherid.test-offer-1`.
- The Offer ID can't be changed after you select **Create**.

Enter an **Offer alias**. This is the name used for the offer in Partner Center.

- This name isn't used on Azure Marketplace. It is different from the offer name and other values shown to customers.

Select **Create** to generate the offer. Partner Center opens the **Offer setup** page.

Alias

Enter a descriptive name that we'll use to refer to this offer solely within Partner Center. The offer alias (pre-populated with what you entered when you created the offer) won't be used in the marketplace and is different than the offer name shown to customers. If you want to update the offer name later, see the Offer listing page.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.

2. In the **Connection details** dialog box, select a lead destination.

3. Complete the fields that appear. For detailed steps, see the following articles:

   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint
   - Configure your offer to send leads to Marketo
   - Configure your offer to send leads to Salesforce

4. To validate the configuration you provided, select the **Validate** link.

5. Select **Connect**.

For more information, see Customer leads from your commercial marketplace offer.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Properties**.

Next steps

- Configure offer properties
- Offer listing best practices

Configure Azure Container offer properties

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the categories used to group your offer on Azure Marketplace, your application version, and the legal contracts that support your offer.

Categories

Select categories and subcategories to place your offer in the appropriate marketplace search areas. Be sure to describe later in the offer description how your offer supports these categories.

- Select a Primary category.
- To add a second optional category (Secondary), select the **+Categories** link.
- Select up to two subcategories for the Primary and/or Secondary category. If no subcategory is applicable to your offer, select **Not applicable**. Use Ctrl+click to select a second subcategory.

See the full list of categories and subcategories in Offer Listing Best Practices.

Legal

Under **Legal**, provide terms and conditions for your offer. You have two options:

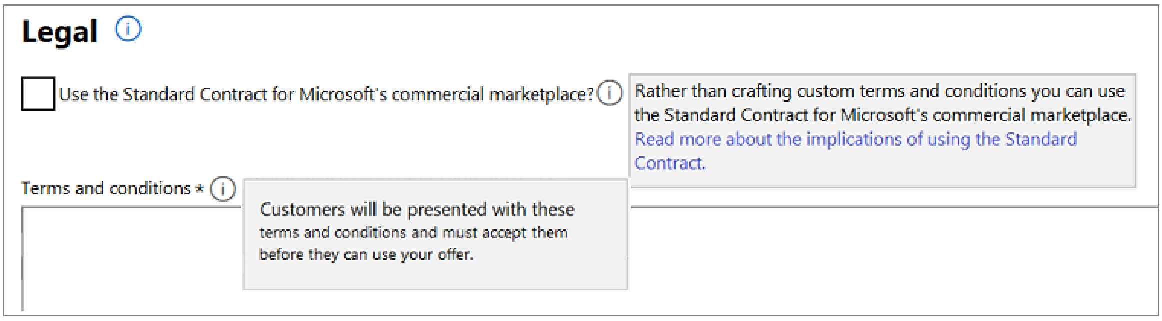
- Use the standard contract
- Use your own terms and conditions

To learn about the standard contract, see Standard Contract for the Microsoft commercial marketplace. You can download the Standard Contract PDF (make sure your pop-up blocker is off).

Use the standard contract

To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions.

1. Select the **Use the Standard Contract for Microsoft's commercial marketplace** check box.



2. In the **Confirmation** dialog box, select **Accept**. Depending on the size of your screen, you may have to scroll up to see it.

> **NOTE**
>
> After you publish an offer using the Standard Contract for the commercial marketplace, you can't use your own custom terms and conditions. Either offer your solution under the standard contract or under your own terms and conditions.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Use your own terms and conditions

You can choose to provide your own terms and conditions, instead of the standard contract. Customers must accept these terms before they can try your offer.

1. Under **Legal**, clear the **Use the Standard Contract for Microsoft's commercial marketplace** check box.
2. In the **Terms and conditions** box, enter up to 10,000 characters of text.

> **NOTE**
>
> If you require a longer description, enter a single web address that points to where your terms and conditions can be found. It will be displayed to customers as an active link.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Next steps

- Configure offer listing

Configure Azure Container offer listing details

11/22/2021 • 4 minutes to read • Edit Online

This page lets you define the offer details such as offer name, description, links, contacts, logos, and screenshots.

> **NOTE**
> Provide offer listing details in one language only. English is not required as long as the offer description begins with the phrase, "This application is available only in [non-English language]." It is also acceptable to provide a *Useful link URL* to offer content in a language other than the one used in the Offer listing content.

Marketplace details

The **Name** you enter here is shown to customers as the title of the offer. This field is pre-populated with the name you entered for **Offer alias** when you created the offer, but you can change it. The name:

- Can include trademark and copyright symbols.
- Must be 50 characters or less.
- Can't include emojis.

Provide a short description of your offer for the **Search results summary** (up to 100 characters). This description may be used in marketplace search results.

Provide a **Short description** of your offer, up to 256 characters. This will appear in search results and on your offer's details page.

Provide a thorough **Description** of your offer, up to 3,000 characters. Customers will see this in the Marketplace listing overview.

Include one or more of the following items in your description:

- The value and key benefits of your offer
- Category and/or industry associations
- In-app purchase opportunities
- Any required disclosures

Here are some tips for writing an informative and impactful description:

- Clearly describe the value of your offer in the first few sentences. Keep in mind that the first few sentences might be displayed in search results.
- Focus on the value your offer provides. Don't rely on features and functionality to sell your product.
- Use industry-specific vocabulary and language that describes the benefits of your offer.
- Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Enter the web address (URL) of your organization's privacy policy. Ensure your offer complies with privacy laws and regulations. You must also post a valid privacy policy on your website.

Useful links

Provide supplemental online documents about your offer. You can add up to 25 links. To add a link, select **+ Add a link** and then complete the following fields:

- **Name** – Customers will see this on your offer's details page.
- **Link** (URL) – Enter a link for customers to view your online document. The link must start with http:// or https://.

Contact information

Provide the name, email, and phone number for a **Support contact**, **Engineering contact**, and **Cloud Solution Provider Program** contact. This information is not shown to customers, but will be available to Microsoft, and may be provided to CSP partners.

In the **Support contact** section, provide the **Support website** where Azure Global and Azure Government (if applicable) customers can reach your support team.

Marketplace media

Provide logos and images to use with your offer. All images must be in PNG format. Blurry images will cause your submission to be rejected.

> **NOTE**
>
> If you have an issue uploading files, ensure that your local network doesn't block the https://upload.xboxlive.com service that's used by Partner Center.

Logos

Provide a PNG file for the **Large** size logo. Partner Center will use this to create other required sizes. You can optionally replace this with a different image later.

These logos are used in different places in the listing:

- The large logo appears on your offer listing page in Microsoft AppSource.
- The small logo appears on the Microsoft AppSource main page and search results page.

Follow these guidelines for your logos:

- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The theme colors of the portal are white and black. Don't use these colors as the background color for your logo. Use a color that makes your logo prominent in the portal. We recommend simple primary colors.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat and avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name.
- Make sure the logo isn't stretched.

Screenshots

Add at least one (and up to five) screenshots that show how your offer works. All screenshots must be 1280 x 720 pixels and in PNG format. Add a caption for each screenshot.

Videos

Add up to five optional videos that demonstrate your offer. They should be hosted on an external video service. Enter each video's name, web address, and a thumbnail PNG image of the video at 1280 x 720 pixels.

For additional marketplace listing resources, see Best practices for marketplace offer listings.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Preview audience**.

Next steps

- Set offer preview audience

Set the preview audience for an Azure Container offer

11/22/2021 • 2 minutes to read • Edit Online

This article describes how to configure a preview audience for an Azure Container offer in the commercial marketplace using Partner Center. The preview audience can review your offer before it goes live.

Define a preview audience

On the **Preview audience** page, define a limited audience who can review your Container offer before you publish it live to the broader marketplace audience. You define the preview audience using Azure subscription IDs, along with an optional description for each. Neither of these fields can be seen by customers. You can find your Azure subscription ID on the **Subscriptions** page on the Azure portal.

Add at least one Azure subscription ID, either individually (up to 10) or by uploading a CSV file (up to 100) to define who can preview your offer. If your offer is already live, you may still define a preview audience for testing updates to your offer.

Add email addresses manually

1. On the **Preview audience** page, add a single Azure subscription ID and an optional description in the boxes provided.
2. To add another email address, select the **Add ID (Max 10)** link.
3. Select **Save draft** before continuing to the next tab to set up plans.

Add email addresses using a CSV file

1. On the **Preview audience** page, select the **Export Audience (csv)** link.
2. Open the CSV file. In the **Id** column, enter the Azure subscription IDs you want to add to the preview audience.
3. In the **Description** column, you have the option to add a description for each entry.
4. In the **Type** column, add **SubscriptionId** to each row that has an ID.
5. Save the file as a CSV file.
6. On the **Preview audience** page, select the **Import Audience (csv)** link.
7. In the **Confirm** dialog box, select **Yes**, then upload the CSV file.
8. Select **Save draft** before continuing to the next tab to set up plans.

> **IMPORTANT**
>
> After you view your offer in Preview, you must select **Go live** to publish your offer to the public.

Next steps

- Create and manage plans

Create and edit plans for an Azure Container offer

11/22/2021 • 2 minutes to read • Edit Online

This overview page lets you create different plan options within the same offer. Plans (formerly called SKUs) can differ in terms of in where they are available (Azure Global or Azure Government) and the image referenced by the plan. Your offer must contain at least one plan.

You can create up to 100 plans for each offer: up to 45 of these can be private. Learn more about private plans in Private offers in the Microsoft commercial marketplace.

After you create a plan, the **Plan overview** page shows:

- Plan names
- Pricing model
- Azure regions (Global or Government)
- Current publishing status
- Any available actions

The actions available for a plan vary depending on the current status of your plan. They include:

- **Delete draft** if the plan status is a Draft.
- **Stop distribution** if the plan status is Published Live.

Edit a plan

Select a plan **Name** to edit its details.

Create a plan

To set up a new plan, select **+ Create new plan**.

Enter a unique **Plan ID** for each plan. This ID will be visible to customers in the product's web address. Use only lowercase letters and numbers, dashes, or underscores, and a maximum of 50 characters. You cannot change the Plan ID after you select **Create**.

Enter a **Plan name**. Customers see this name when deciding which plan to select within your offer. Each plan in this offer must have a unique name. For example, you might use an offer name of **Windows Server** with plans **Windows Server 2016** and **Windows Server 2019**.

Select **Create** and continue below.

Next steps

- + Create new plan, or
- Exit plan setup and continue with optional Co-sell with Microsoft, or
- Review and publish your offer

Set up plans for an Azure Container offer

11/22/2021 • 2 minutes to read • Edit Online

The **Plan setup** page lets you configure which clouds the plan is available in. Your answers on this tab affect which fields are displayed on other tabs.

Azure regions

Azure Global

All Azure Container offers are automatically available in **Azure Global**. Your plan can be used by customers in all global Azure regions that use the marketplace. For details, see Geographic availability and currency support.

Azure Government

Select **Azure Government** to make your offer appear there. This is a government community cloud with controlled access for customers from U.S. federal, state, and local or tribal government agencies, as well as partners eligible to serve them. As the publisher, you're responsible for any compliance controls, security measures, and best practices for this cloud community. Azure Government uses physically isolated data centers and networks (located in the U.S. only). Before publishing to Azure Government, test and confirm your solution within that area as the results may be different. To stage and test your solution, request a trial account from Microsoft Azure Government trial.

> **NOTE**
> After your plan is published and available in a specific region, you can't remove that region.

Azure Government certifications

If you select **Azure Government**, add your **certifications**. Azure Government services handle data that's subject to certain government regulations and requirements. For example, FedRAMP, NIST 800.171 (DIB), ITAR, IRS 1075, DoD L4, and CJIS. To bring awareness to your certifications for these programs, you can provide up to 100 links that describe your certifications. These can be links to your listings on the program directly or to your own website. These links are visible to Azure Government customers only.

Select **Save draft** before continuing to the next tab in the **Plan overview** left-nav menu, **Plan listing**.

Next steps

- Set up the plan listing

Set up plan listing details for an Azure Container offer

11/22/2021 • 2 minutes to read • Edit Online

This page displays information specific to the current plan.

Plan name

This is pre-filled with the name you gave your plan when you created it, but you can change it. It can be up to 50 characters long. This name appears as the title of this plan in Azure Marketplace and the Azure portal. It's used as the default module name after the plan is ready to be used.

Plan summary

Provide a short summary of your plan (not the offer). This summary appears in Azure Marketplace search results and can contain up to 100 characters.

Plan description

Describe what makes this plan unique, as well as differences between plans within your offer. Don't describe the offer, just the plan. This description will appear in Azure Marketplace and in the Azure portal on the offer listing page. It can be the same content you provided in the plan summary and contain up to 2,000 characters.

Select **Save draft** before continuing to the next tab in the **Plan overview** left-nav menu, **Availability**.

Next steps

- Set plan availability

Set plan availability for an Azure Container offer

11/22/2021 • 2 minutes to read • Edit Online

Use this tab to set the availability of your Azure Container plan.

Set plan availability

To hide your published offer so customers can't search, browse, or purchase it in the marketplace, select the **Hide plan** check box.

This field is commonly used when:

- The offer is only to be used only indirectly when referenced though another application.
- The offer should not be purchased individually.
- The plan was used for initial testing and is no longer relevant.
- The plan was used for temporary or seasonal offers and should no longer be offered.

Select **Save draft** before continuing to the next tab in the **Plan overview** left-nav menu, **Technical configuration**.

Next steps

- Set plan technical configuration

Set plan technical configuration for an Azure Container offer

11/22/2021 • 3 minutes to read • Edit Online

Container images must be hosted in a private Azure Container Registry. Use this page to provide reference information for your container image repository inside the Azure Container Registry.

After you submit the offer, your container image is copied to Azure Marketplace in a specific public container registry. All requests from Azure users to use your module are served from the Azure Marketplace public container registry, not your private container registry.

You can target multiple platforms and provide several versions of your module container image using tags. To learn more about tags and versioning, see Prepare Azure Container technical assets.

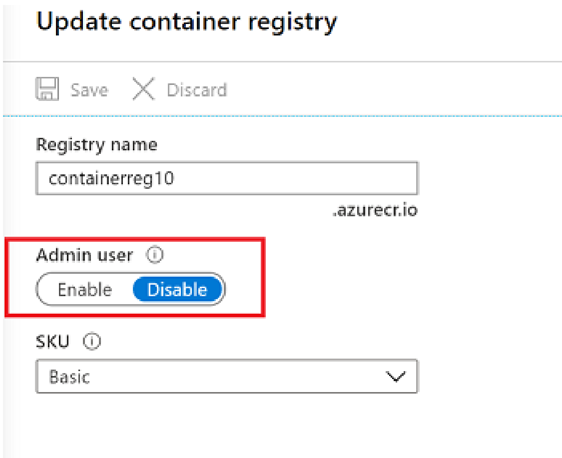
Image repository details

Provide the **Azure subscription ID** where resource usage is reported and services are billed for the Azure Container Registry that includes your container image. You can find this ID on the Subscriptions page in the Azure portal.

Provide the **Azure resource group name** that contains the Azure Container Registry with your container image. The resource group must be accessible in the subscription ID (above). You can find the name on the Resource groups page in the Azure portal.

Provide the **Azure container registry name** that has your container image. The container registry must be present in the Azure resource group you provided earlier. Provide only the registry name, not the full login server name. Omit **azurecr.io** from the name. You can find the registry name on the Container Registries page in the Azure portal.

Provide the **Admin username for the Azure Container Registry** associated with the Azure Container Registry that has your container image. The username and password (next step) are required to ensure your company has access to the registry. To get the admin username and password, set the **admin-enabled** property to **True** using the Azure Command-Line Interface (CLI). You can optionally set **Admin user** to **Enable** in the Azure portal.



Provide the **Admin password for the Azure Container Registry** for the admin username associated with the Azure Container Registry and has your container image. The username and password are required to ensure your company has access to the registry. You can get the password from the Azure portal by going to

Container Registry > **Access Keys** or with Azure CLI using the show command.

Provide the **Repository name within the Azure Container Registry** that has your image. You specify the name of the repository when you push the image to the registry. You can find the name of the repository by going to the Container Registry > **Repositories page**. For more information, see View container registry repositories in the Azure portal. After the name is set, it can't be changed. Use a unique name for each offer in your account.

Image versions

Customers must be able to automatically get updates from Azure Marketplace when you publish an update. If they don't want to update, they must be able to stay on a specific version of your image. You can do this by adding new image tags each time you make an update to the image.

Select **Add Image version** to include an **Image tag** that points to the latest version of your image on all supported platforms. It must also include a version tag (for example, starting with xx.xx.xx, where xx is a number). Customers should use manifest tags to target multiple platforms. All tags referenced by a manifest tag must also be added so we can upload them. All manifest tags (except the latest tag) must start with either X.Y- or X.Y.Z- where X, Y, and Z are integers. For example, if a latest tag points to `1.0.1-linux-x64`, `1.0.1-linux-arm32`, and `1.0.1-windows-arm32`, these six tags need to be added to this field. For details about tags and versioning, see Prepare your Azure Container technical assets.

> **TIP**
>
> Add a test tag to your image so you can identify the image during testing.

Next steps

- To **Co-sell with Microsoft** (optional), select it in the left-nav menu. For details, see Co-sell partner engagement.
- To **Resell through CSPs** (Cloud Solution Partners, also optional), select it in the left-nav menu. For details, see Resell through CSP Partners.
- If you're not setting up either of these or you've finished, it's time to Review and publish your offer.

Plan a virtual machine offer

11/22/2021 • 6 minutes to read • Edit Online

This article explains the different options and requirements for publishing a virtual machine (VM) offer to the commercial marketplace. VM offers are transactable offers deployed and billed through Azure Marketplace.

Before you start, Create a commercial marketplace account in Partner Center and ensure your account is enrolled in the commercial marketplace program.

> **TIP**
> To see the customer's view of purchasing in the commercial marketplace, see Azure Marketplace purchasing.

Technical fundamentals

The process of designing, building, and testing offers takes time and requires expertise in both the Azure platform and the technologies used to build your offer. Your engineering team should have a working knowledge of Azure Virtual Machines, Azure Storage, and Azure Networking, as well as proficiency with the design and architecture of Azure applications. See these additional technical resources:

- Tutorials
  - Linux VMs
  - Windows VMs
- Samples
  - Azure CLI samples for Linux VMs
  - Azure PowerShell for Linux VMs
  - Azure CLI samples for Windows VMs
  - Azure PowerShell for Windows VMs

Technical requirements

VM offers have the following technical requirements:

- You must prepare one operating system virtual hard disk (VHD). Data disk VHDs are optional. This is explained in more detail below.
- You must create at least one plan for your offer. Your plan is priced based on the licensing model you select.

  > **IMPORTANT**
  > Every VM image in a plan must have the same number of data disks.

A VM contains two components:

- **Operating VHD** – Contains the operating system and solution that deploys with your offer. The process of preparing the VHD differs depending on whether it is a Linux-, Windows-, or custom-based VM.
- **Data disk VHDs** (optional) – Dedicated, persistent storage for a VM. Don't use the operating system VHD (for example, the C: drive) to store persistent information.
  - You can include up to 16 data disks.

- Use one VHD per data disk, even if the disk is blank.

> **NOTE**
>
> Regardless of which operating system you use, add only the minimum number of data disks needed by the solution. Customers cannot remove disks that are part of an image at the time of deployment, but they can always add disks during or after deployment.

For detailed instructions on preparing your technical assets, see Create a virtual machine using an approved base or Create a virtual machine using your own image.

Preview audience

A preview audience can access your offer prior to it being published live in the marketplace in order to test the end-to-end functionality. On the **Preview audience** page, you can use Azure subscription IDs to define a limited preview audience.

> **NOTE**
>
> A preview audience differs from a private audience. A preview audience is a list of subscription IDs that can test and validate your offer. This includes any private plans, before they are made available to your users. In contrast, when making an offer private, you need to specify a private audience to restrict visibility of your offer to customers of your choosing. A private audience (defined on the **Pricing and Availability** page for each of your plans) is a list of subscription IDs and/or tenant IDs that will have access to a particular plan after the offer is live.

Plans, pricing, and trials

VM offers require at least one plan. A plan defines the solution scope and limits, and the associated pricing. You can create multiple plans for your offer to give your customers different technical and licensing options, as well as trial opportunities. See Plans and pricing for commercial marketplace offers for general guidance about plans, including pricing models, free trials, and private plans.

VMs are fully commerce-enabled, using usage-based pay-as-you-go or bring-your-own-license (BYOL) licensing models. Microsoft hosts the commerce transaction and bills your customer on your behalf. You get the benefit of using the preferred payment relationship between your customer and Microsoft, including any Enterprise Agreements. For more information, see Commercial marketplace transact capabilities.

> **NOTE**
>
> The Azure Prepayment (previously called monetary commitment) associated with an Enterprise Agreement can be used against the Azure usage of your VM, but not against your software licensing fees.

Private plans

Private plans restrict the discovery and deployment of your solution to a specific set of customers you choose and offer customized software, terms, and pricing. The customized terms enable you to highlight a variety of scenarios, including field-led deals with specialized pricing and terms as well as early access to limited release software.

For more information, see Plans and pricing for commercial marketplace offers and Private offers in the Microsoft commercial marketplace.

Licensing models

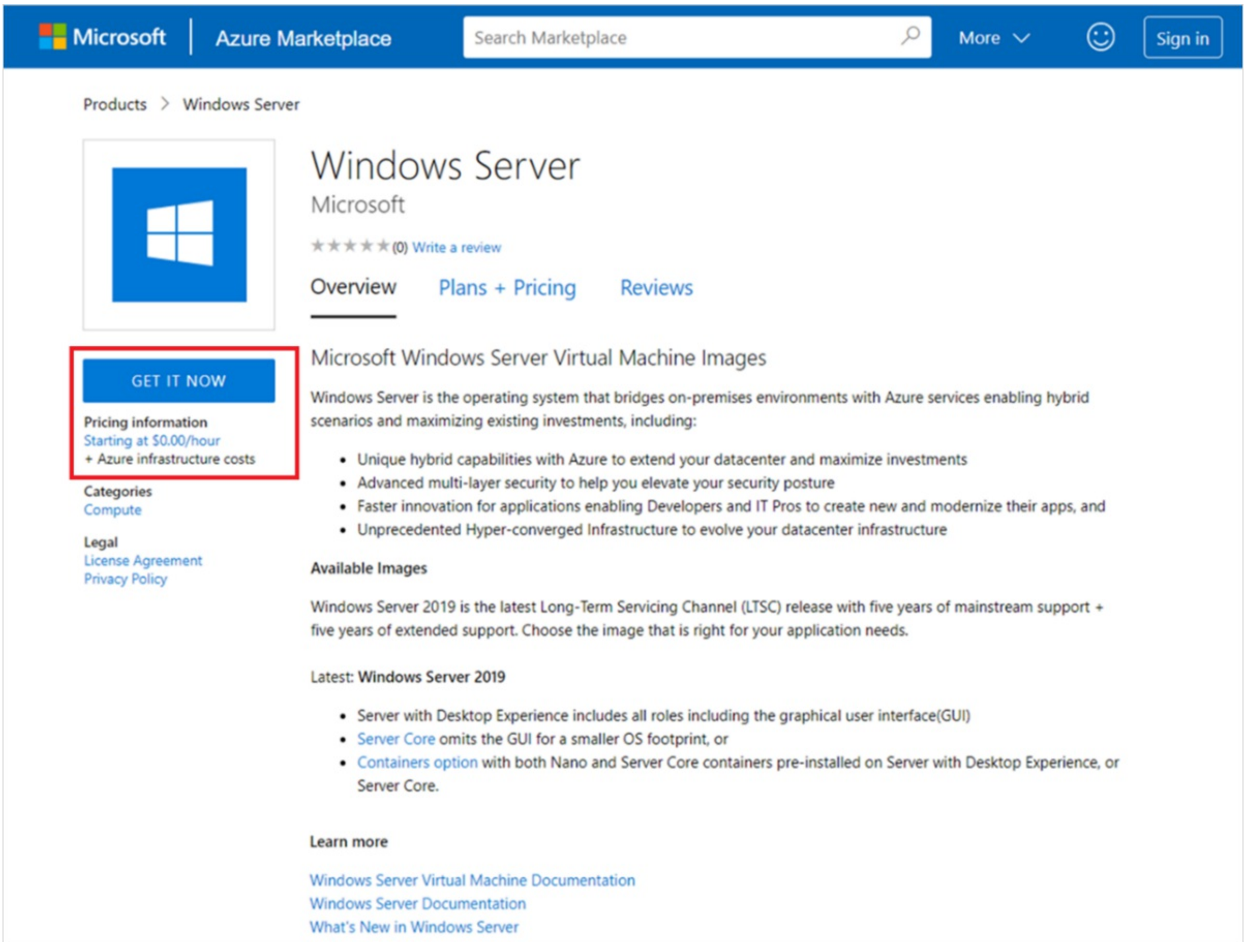
As you prepare to publish a new offer, you need to make pricing-related decisions by selecting the appropriate licensing model.

These are the available licensing options for VM offers:

LICENSING MODEL	TRANSACTION PROCESS
Usage-based	Also known as pay-as-you-go. This licensing model lets you bill your customers per hour through various pricing options.
BYOL	The Bring Your Own Licensing option lets your customers bring existing software licenses to Azure. *

`*` As the publisher, you support all aspects of the software license transaction, including (but not limited to) order, fulfillment, metering, billing, invoicing, payment, and collection.

The following example shows a VM offer in Azure Marketplace that has usage-based pricing.



Trials

The following are types of trials that can be configured to help identify customer leads. These trials give potential customers an opportunity to interact with your offer prior to purchasing via the licensing model you selected.

TRIALS	TRANSACTION PROCESS
Free trial	Offer your customers a one-, three- or six-month free trial.

TRIALS	TRANSACTION PROCESS
Test drive	This option lets your customers evaluate your solution at no additional cost to them. They don't need to be an existing Azure customer to engage with the trial experience. Learn more about test drives.

NOTE

The licensing model along with any trial opportunities you select will determine the additional information you'll need to provide when you create the offer in Partner Center.

Test drive

You can enable a test drive that lets customers try your offer prior to purchase by giving them access to a preconfigured environment for a fixed number of hours, resulting in highly qualified leads and an increased conversion rate. Test drives differ depending on the offer type and marketplace. To learn more about types of test drives and how they work, see What is a test drive?. To learn more about test drives for VM offers, see Configure a VM test drive.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

Legal contracts

You have two options for defining the terms and conditions for your offer:

- Use the standard contract with optional amendments
- Use your own terms and conditions

To learn about the standard contract and optional amendments, see Standard Contract for the Microsoft commercial marketplace. You can download the Standard Contract PDF (make sure your pop-up blocker is off).

Cloud Solution Providers

When creating your offer in Partner Center, you will see the **Resell through CSPs** tab. This option allows partners who are part of the Microsoft Cloud Solution Providers (CSP) program to resell your VM as part of a bundled offer. All Bring-your-own-license (BYOL) plans are automatically opted in to the program. You can also choose to opt in your non-BYOL plans. See Cloud Solution Provider program for more information.

Next steps

- If you do not yet have an image created for your offer, see Create a virtual machine using an approved base or Create a virtual machine using your own image.
- Once you have an image ready, see Create a virtual machine offer on Azure Marketplace

Create a virtual machine offer on Azure Marketplace

11/22/2021 • 4 minutes to read • Edit Online

This article describes how to create an Azure virtual machine offer for Azure Marketplace. It addresses both Windows-based and Linux-based virtual machines that contain an operating system, a virtual hard disk (VHD), and up to 16 data disks.

Before you start, create a commercial marketplace account in Partner Center. Ensure that your account is enrolled in the commercial marketplace program.

Before you begin

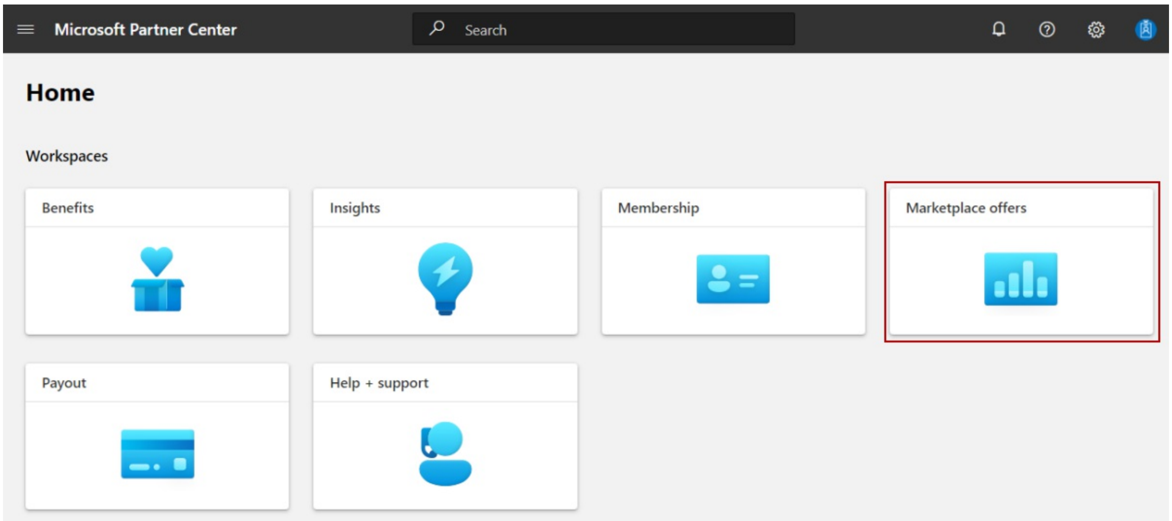
If you haven't done so yet, review Plan a virtual machine offer. It will explain the technical requirements for your virtual machine and list the information and assets you'll need when you create your offer.

Create a new offer

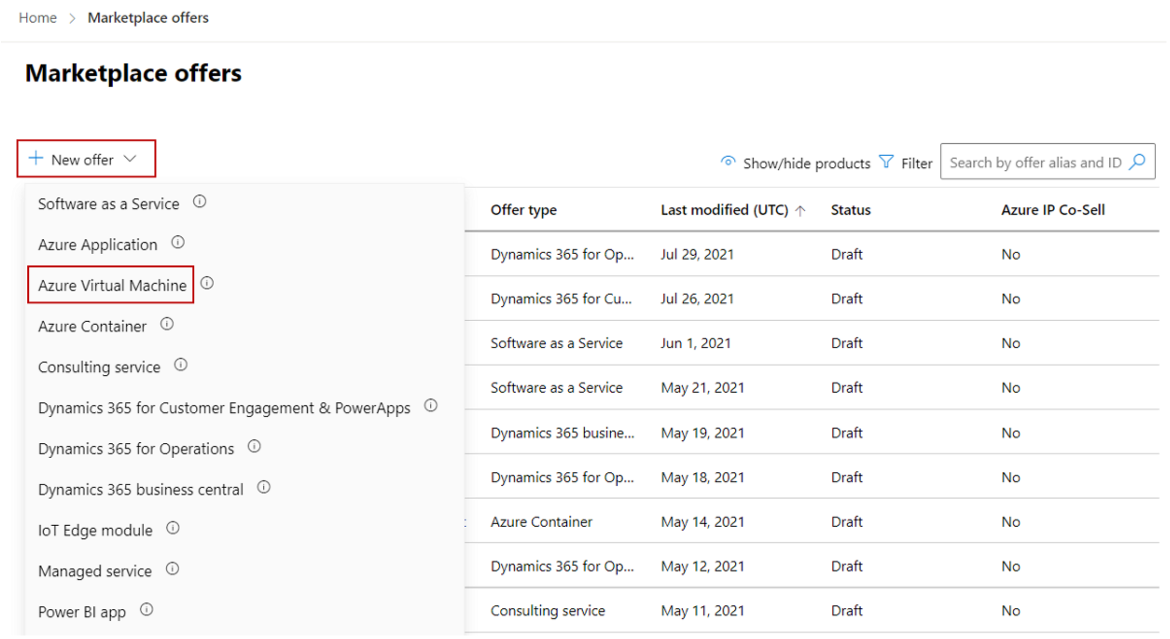
> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Azure Virtual Machine**.



NOTE

After an offer is published, any edits you make to it in Partner Center appear on Azure Marketplace only after you republish the offer. Be sure to always republish an offer after making changes to it.

Enter an **Offer ID**. This is a unique identifier for each offer in your account.

- This ID is visible to customers in the web address for the Azure Marketplace offer and in Azure PowerShell and the Azure CLI, if applicable.
- Use only lowercase letters and numbers. The ID can include hyphens and underscores, but no spaces, and is limited to 50 characters. For example, if you enter **test-offer-1**, the offer web address will be `https://azuremarketplace.microsoft.com/marketplace/../test-offer-1`.
- The Offer ID can't be changed after you select **Create**.

Enter an **Offer alias**. The offer alias is the name that's used for the offer in Partner Center.

- This name is not used on Azure Marketplace. It is different from the offer name and other values that are shown to customers.

Select **Create** to generate the offer and continue. Partner Center opens the **Offer setup** page.

Test drive (optional)

You can enable a test drive that lets customers try your offer prior to purchase by giving them access to a preconfigured environment for a fixed number of hours, resulting in highly qualified leads and an increased conversion rate. Test drives differ depending on the offer type and marketplace. To learn more about types of test drives and how they work, see What is a test drive?. For information about configuring different kinds of test drives, see Test drive technical configuration.

TIP

A test drive is different from a free trial. You can offer a test drive, free trial, or both. They both provide your customers with your solution for a fixed period-of-time. But, a test drive also includes a hands-on, self-guided tour of your product's key features and benefits being demonstrated in a real-world implementation scenario.

For VM offers, Azure Resource Manager (ARM) deployment is the only test drive option available. The deployment template must contain all the Azure resources that comprise your solution.

To enable a test drive, select the **Enable a test drive** check box; this will enable a Test drive tab in the left-nav menu. You will configure and create the listing of your test drive using that tab later in Configure a VM test drive.

With test drive, configuring a CRM for customer leads is required (see next section). To remove test drive from your offer, clear this check box.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.
3. Complete the fields that appear. For detailed steps, see the following articles:
    - Configure your offer to send leads to the Azure table
    - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
    - Configure your offer to send leads to HTTPS endpoint
    - Configure your offer to send leads to Marketo
    - Configure your offer to send leads to Salesforce
4. To validate the configuration you provided, select the **Validate** link.
5. Select **Connect**.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Properties**.

Next steps

- Configure virtual machine offer properties
- Offer listing best practices

Configure virtual machine offer properties

11/22/2021 • 3 minutes to read • Edit Online

On the **Properties** page (select from the left-nav menu in Partner Center), you define the categories used to group your virtual machine (VM) offer on Azure Marketplace and the legal contracts that support your offer.

Select a category

Select categories and subcategories to place your offer in the appropriate Azure Marketplace search areas. Be sure to describe later in the offer description how your offer supports these categories.

- Select a Primary category.
- To add a second optional category (Secondary), select the **+Categories** link.
- Select up to two subcategories for the Primary and/or Secondary category. Use Ctrl+click to select a second subcategory. If no subcategory is applicable to your offer, then **Not applicable** is automatically selected.

See the full list of categories and subcategories in Categories and subcategories in the commercial marketplace. Virtual machine offers always appear under the **Compute** category on Azure Marketplace.

Provide terms and conditions

Under **Legal**, provide terms and conditions for your offer. You have two options:

- Use the standard contract with optional amendments
- Use your own terms and conditions

To learn about the standard contract and optional amendments, see Standard Contract for the Microsoft commercial marketplace. You can download the Standard Contract PDF (make sure your pop-up blocker is off).

Use the standard contract

To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions. To learn more about the customer experience during the discovery and purchase process, see Standard Contract for Microsoft commercial marketplace.

1. Select the **Use the Standard Contract for Microsoft's commercial marketplace** check box.
2. In the **Confirmation** dialog box, select **Accept**. Depending on the size of your screen, you may have to scroll up to see it.
3. Select **Save draft** before continuing.

> **NOTE**
>
> After you publish an offer using the Standard Contract for the commercial marketplace, you can't use your own custom terms and conditions. Either offer your solution under the standard contract with optional amendments or under your own terms and conditions.

Add amendments to the standard contract (optional)

There are two kinds of amendments available: *universal* and *custom*.

Add universal amendment terms

In the **Universal amendment terms to the standard contract for Microsoft's commercial marketplace** box, enter your universal amendment terms. You can enter an unlimited number of characters in this box. These terms are displayed to customers in AppSource, Azure Marketplace, and/or Azure portal during the discovery and purchase flow.

Add one or more custom amendments

Custom amendments are special amendments to the Standard Contract that are targeted to specific customers using Azure tenant IDs. Only customers from the tenant will be presented with the custom amendment terms when they purchase the offer.

> **NOTE**
>
> Customers targeted with custom amendments will also get the universal amendment (if any) to the Standard Contract during purchase.

1. Under **Custom amendments terms to the Standard Contract for Microsoft's commercial marketplace**, select the **Add custom amendment term (Max 10)** link.

2. Enter your **Custom amendment terms** in the box.

3. Enter the **Tenant ID** in the box.

   > **TIP**
   >
   > A tenant ID identifies your customer in Azure. You can ask your customer for this ID and they can find it by going to **https://portal.azure.com** > **Azure Active Directory** > **Properties**. The directory ID value is the tenant ID (for example, `50c464d3-4930-494c-963c-1e951d15360e`). You can also look up the organization's tenant ID of your customer by using their domain name URL at What is my Microsoft Azure and Office 365 tenant ID?.

4. Optionally, enter a friendly **Description** for the tenant ID. This description helps you identify the customer you're targeting with the amendment.

5. To add another tenant ID, select the **Add a customer's tenant ID (Max 10)** link and repeat steps 3 and 4. You can add up to 10 tenant IDs.

6. To add another amendment term, repeat steps 1 through 5. You can provide up to 10 custom amendment terms per offer.

7. Select **Save draft** before continuing.

Use your own terms and conditions

You may provide your own terms and conditions instead of using the standard contract. Customers must accept these terms before they can try your offer.

1. Under **Legal**, clear the **Use the Standard Contract for Microsoft's commercial marketplace** check box.

2. In the **Terms and conditions** box, enter up to 10,000 characters of text.

   > **NOTE**
   >
   > If you require a longer description, enter a single web address that points to where your terms and conditions can be found. It will be displayed to customers as an active link.

3. Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Next steps

- Configure VM offer listing

Configure virtual machine offer listing details

11/22/2021 • 5 minutes to read • Edit Online

On the **Offer listing** page (select from the left-nav menu in Partner Center), you define the offer details such as offer name, description, links, and support contacts.

Offer listing content is not required to be in English as long as the offer description begins with the phrase "This application is available only in [non-English language]." You can also link to a site that offers content in a language other than the one that's used in the offer listing content.

Marketplace details

Name

The name entered here should be descriptive because it will be the title of your offer listing. This field is autofilled with the name that you entered in the **Offer alias** box when you created the offer. The name:

- Can include trademark and copyright symbols.
- Must be 50 characters or less.
- Can't include emojis.

Search results summary

Provide a brief summary of the purpose or function of your offer to display on your offer's search results page in Azure Marketplace.

Short description

Provide a short description of your offer to display on your offer's details page in Azure Marketplace.

Description

Provide a thorough Description of your offer to display to customers in the Azure Marketplace listing overview.

Consider including the following items in your description:

- Description of the offer
- The type of user who benefits from the offer
- The customer needs or issues that the offer addresses
- Category and/or industry associations selected within the Properties tab
- In-app purchase opportunities
- Any required disclosures

Here are some tips for writing an informative and impactful description:

- Clearly describe the value of your offer in the first few sentences. Keep in mind that the first few sentences might be displayed in search results.
- Focus on the value your offer provides. Don't rely on features and functionality to sell your product.
- Use industry-specific vocabulary and language that describes the benefits of your offer.
- Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Privacy policy link

Enter the web address (URL) of your organization's privacy policy. Ensure your offer complies with privacy laws and regulations. You must also post a valid privacy policy on your website.

Useful links

Provide additional product related links and support links for your offer.

Product information links

Optionally, provide supplemental online documents about your offer. To add a link, select **+ Add a link** and complete the following fields for each link you add:

- **Name**: Customers will see this name as a link on the details page.
- **Link**: Enter a web address that lets customers view your online document.

Customer support links

Provide the support website(s) where customers can reach your support team.

- Azure Global support website (specific for Azure Global customers)
- Azure Government support website (specific for Azure Government customers)

Contact information

Provide the following contact information.

Partner support contact

Provide the **Name**, **Email**, and **Phone** for Microsoft partners to use when your customers open a support ticket. This information isn't listed on Azure Marketplace.

Engineering contact

Provide the **Name**, **Email**, and **Phone** for Microsoft to use when there are issues with your offer, including issues with certification. This information isn't listed on Azure Marketplace.

Cloud Solution Provider Program contact

If applicable, provide the **Name**, **Email**, and **Phone** of the contact for partners in the Cloud Solution Provider (CSP) program to use for support and business issues. This information is only shown to CSP partners and isn't listed on Azure Marketplace. For **CSP Program Marketing Materials**, enter the web address where partners in this program can view your marketing materials.

Marketplace media

Provide logos, screenshots, and videos to use with your offer. These will appear on the search results and detail pages in the Azure Marketplace. All images must be in PNG format. Blurry images will cause your submission to be rejected.

> **NOTE**
>
> If you have an issue uploading files, ensure that your local network doesn't block the https://upload.xboxlive.com service that's used by Partner Center.

Logos

Provide a PNG file for the **Large** size logo. Partner Center will use this to create a **Small** and a **Medium** logo. You can optionally replace these with different images later. These logos are used in different places in the listing:

- **Large** (from 216 x 216 to 350 x 350 px, required) - Appears on your offer details page in Azure Marketplace
- **Medium** (90 x 90 px, optional) - Appears when you create a new resource in the Azure portal
- **Small** (48 x 48 px, optional) - Appears in the search results of Azure Marketplace

Follow these guidelines for your logos:

- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The theme colors of the portal are white and black. Don't use these colors as the background color for your logo. Use a color that makes your logo prominent in the portal. We recommend simple primary colors.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat and avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name.
- Make sure the logo isn't stretched.

Screenshots

Optionally, add up to five screenshots that show how your offer works. Incorporate key search words in the file names. Each screenshot must be 1280 x 720 pixels in size and in PNG format. Each screenshot must include a caption. Add a caption by selecting the pencil icon that appears after uploading an image.

Videos

Add up to five videos that demonstrate your offer. The videos should be hosted on an external video service (YouTube or Vimeo only). Enter each video's Name, Link, and a Thumbnail of the video as a 1280 x 720 pixel PNG image.

For additional marketplace listing resources, see Best practices for marketplace offer listings.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Preview audience**.

Next steps

- Create a preview audience

Add a preview audience for a virtual machine offer

11/22/2021 • 2 minutes to read • Edit Online

On the **Preview audience** page (select from the left-nav menu in Partner Center), configure a limited *Preview audience* to be authorized to validate your offer before publishing it live to the broader commercial marketplace audience. When you publish your offer, preview links will be made available to the members of the preview audience that you specified. Only the preview audience you configure will be able to access the preview links and verify the details of your offer preview before you sign off to **Go live**.

Preview links are not available for hidden plans. For hidden plans, the preview audience can test the offer via the command prompt.

Your preview audience is identified by **Azure subscription IDs**, along with an optional **Description** for each. Neither of these fields can be seen by customers. You can find your Azure subscription ID on the **Subscriptions** page in the Azure portal.

Add at least one Azure subscription ID, either individually or by uploading a CSV file. If your offer is already live, you can still modify the preview audience for testing changes or updates to your offer.

> **IMPORTANT**
> Any changes made to the preview audience for your offer must be saved and will only take effect after you republish your offer.

> **NOTE**
> A preview audience differs from a private audience. A preview audience is a list of subscription IDs that can test and validate your offer. This includes any private plans, before they are made available to your users. In contrast, when making an offer private, you need to specify a private audience to restrict visibility of your offer to customers of your choosing. A private audience (defined on the **Pricing and Availability** page for each of your plans) is a list of subscription IDs and/or tenant IDs that will have access to a particular plan after the offer is live.

After configuring the preview audience, select **Save draft** before continuing to the next tab in the left-nav menu, **Plan overview**.

Next steps

- Create plans

Create plans for a virtual machine offer

11/22/2021 • 13 minutes to read • Edit Online

On the **Plan overview** page (select from the left-nav menu in Partner Center) you can provide a variety of plan options within the same offer. An offer requires at least one plan (formerly called a SKU), which can vary by monetization audience, Azure region, features, or VM images.

You can create up to 100 plans for each offer and up to 45 of these plans can be private. Learn more about private plans in Private offers in the Microsoft commercial marketplace.

After you create your plans, select the **Plan overview** tab to display:

- Plan names
- License models
- Audience (public or private)
- Current publishing status
- Available actions

The actions available on this pane vary depending on the current status of your plan.

- If the plan status is a draft, select **Delete draft**.
- If the plan status is published live, select **Deprecate plan** or **Sync private audience**.

Create a new plan

Select **+ Create new plan** at the top.

In the **New plan** dialog box, enter a unique **Plan ID** for each plan in this offer. This ID will be visible to customers in the product web address. Use only lowercase letters and numbers, dashes, or underscores, and a maximum of 50 characters.

> **NOTE**
>
> The plan ID can't be changed after you select **Create**.

Enter a **Plan name**. Customers see this name when they're deciding which plan to select within your offer. Create a unique name that clearly points out the differences between plans. For example, you might enter **Windows Server** with *Pay-as-you-go*, *BYOL*, *Advanced*, and *Enterprise* plans.

Select **Create**. The **Plan setup** page appears.

Plan setup

Set the high-level configuration for the type of plan, specify whether it reuses a technical configuration from another plan, and identify the Azure regions where the plan should be available. Your selections here determine which fields are displayed on other panes for the same plan.

Azure regions

Your plan must be made available in at least one Azure region.

Select **Azure Global** to make your plan available to customers in all Azure Global regions that have commercial marketplace integration. For more information, see Geographic availability and currency support.

Select **Azure Government** to make your plan available in the Azure Government region. This region provides controlled access for customers from US federal, state, local, or tribal entities, and for partners who are eligible to serve them. You, as the publisher, are responsible for any compliance controls, security measures, and best practices. Azure Government uses physically isolated datacenters and networks (located in the US only).

Before you publish to Azure Government, test and validate your plan in the environment, because certain endpoints may differ. To set up and test your plan, request a trial account from the Microsoft Azure Government trial page.

> **NOTE**
> After your plan is published and available in a specific Azure region, you can't remove that region.

Azure Government certifications

This option is visible only if you selected **Azure Government** as the Azure region in the preceding section.

Azure Government services handle data that's subject to certain government regulations and requirements. For example, FedRAMP, NIST 800.171 (DIB), ITAR, IRS 1075, DoD L4, and CJIS. To bring awareness to your certifications for these programs, you can provide up to 100 links that describe them. These can be either links to your listing on the program directly or links to descriptions of your compliance with them on your own websites. These links are visible to Azure Government customers only.

Select **Save draft** before continuing to the next tab in the left-nav Plan menu, **Plan listing**.

Plan listing

Configure the listing details of the plan. This pane displays specific information, which can differ from other plans in the same offer.

Plan name

This field is automatically filled with the name that you gave your plan when you created it. This name appears on Azure Marketplace as the title of this plan. It is limited to 100 characters.

Plan summary

Provide a short summary of your plan, not the offer. This summary is limited to 100 characters.

Plan description

Describe what makes this software plan unique, and describe any differences between plans within your offer. Describe the plan only, not the offer. The plan description can contain up to 2,000 characters.

Select **Save draft** before continuing to the next tab in the left-nav Plan menu, **Pricing and availability**.

Pricing and availability

On this pane, you configure:

- Markets where this plan is available. Every plan must be available in at least one market.
- The price per hour.
- Whether to make the plan visible to everyone or only to specific customers (a private audience).

Markets

Every plan must be available in at least one market. Most markets are selected by default. To edit the list, select **Edit markets** and select or clear check boxes for each market location where this plan should (or shouldn't) be available for purchase. Users in selected markets can still deploy the offer to all Azure regions selected in the "Plan setup" section.

Select **Select only Microsoft Tax Remitted** to select only countries/regions in which Microsoft remits sales and use tax on your behalf. Publishing to China is limited to plans that are either *Free* or *Bring-your-own-license* (BYOL).

If you've already set prices for your plan in US dollar (USD) currency and add another market location, the price for the new market is calculated according to current exchange rates. Always review the price for each market before you publish. Review your pricing by selecting **Export prices (xlsx)** after you save your changes.

When you remove a market, customers from that market who are using active deployments will not be able to create new deployments or scale up their existing deployments. Existing deployments are not affected.

Select **Save** to continue.

Pricing

For the **License model**, select **Usage-based monthly billed plan** to configure pricing for this plan, or **Bring your own license** to let customers use this plan with their existing license.

For a usage-based monthly billed plan, Microsoft will charge the customer for their hourly usage and they are billed monthly. This is our *Pay-as-you-go* plan, where customers are only billed for the hours that they've used. When you select this plan, choose one of the following pricing options:

- **Free** – Your VM offer is free.
- **Flat rate (recommended)** – Your VM offer is the same hourly price regardless of the hardware it runs on.
- **Per core** – Your VM offer pricing is based on per CPU core count. You provide the price for one CPU core and we'll increment the pricing based on the size of the hardware.
- **Per core size** – Your VM offer is priced based on the number of CPU cores on the hardware it's deployed on.
- **Per market and core size** – Assign prices based on the number of CPU cores on the hardware it's deployed on, and also for all markets. Currency conversion is done by you, the publisher. This option is easier if you use the import pricing feature.

For **Per core size** and **Per market and core size**, enter a **Price per core**, and then select **Generate prices**. The tables of price/hour calculations are populated for you. You can then adjust the price per core, if you choose. If using the *Per market and core size* pricing option, you can additionally customize the price/hour calculation tables for each market that's selected for this plan.

> **NOTE**
> To ensure that the prices are right before you publish them, export the pricing spreadsheet and review the prices in each market. Before you export pricing data, first select **Save draft** near the bottom of the page to save pricing changes.

Some things to consider when selecting a pricing option:

- For the first four options, Microsoft does the currency conversion.
- Microsoft suggests using a flat rate pricing for software solutions.
- Prices are fixed, so once the plan is published the prices cannot be adjusted. However, if you would like to reduce prices for your VM offers you can open a support ticket.

Free Trial

You can offer a one-month, three-month, or six-month **Free Trial** to your customers.

Plan visibility

You can design each plan to be visible to everyone or only to a preselected audience. Assign memberships in this restricted audience by using Azure tenant IDs, subscription IDs, or both.

Public: Your plan can be seen by everyone.

Private: Make your plan visible only to a preselected audience. After it's published as a private plan, you can update the audience or change it to public. After you make a plan public, it must remain public. It can't be changed back to a private plan.

Assign the audience that will have access to this private plan using *Azure tenant IDs*, *subscription IDs*, or both. Optionally, include a **Description** of each Azure tenant ID or subscription ID that you assign. Add up to 10 subscription IDs and tenant IDs manually or import a CSV spreadsheet if more than 10 IDs are required.

> **NOTE**
>
> A private or restricted audience is different from the preview audience that you defined on the **Preview** pane. A preview audience can access your offer *before* it's published live to Azure Marketplace. Although the private audience choice applies only to a specific plan, the preview audience can view all private and public plans for validation purposes.

Private offers are not supported with Azure subscriptions established through a reseller of the Cloud Solution Provider program (CSP).

Hide plan

If your virtual machine is meant to be used only indirectly when it's referenced through another solution template or managed application, select this check box to publish the virtual machine but hide it from customers who might be searching or browsing for it directly.

Any Azure customer can deploy the offer using either PowerShell or CLI. If you wish to make this offer available to a limited set of customers, then set the plan to **Private**.

Hidden plans do not generate preview links. However, you can test them by following these steps.

Select **Save draft** before continuing to the next tab in the left-nav Plan menu, **Technical configuration**.

Technical configuration

Provide the images and other technical properties associated with this plan.

Reuse technical configuration

This option lets you use the same technical configuration settings across plans within the same offer and therefore leverage the same set of images. If you enable the *reuse technical configuration* option, your plan will inherit the same technical configuration settings as the base plan you select. When you change the base plan, the changes are reflected on the plan reusing the configuration.

Some common reasons for reusing the technical configuration settings from another plan include:

1. The same images are available for both *Pay as you go* and *BYOL*.
2. To reuse the same technical configuration from a public plan for a private plan with a different price.
3. Your solution behaves differently based on the plan the user chooses to deploy. For example, the software is the same, but features vary by plan.

Leverage Azure Instance Metadata Service (IMDS) to identify which plan your solution is deployed within to validate license or enabling of appropriate features.

If you later decide to publish different changes between your plans, you can detach them. Detach the plan reusing the technical configuration by deselecting this option with your plan. Once detached, your plan will carry the same technical configuration settings at the place of your last setting and your plans may diverge in configuration. A plan that has been published independently in the past cannot reuse a technical configuration later.

Operating system

Select the **Windows** or **Linux** operating system family.

Select the Windows **Release** or Linux **Vendor**.

Enter an **OS friendly name** for the operating system. This name is visible to customers.

Recommended VM sizes

Select the link to choose up to six recommended virtual machine sizes to display on Azure Marketplace.

Open ports

Add open public or private ports on a deployed virtual machine.

Properties

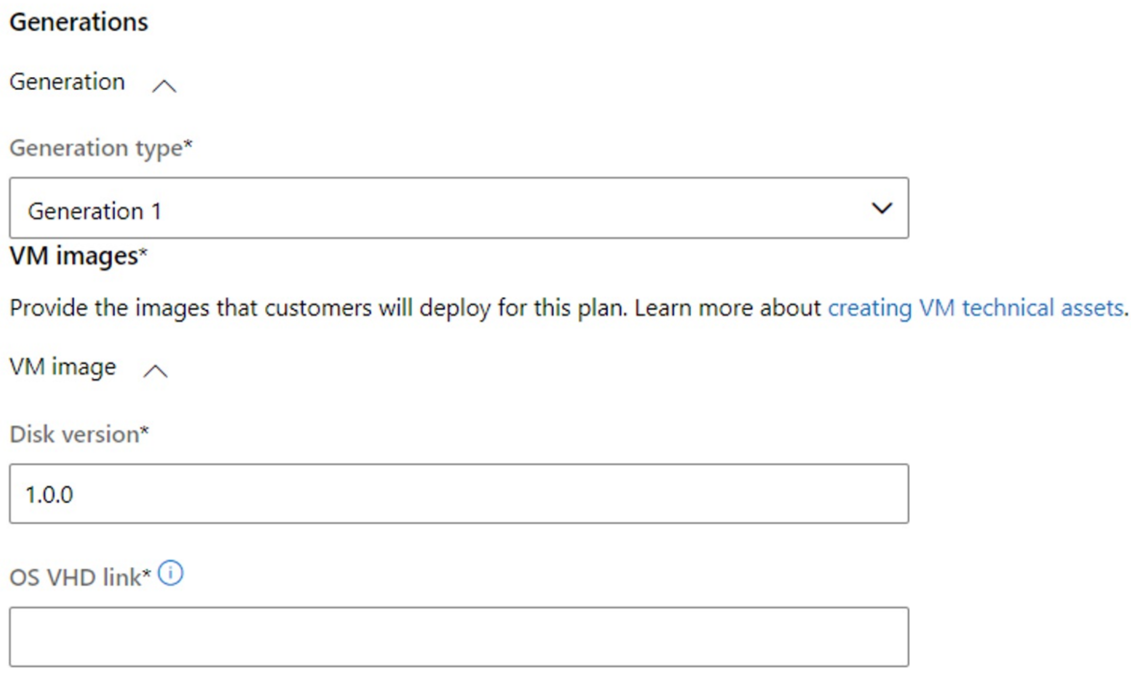
Here is a list of properties that can be selected for your VM.

- **Supports backup**: Enable this property if your images support Azure VM backup. Learn more about Azure VM backup.
- **Supports accelerated networking**: Enable this property if the VM images for this plan support single root I/O virtualization (SR-IOV) to a VM, enabling low latency and high throughput on the network interface. Learn more about accelerated networking.
- **Supports cloud-init configuration**: Enable this property if the images in this plan support cloud-init post deployment scripts. Learn more about cloud-init configuration.
- **Supports hotpatch**: Windows Server Azure Editions supports Hot Patch. Learn more about Hot Patch.
- **Supports extensions**: Enable this property if the images in this plan support extensions. Extensions are small applications that provide post-deployment configuration and automation on Azure VMs. Learn more about Azure virtual machine extensions.
- **Is a network virtual appliance**: Enable this property if this product is a Network Virtual Appliance. A network virtual appliance is a product that performs one or more network functions, such as a Load Balancer, VPN Gateway, Firewall or Application Gateway. Learn more about network virtual appliances.
- **Remote desktop or SSH disabled**: Enable this property if virtual machines deployed with these images don't allow customers to access it using Remote Desktop or SSH. Learn more about locked VM images.
- **Requires custom ARM template for deployment**: Enable this property if the images in this plan can only be deployed using a custom ARM template. To learn more see the Custom templates section of Troubleshoot virtual machine certification.

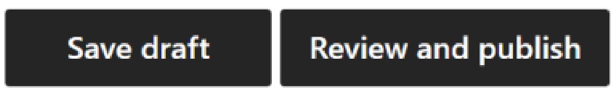
Generations

Generating a virtual machine defines the virtual hardware it uses. Based on your customer's needs, you can publish a Generation 1 VM, Generation 2 VM, or both.

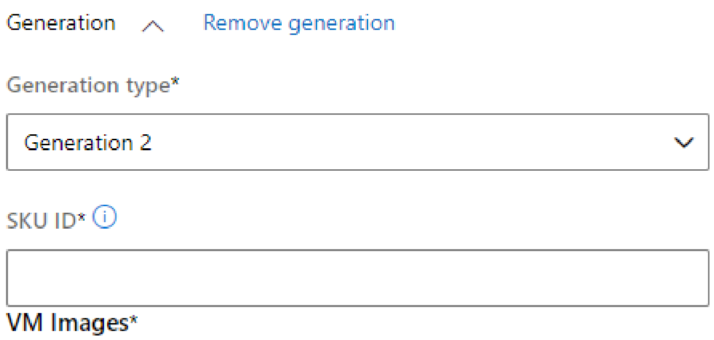
1. When creating a new offer, select a **Generation type** and enter the requested details:



2. To add another generation to a plan, select **Add generation**...



...and enter the requested details:



3. To update an existing VM that has a Generation 1 already published, edit details on the **Technical configuration** page.

To learn more about the differences between Generation 1 and Generation 2 capabilities, see Support for generation 2 VMs on Azure.

> **NOTE**
>
> A published generation requires at least one image version to remain available for customers. To remove the entire plan (along with all its generations and images), select **Deprecate plan** on the **Plan Overview** page (see first section in this article).

VM images

Provide a disk version and the shared access signature (SAS) URI for the virtual machine images. Add up to 16 data disks for each VM image. Provide only one new image version per plan in a specified submission. After an image has been published, you can't edit it, but you can delete it. Deleting a version prevents both new and existing users from deploying a new instance of the deleted version.

These two required fields are shown in the prior image above:

- **Disk version**: The version of the image you are providing.
- **OS VHD link**: The image stored in Azure Compute Gallery (formerly know as Shared Image Gallery). Learn how to capture your image in an Azure Compute Gallery.

Data disks (select **Add data disk (maximum 16)**) are also VHD shared access signature URIs that are stored in their Azure storage accounts. Add only one image per submission in a plan.

Regardless of which operating system you use, add only the minimum number of data disks that the solution requires. During deployment, customers can't remove disks that are part of an image, but they can always add disks during or after deployment.

> **NOTE**
>
> If you provide your images using SAS and have data disks, you also need to provide them as SAS URI. If you are using a shared image, they are captured as part of your image in Azure Compute Gallery. Once your offer is published to Azure Marketplace, you can delete the image from your Azure storage or Azure Compute Gallery.

Select **Save draft**, then select **← Plan overview** at the top left to see the plan you just created.

Once your VM image has published, you can delete the image from your Azure storage.

Next steps

- Resell through CSPs

Resell your offer through CSP

11/22/2021 • 2 minutes to read • Edit Online

Enabling this option allows partners who are part of the Microsoft Cloud Solution Providers (CSP) program to resell your VM as part of a bundled offer. All Bring-your-own-license (BYOL) plans are automatically opted into the program. You can also choose to opt in your non-BYOL plans. For more information, see Cloud Solution Provider program.

Resell through CSP

On the **Resell through CSPs** page of your offer, you can expand the reach of your offer by making it available to partners in the Cloud Solution Provider (CSP) program.

1. Select which partners can resell your offer:
   - Any partner in the CSP program
   - Specific partners in the CSP program I select
   - No partners in the CSP program
2. Select **Save draft** before continuing.
3. If you chose to offer a test drive with this offer, in the left-nav menu, select **Test drive**. Otherwise, select **Review and publish**.

Next steps

- Configure a VM test drive. This optional feature is only available if you selected the **Test drive** check box on the Offer setup page.
- If you don't want to set up a test drive, it's time to review and publish your offer.

Configure a VM test drive

11/22/2021 • 6 minutes to read • Edit Online

A test drive lets customers try your offer prior to purchase by giving them access to a preconfigured environment for a fixed number of hours, resulting in highly qualified leads and an increased conversion rate.

For VM offers, Azure Resource Manager (ARM) deployment is the **only** test drive option available. The deployment template must contain all the Azure resources that comprise your solution.

To see the **Test drive** tab in left-nav menu, select the **Test drive** check box on the Offer setup page and connect to your CRM system. After you select **Save**, the **Test drive** tab appears with two sub-tabs:

- **Technical configuration** – Configure your test drive and provide your ARM template (next section below).
- **Marketplace listing** – Provide additional details of your listing and supplemental resources for your customers, such as user manuals and videos.

Technical configuration

Regions

Select **Edit regions** and select the check box for each region in which you want the test drive to be available. Or, at the top right, use the **Select all** or **Unselect all** links as appropriate. For best performance, choose only the regions where you expect the largest number of customers to be located, and ensure your subscription is allowed to deploy all needed resources there. When you've finished selecting regions, select **Save**.

Instances

Enter values between 0-99 in the boxes to indicate how many of Hot, Warm, or Cold instances you want available per region. The number of each instance type you specify will be multiplied by the number of regions where your offer is available.

- **Hot** – Pre-deployed instances that are always running and ready for your customers to instantly access (< 10 seconds acquisition time) rather than having to wait for a deployment. Since most customers don't want to wait for a full deployment, we recommended having at least one Hot instance, otherwise you may experience reduced customer usage. Since hot instances are always running on your Azure subscription, they incur a larger uptime cost.
- **Warm** – Pre-deployed instances that are then put in storage. Less expensive than hot instances while still being quick to reboot for your customers (3-10 minutes acquisition time).
- **Cold** – Instances that require the test drive ARM template to be deployed when requested by each customer. Cold instances are much slower to load relative to Hot and Warm instances. The wait time varies greatly based on the resources required (up to 1.5 hours). Cold instances are more cost-effective for you since the cost is only for the test drive duration, compared to always running on your Azure subscription as with a Hot instance.

Technical configuration of ARM template

The ARM template for your test drive is a coded container of all the Azure resources that comprise your solution. To create the ARM deployment template you'll need for your test drive, see Azure Resource Manager test drive. Once your template is complete, return here to learn how to uploaded your ARM template and complete the configuration.

To publish successfully, it is important to validate the formatting of the ARM template. Two ways to do this are by using an online API tool or with a test deployment. Once you are ready to upload your template, drag .zip file into the area indicated, or **Browse** for the file.

Enter a **Test drive duration**, in hours. This is the number of hours the test drive will stay active. The test drive terminates automatically after this time period ends.

Deployment subscription details

For Microsoft to deploy the test drive on your behalf, connect to your Azure Subscription and Azure Active Directory (AAD) by completing the steps below, then select **Save draft**.

1. **Azure subscription ID** – This grants access to Azure services and the Azure portal. The subscription is where resource usage is reported and services are billed. Consider creating a separate Azure subscription to use for test drives if you don't have one already. You can find your Azure subscription ID by signing into the Azure portal and searching *Subscriptions* in the search bar.

2. **Azure AD tenant ID** – Enter your Azure Active Directory (AD) tenant ID by going to **Azure Active Directory** > **Properties** > **Directory ID** within the Azure portal. If you don't have a tenant ID, create a new one in Azure Active Directory. For help with setting up a tenant, see Quickstart: Set up a tenant.

3. Before proceeding with the other fields, provision the Microsoft Test-Drive application to your tenant. We will use this application to perform operations on your test drive resources.

   a. If you don't have it yet, install the Azure Az PowerShell module.

   b. Add the Service Principal for Microsoft Test-Drive application.

      a. Run `Connect-AzAccount` and provide credentials to sign in to your Azure account, which requires the Azure active directory **Global Administrator** built-in role.

      b. Create a new service principal:

      ```
      New-AzADServicePrincipal -ApplicationId d7e39695-0b24-441c-a140-047800a05ede -DisplayName
      'Microsoft TestDrive' -SkipAssignment
      ```

      .

      c. Ensure the service principal has been created:

      `Get-AzADServicePrincipal -DisplayName 'Microsoft TestDrive'`.

      ```
      PS C:\Users\aahitman> Get-AzADServicePrincipal -DisplayName 'Microsoft TestDrive'


      ServicePrincipalNames : {d7e39695-0b24-441c-a140-047800a05ede}
      ApplicationId         : d7e39695-0b24-441c-a140-047800a05ede
      ObjectType            : ServicePrincipal
      DisplayName           : Microsoft TestDrive
      Id                    : c2c338e6-330c-440f-8c3c-64d1128d674f
      Type                  :
      ```

4. **Azure AD App ID** - After provisioning the Microsoft Test-Drive application to your tenant, then paste in this Application ID: `d7e39695-0b24-441c-a140-047800a05ede`.

5. **Azure AD app client secret** – No secret is required. Insert a dummy secret, such as "no-secret".

6. Since we are using the application to deploy to the subscription, we need to add the application as a contributor on the subscription. Do this using either the Azure portal or PowerShell:

   Method 1: Azure portal

   a. Select the Subscription being used for the test drive.

   b. Select **Access control (IAM)**.

   c. Select the **Role assignments** tab within the main window, then **+Add** and select **+ Add role assignment** from the drop-down menu.

   d. Enter this Azure AD application name: `Microsoft TestDrive`. Select the application to which you want to assign the **Contributor** role.

   e. Select **Save**.

   Method 2: PowerShell

   a. Run this to get the ServicePrincipal object-id:

`(Get-AzADServicePrincipal -DisplayName 'Microsoft TestDrive').id`.

b. Run this with the ObjectId and subscription ID:

```
New-AzRoleAssignment -ObjectId <objectId> -RoleDefinitionName Contributor -Scope /subscriptions/<subscriptionId>
```

.

Complete your test drive solution by continuing to the next **Test drive** tab in the left-nav menu, **Marketplace listing**.

Marketplace listing

Provide additional details of your listing and resources for your customers.

Description – Describe your test drive, what will be demonstrated, features to explore, objectives for the user to experiment with, and other relevant information to help them determine if your offer is right for them (up to 3,000 characters).

Access information – Walk through a scenario for exactly what the customer needs to know to access and use the features throughout the test drive (up to 10,000 characters).

User Manual – Describe your test drive experience in detail. The manual should cover exactly what you want the customer to gain from experiencing the test drive and serve as a reference for questions. It must be in PDF format with a name less than 255 characters in length.

Test drive demo video (optional) – Reference a video hosted elsewhere with a link and thumbnail image. Videos are a great way to help customers better understand the test drive, including how to successfully use the features of your offer and understand scenarios that highlight their benefits. Select **Add video** and include the following information:

- **Name**
- **URL** – YouTube or Vimeo only
- **Thumbnail** – Image must be in PNG format, 533x324 pixels.

Select **Save draft** before continuing with **Next steps** below.

Next steps

- Review and publish your offer

Create a virtual machine using an approved base

11/22/2021 • 5 minutes to read • Edit Online

This article describes how to use Azure to create a virtual machine (VM) containing a pre-configured, endorsed operating system. If this isn't compatible with your solution, it's possible to create and configure an on-premises VM using an approved operating system.

> **NOTE**
>
> Before you start this procedure, review the technical requirements for Azure VM offers, including virtual hard disk (VHD) requirements.

Select an approved base Image

Select one of the following Windows or Linux images as your base.

Windows

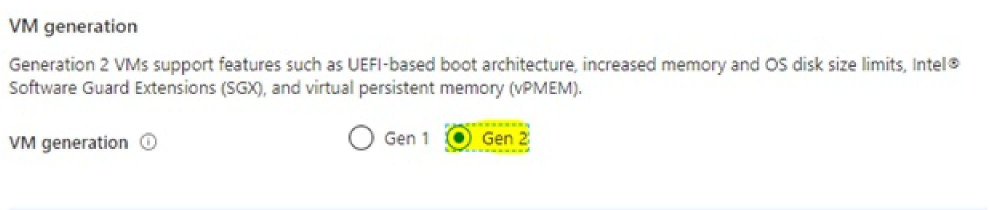
- Windows Server
- SQL Server 2019, 2014, 2012

Linux

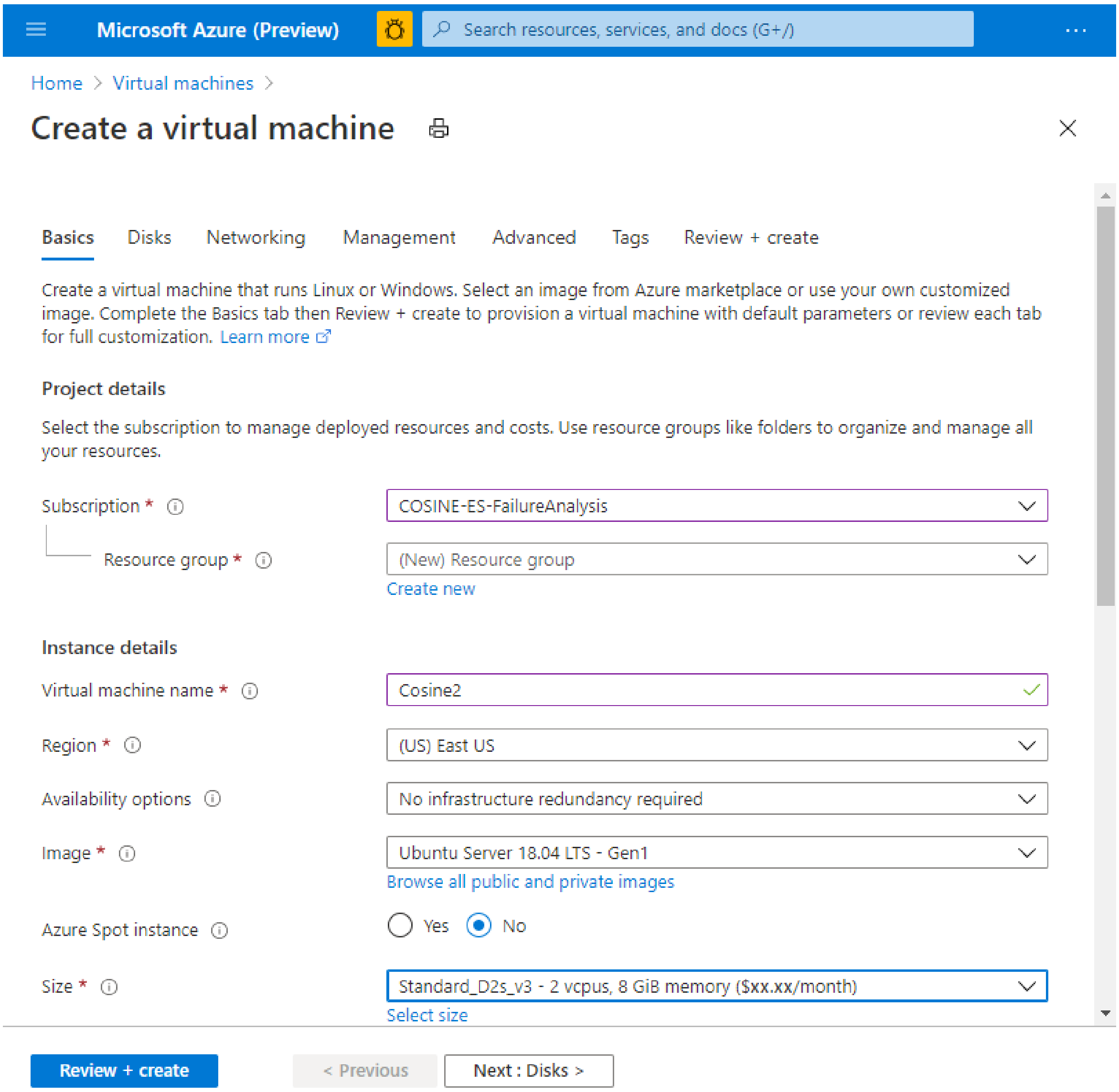
Azure offers a range of approved Linux distributions. For a current list, see Linux on distributions endorsed by Azure.

Create VM on the Azure portal

1. Sign in to the Azure portal.
2. Select **Virtual machines**.
3. Select **+ Add** to open the **Create a virtual machine** screen.
4. Select the image from the dropdown list or select **Browse all public and private images** to search or browse all available virtual machine images.
5. To create a **Gen 2** VM, go to the **Advanced** tab and select the **Gen 2** option.

6. Select the size of the VM to deploy.



7. Provide the other required details to create the VM.

8. Select **Review + create** to review your choices. When the **Validation passed** message appears, select **Create**.

Azure begins provisioning the virtual machine you specified. Track its progress by selecting the **Virtual Machines** tab in the left menu. After it's created, the status of Virtual Machine changes to **Running**.

Configure the VM

This section describes how to size, update, and generalize an Azure VM. These steps are necessary to prepare your VM to be deployed on Azure Marketplace.

Connect to your VM

Refer to the following documentation to connect to your Windows or Linux VM.

Install the most current updates

The base images of operating system VMs must contain the latest updates up to their published date. Before publishing, ensure you updated the OS and all installed services with all the latest security and maintenance patches.

- For Windows Server, run the Check for Updates command.
- For Linux distributions, updates are commonly downloaded and installed through a command-line tool or a graphical utility. For example, Ubuntu Linux provides the apt-get command and the Update Manager tool for

updating the OS.

Perform additional security checks

Maintain a high level of security for your solution images in Azure Marketplace. For a checklist of security configurations and procedures, see Security Recommendations for Azure Marketplace Images.

Perform custom configuration and scheduled tasks

If you need additional configuration, use a scheduled task that runs at startup to make final changes to the VM after it has been deployed. Also consider the following:

- If it is a run-once task, the task should delete itself after it successfully completes.
- Configurations should not rely on drives other than C or D, because only these two drives are always guaranteed to exist (drive C is the operating system disk and drive D is the temporary local disk).

For more information about Linux customizations, see Virtual machine extensions and features for Linux.

Generalize the image

All images in Azure Marketplace must be reusable in a generic fashion. To achieve this, the operating system VHD must be generalized, an operation that removes all instance-specific identifiers and software drivers from a VM.

For Windows

Windows OS disks are generalized with the sysprep tool. If you later update or reconfigure the OS, you must run sysprep again.

> **WARNING**
>
> After you run sysprep, turn the VM off until it's deployed because updates may run automatically. This shutdown will avoid subsequent updates from making instance-specific changes to the operating system or installed services. For more information about running sysprep, see Generalize a Windows VM.

For Linux

1. Remove the Azure Linux agent.
   a. Connect to your Linux VM using an SSH client.
   b. In the SSH window, enter this command: `sudo waagent –deprovision+user`.
   c. Type Y to continue (you can add the -force parameter to the previous command to avoid the confirmation step).
   d. After the command completes, enter **Exit** to close the SSH client.
2. Stop virtual machine.
   a. In the Azure portal, select your resource group (RG) and de-allocate the VM.
   b. Your VM is now generalized and you can create a new VM using this VM disk.

Capture image

> **NOTE**
>
> The Azure subscription containing the Azure Compute Gallery must be under the same tenant as the publisher account in order to publish. Also, the publisher account must have at least Contributor access to the subscription containing Azure Compute Gallery.

Once your VM is ready, you can capture it in an Azure Compute Gallery (formerly know as Shared Image Gallery). Follow the below steps to capture:

1. On Azure portal, go to your Virtual Machine's page.
2. Select **Capture**.
3. Under **Share image to Azure Compute Gallery**, select **Yes, share it to a gallery as an image version**.
4. Under **Operating system state** select Generalized.
5. Select a Target image gallery or **Create New**.
6. Select a Target image definition or **Create New**.
7. Provide a **Version number** for the image.
8. Select **Review + create** to review your choices.
9. Once the validation is passed, select **Create**.

Set the right permissions

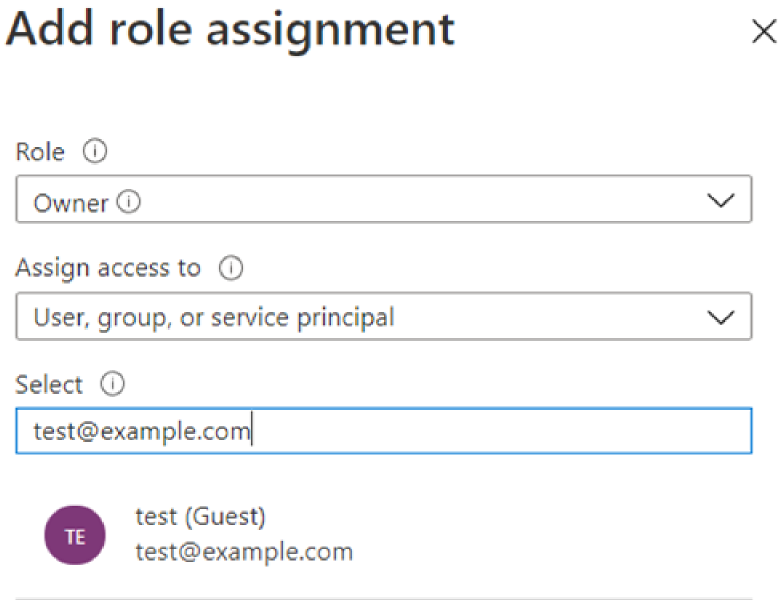
If your Partner Center account is the owner of the subscription hosting an Azure Compute Gallery, nothing further is needed for permissions.

If you only have read access to the subscription, use one of the following two options.

Option one – Ask the owner to grant owner permission

Steps for the owner to grant owner permission:

1. Go to the Azure Compute Gallery.
2. Select **Access control** (IAM) on the left panel.
3. Select **Add**, then **Add role assignment**.



4. For **Role**, select **Owner**.
5. For **Assign access to**, select **User, group, or service principal**.
6. For **Select**, enter the Azure email of the person who will publish the image.
7. Select **Save**.

Option Two – Run a command

Ask the owner to run either one of these commands (in either case, use the SusbscriptionId of the subscription where you created the Azure Compute Gallery).

```
az login
az provider register --namespace Microsoft.PartnerCenterIngestion --subscription {subscriptionId}
```

```
Connect-AzAccount
Select-AzSubscription -SubscriptionId {subscriptionId}
Register-AzResourceProvider -ProviderNamespace Microsoft.PartnerCenterIngestion
```

NOTE

You don’t need to generate SAS URIs as you can now publish an Azure Compute Gallery Image on Partner Center. However, if you still need to refer to the SAS URI generation steps, see How to generate a SAS URI for a VM image.

Next steps

- Recommended next step: Test your VM image to ensure it meets Azure Marketplace publishing requirements. This is optional.
- If you don't want to test your VM image, sign in to Partner Center to publish your image.
- If you encountered difficulty creating your new Azure-based VHD, see VM FAQ for Azure Marketplace.

Create a virtual machine using your own image

11/22/2021 • 2 minutes to read • Edit Online

This article describes how to publish a virtual machine (VM) image that you built on your premises.

Bring your image into Azure

Upload your VHD to an Azure Compute Gallery (formerly know as Shared Image Gallery).

1. On the Azure portal, search for **Azure Compute Galleries**.
2. Create or use an existing Azure Compute Gallery. We suggest you create a separate Azure Compute Gallery for images being published to the Marketplace.
3. Create or use an existing image definition.
4. Select **Create a version**.
5. Choose the region and image version.
6. If your VHD is not yet uploaded to Azure portal, choose **Storage blobs (VHDs)** as the **Source**, then **Browse**. You can create a **storage account** and **storage container** if you haven't created one before. Upload your VHD.
7. Select **Review + create**. Once validation finishes, select **Create**.

> **TIP**
>
> Publisher account must have "Owner" access to publish the Azure Compute Gallery Image. If required, follow the steps in the following section, **Set the right permissions**, to grant access.

Set the right permissions

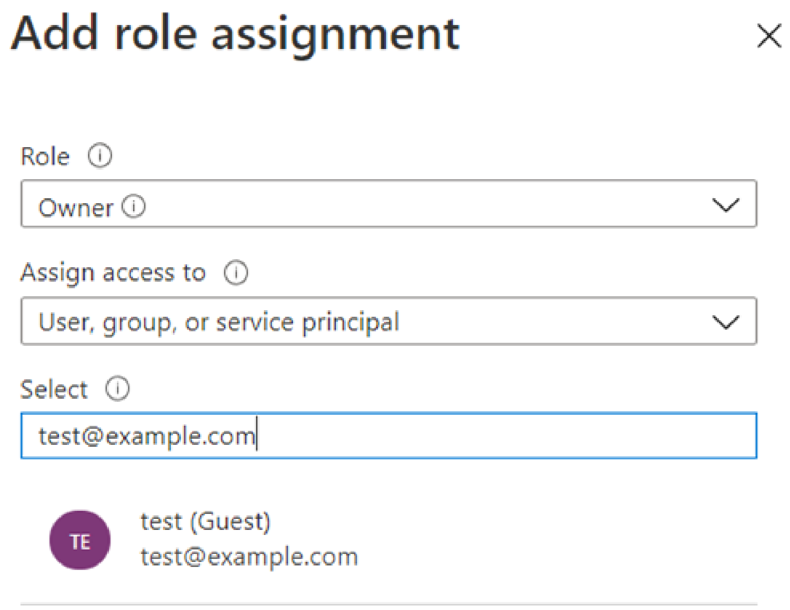
If your Partner Center account is the owner of the subscription hosting Azure Compute Gallery, nothing further is needed for permissions.

If you only have read access to the subscription, use one of the following two options.

Option one – Ask the owner to grant owner permission

Steps for the owner to grant owner permission:

1. Go to the Azure Compute Gallery.
2. Select **Access control** (IAM) on the left panel.
3. Select **Add**, then **Add role assignment**.



4. For **Role**, select **Owner**.
5. For **Assign access to**, select **User, group, or service principal**.
6. For **Select**, enter the Azure email of the person who will publish the image.
7. Select **Save**.

Option Two – Run a command

Ask the owner to run either one of these commands (in either case, use the SusbscriptionId of the subscription where you created the Azure Compute Gallery).

```
az login
az provider register --namespace Microsoft.PartnerCenterIngestion --subscription {subscriptionId}
```

```
Connect-AzAccount
Select-AzSubscription -SubscriptionId {subscriptionId}
Register-AzResourceProvider -ProviderNamespace Microsoft.PartnerCenterIngestion
```

> **NOTE**
>
> You don't need to generate SAS URIs as you can now publish an Azure Compute Gallery Image on Partner Center, without using APIs.
>
> If you *are* publishing using APIs, you would need to generate SAS URIs instead of using an Azure Compute Gallery, see How to generate a SAS URI for a VM image.

Next steps

- Test your VM image to ensure it meets Azure Marketplace publishing requirements (optional).
- If you don't want to test your VM image, sign in to Partner Center and publish the Azure Compute Gallery Image.
- If you encountered difficulty creating your new Azure-based VHD, see VM FAQ for Azure Marketplace.

Test a virtual machine image

11/22/2021 • 7 minutes to read • Edit Online

This topic will cover the steps to test a virtual machine (VM) image for deployment on Azure Marketplace.

Deploy an Azure VM

To deploy a VM from the Azure Compute Gallery (formerly know as Shared Image Gallery) image:

1. Navigate to the Azure Compute Gallery image version.
2. Select **Create VM**.
3. Provide a Virtual Machine Name and select a VM Size.
4. Select **Review + create**. Once validation is passed, select **Create**.

> **NOTE**
> If you need to create a VM from a vhd file, follow the instructions in the following articles, Prepare an Azure Resource Manager template or Deploy an Azure VM using PowerShell.

This article describes how to test and submit a virtual machine (VM) image in the commercial marketplace to ensure it meets the latest Azure Marketplace publishing requirements.

Complete these steps before submitting your VM offer:

- Deploy an Azure VM using your generalized image; see Create a virtual machine using an approved base or create a virtual machine using your own image.
- Run validations.

Run validations

There are two ways to run validations on the deployed image.

Use Certification Test Tool for Azure Certified

Download and run the certification test tool

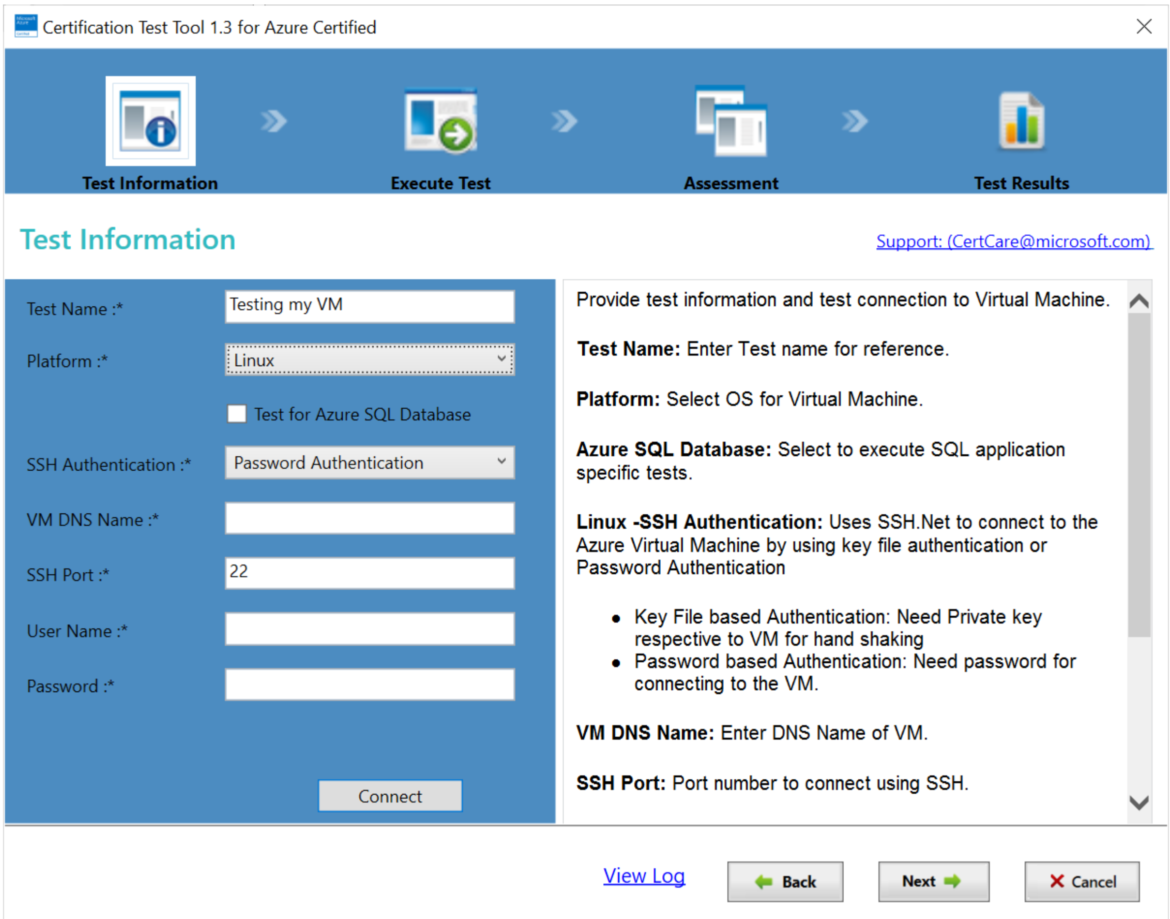
The Certification Test Tool for Azure Certified runs on a local Windows machine but tests an Azure-based Windows or Linux VM. It certifies that your user VM image can be used with Microsoft Azure and that the guidance and requirements around preparing your VHD have been met.

1. Download and install the most recent Certification Test Tool for Azure Certified.
2. Open the certification tool, then select **Start New Test**.
3. From the Test Information screen, enter a **Test Name** for the test run.
4. Select the Platform for your VM, either **Windows Server** or **Linux**. Your platform choice affects the remaining options.
5. If your VM is using this database service, select the **Test for Azure SQL Database** check box.

Connect the certification tool to a VM image

1. Select the SSH Authentication mode: Password Authentication or Key File Authentication.

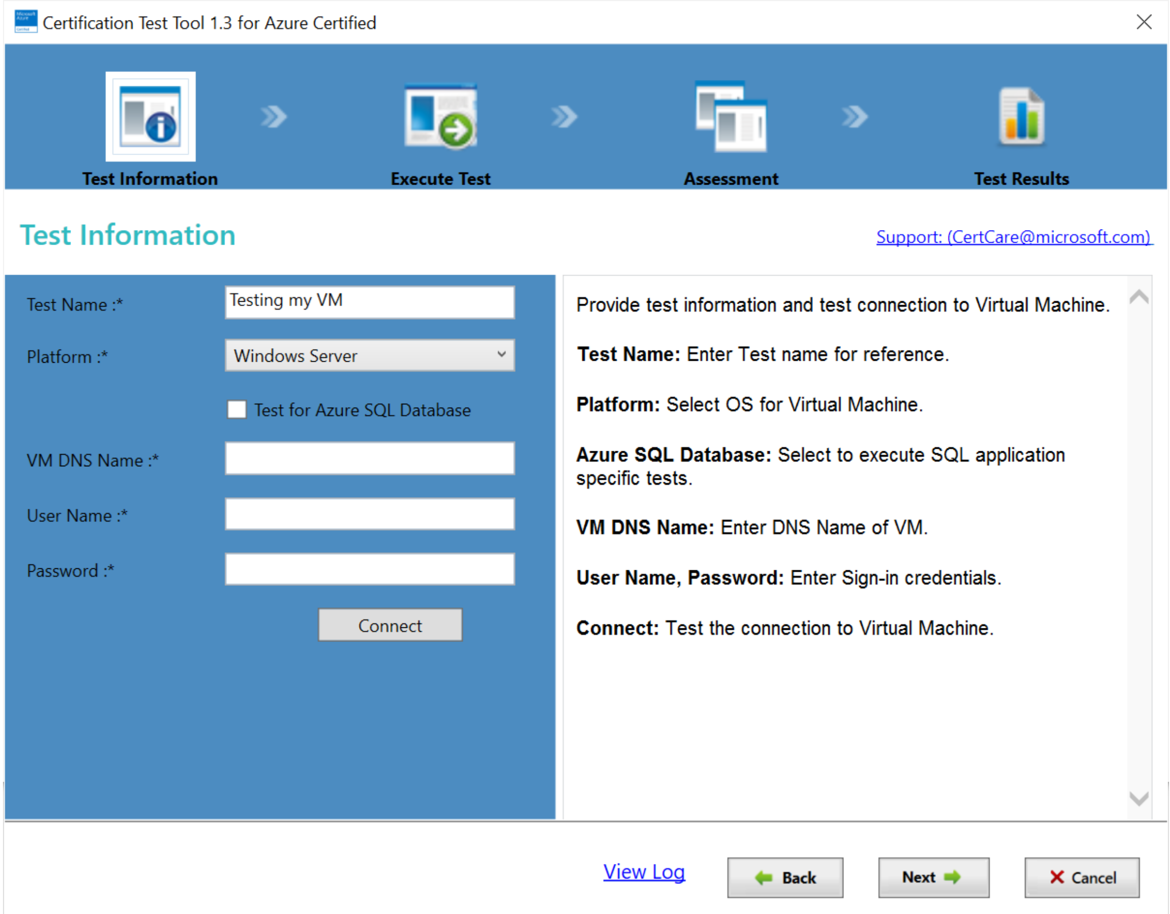
2. If using password-based authentication, enter values for the **VM DNS Name**, **User name**, and **Password**. You can also change the default SSH Port number.



3. If using key file-based authentication, enter values for the VM DNS Name, User name, and Private key location. You can also include a Passphrase or change the default SSH Port number.

4. Enter the fully qualified VM DNS name (for example, MyVMName.Cloudapp.net).

5. Enter **User Name** and **Password**.



6. Select **Next**.

Run a certification test

After you've given the parameter values for your VM image in the certification tool, select Test Connection to create a valid connection to your VM. After a connection is verified, select **Next** to start the test. When the test is complete, the results display in a table. The Status column shows (Pass/Fail/Warning) for each test. If any of the tests fail, your image is not certified. In this case, review the requirements and failure messages, make the suggested changes, and run the test again.

After the automated test completes, provide additional information about your VM image on the two tabs of the Questionnaire screen, General Assessment and Kernel Customization, and then select Next.

The last screen lets you provide more information, such as SSH access information for a Linux VM image, and an explanation for any failed assessments if you're looking for exceptions.

Finally, select Generate Report to download the test results and log files for the executed test cases along with your answers to the questionnaire.

> **NOTE**
>
> Few publishers have scenarios where VMs need to be locked as they have software such as firewalls installed on the VM. In this case, download the Certified Test Tool here and submit the report at Partner Center support.

How to use PowerShell to consume the Self-Test API

On Linux OS

Call the API in PowerShell:

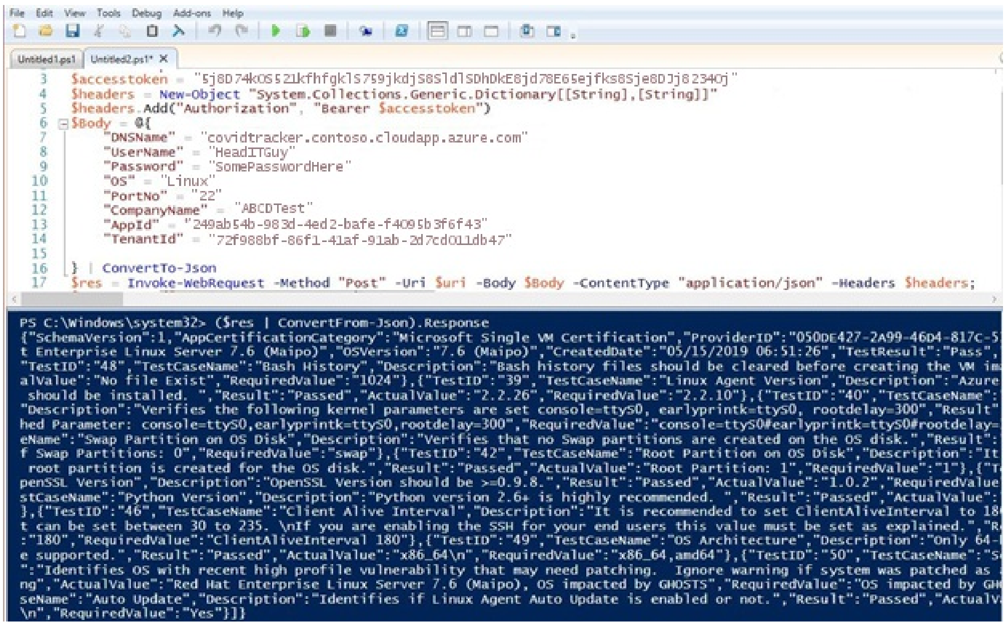
1. Use the Invoke-WebRequest command to call the API.
2. The method is Post and content type is JSON, as shown in the following code example and screen capture.

3. Specify the body parameters in JSON format.

This following example shows a PowerShell call to the API:

```
$accesstoken = "token"
$headers = @{ "Authorization" = "Bearer $accesstoken" }
$DNSName = "<Machine DNS Name>"
$UserName = "<User ID>"
$Password = "<Password>"
$OS = "Linux"
$PortNo = "22"
$CompanyName = "ABCD"
$AppID = "<Application ID>"
$TenantId = "<Tenant ID>"

$body = @{
   "DNSName" = $DNSName
   "UserName" = $UserName
   "Password" = $Password
   "OS" = $OS
   "PortNo" = $PortNo
   "CompanyName" = $CompanyName
   "AppID" = $AppID
   "TenantId" = $TenantId
} | ConvertTo-Json

$body

$uri = "URL"

$res = (Invoke-WebRequest -Method "Post" -Uri $uri -Body $body -ContentType "application/json" -Headers
$headers).Content
```

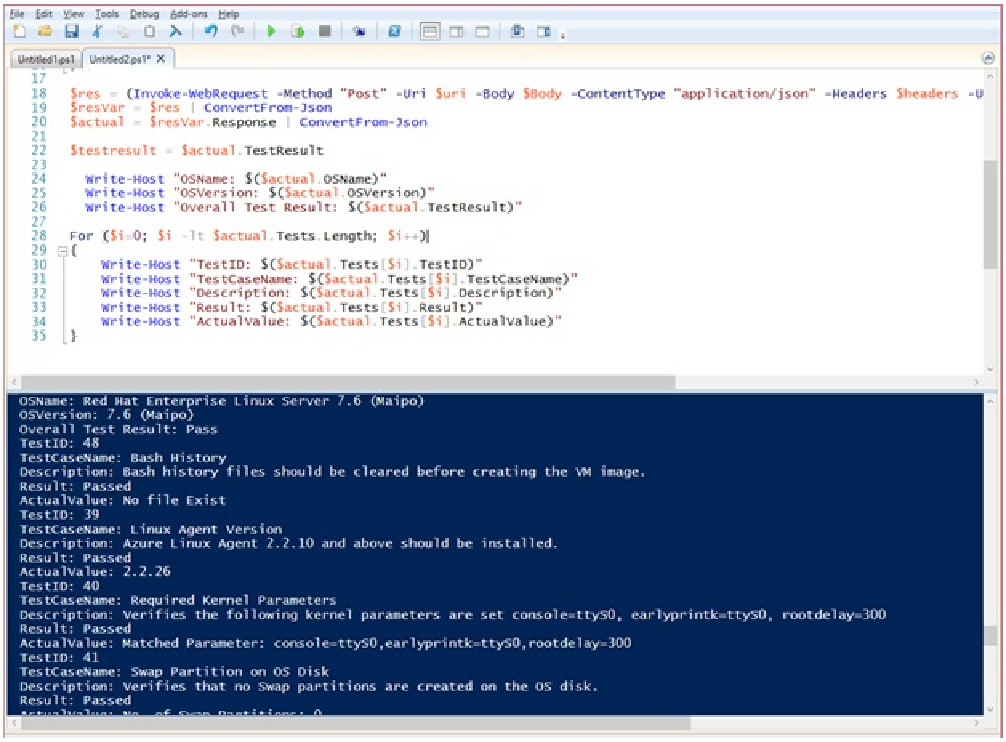
Here's an example of calling the API in PowerShell:



Using the previous example, you can retrieve the JSON and parse it to get the following details:

```
$resVar = $res | ConvertFrom-Json
$actualresult = $resVar.Response | ConvertFrom-Json

Write-Host "OSName: $($actualresult.OSName)"
Write-Host "OSVersion: $($actualresult.OSVersion)"
Write-Host "Overall Test Result: $($actualresult.TestResult)"

For ($i = 0; $i -lt $actualresult.Tests.Length; $i++) {
   Write-Host "TestID: $($actualresult.Tests[$i].TestID)"
   Write-Host "TestCaseName: $($actualresult.Tests[$i].TestCaseName)"
   Write-Host "Description: $($actualresult.Tests[$i].Description)"
   Write-Host "Result: $($actualresult.Tests[$i].Result)"
   Write-Host "ActualValue: $($actualresult.Tests[$i].ActualValue)"
}
```

This sample screen, which shows `$res.Content`, shows details of your test results in JSON format:



Here's an example of JSON test results viewed in an online JSON viewer (such as Code Beautify or JSON Viewer).

On Windows OS

Call the API in PowerShell:

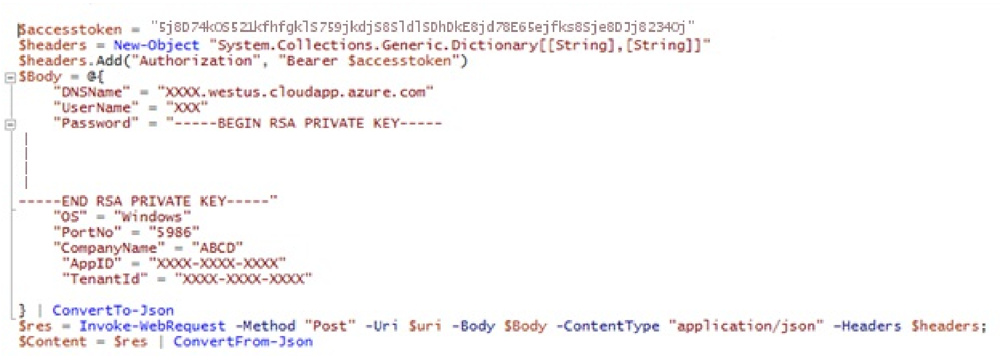
1. Use the Invoke-WebRequest command to call the API.
2. The method is Post and content type is JSON, as shown in the following code example and sample screen.
3. Create the body parameters in JSON format.

This code sample shows a PowerShell call to the API:

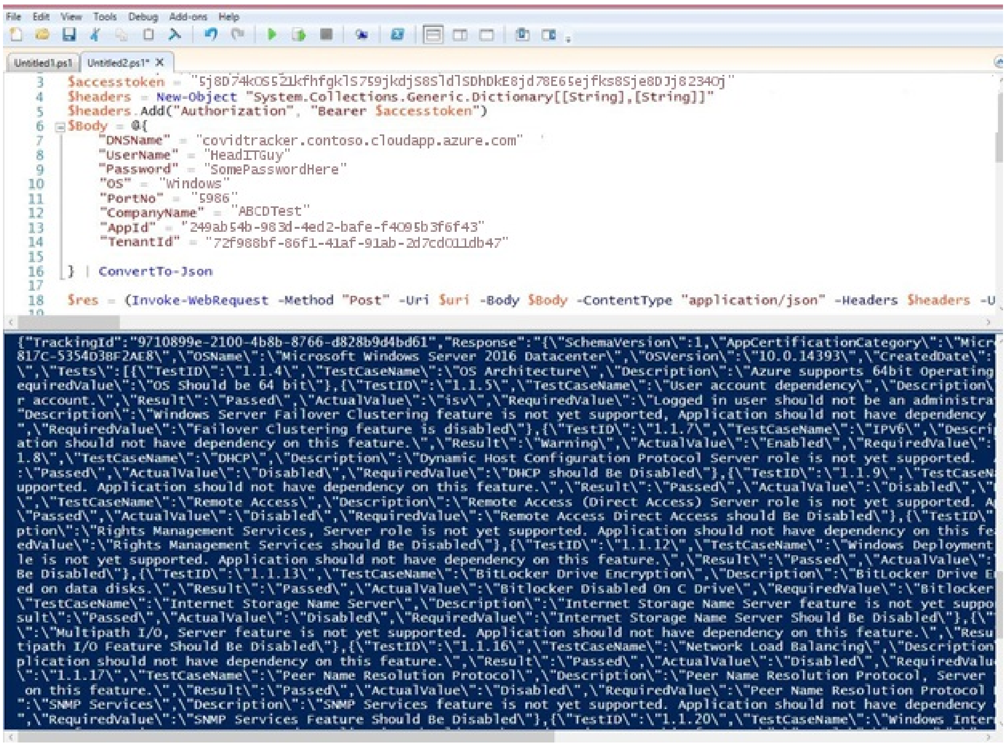
```
$accesstoken = "Get token for your Client AAD App"
$headers = @{ "Authorization" = "Bearer $accesstoken" }
$Body = @{
   "DNSName" = "XXXX.westus.cloudapp.azure.com"
   "UserName" = "XXX"
   "Password" = "XXX@123456"
   "OS" = "Windows"
   "PortNo" = "5986"
   "CompanyName" = "ABCD"
   "AppID" = "XXXX-XXXX-XXXX"
   "TenantId" = "XXXX-XXXX-XXXX"
} | ConvertTo-Json

$res = Invoke-WebRequest -Method "Post" -Uri $uri -Body $Body -ContentType "application/json" –Headers
$headers;
$Content = $res | ConvertFrom-Json
```

These sample screens show example for calling the API in PowerShell:

With SSH key:



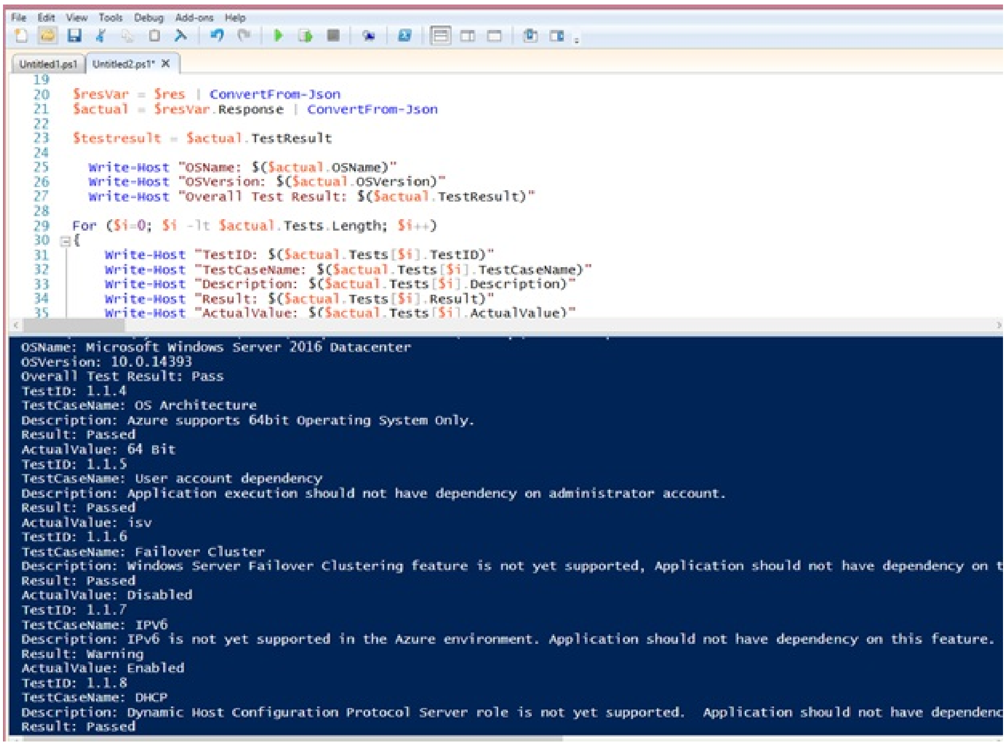
With password:



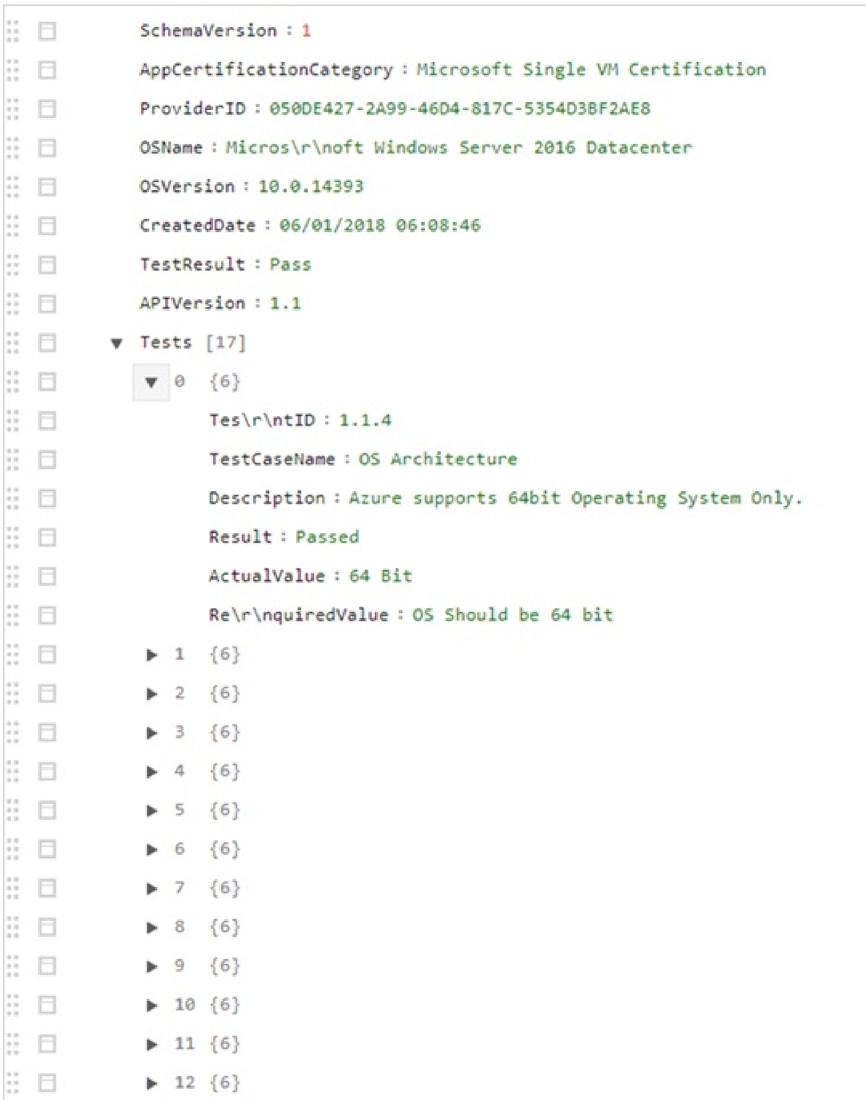
Using the previous example, you can retrieve the JSON and parse it to get the following details:

```
$resVar = $res | ConvertFrom-Json
$actualresult = $resVar.Response | ConvertFrom-Json

Write-Host "OSName: $($actualresult.OSName)"
Write-Host "OSVersion: $($actualresult.OSVersion)"
Write-Host "Overall Test Result: $($actualresult.TestResult)"

For ($i = 0; $i -lt $actualresult.Tests.Length; $i++) {
   Write-Host "TestID: $($actualresult.Tests[$i].TestID)"
   Write-Host "TestCaseName: $($actualresult.Tests[$i].TestCaseName)"
   Write-Host "Description: $($actualresult.Tests[$i].Description)"
   Write-Host "Result: $($actualresult.Tests[$i].Result)"
   Write-Host "ActualValue: $($actualresult.Tests[$i].ActualValue)"
}
```

This screen, which shows `$res.Content`, shows the details of your test results in JSON format:



Here's an example of test results viewed in an online JSON viewer (such as Code Beautify or JSON Viewer).



How to use CURL to consume the Self-Test API on Linux OS

In this example, curl will be used to to make a POST API call to Azure Active Directory and the Self-Host VM.

1. Request an Azure AD token to authenticate to self-host VM

   Ensure the correct values are substituted in the curl request.

```
curl --location --request POST 'https://login.microsoftonline.com/{TENANT_ID}/oauth2/token' \
--header 'Content-Type: application/x-www-form-urlencoded' \
--data-urlencode 'grant_type=client_credentials' \
--data-urlencode 'client_id={CLIENT_ID} ' \
--data-urlencode 'client_secret={CLIENT_SECRET}' \
--data-urlencode 'resource=https://management.core.windows.net'
```

   Here is an example of the response from the request:

```
{
    "token_type": "Bearer",
    "expires_in": "86399",
    "ext_expires_in": "86399",
    "expires_on": "1599663998",
    "not_before": "1599577298",
    "resource": "https://management.core.windows.net",
    "access_token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJS…"
}
```

2. Submit a request for the self-test VM

   Ensure the Bearer token and parameters are substituted with the correct values.

```
curl --location --request POST 'https://isvapp.azurewebsites.net/selftest-vm' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJS…' \
--data-raw '{
    "DNSName": "avvm1.eastus.cloudapp.azure.com",
    "UserName": "azureuser",
    "Password": "SECURE_PASSWORD_FOR_THE_SSH_INTO_VM",
    "OS": "Linux",
    "PortNo": "22",
    "CompanyName": "COMPANY_NAME",
    "AppId": "CLIENT_ID_SAME_AS_USED_FOR_AAD_TOKEN ",
    "TenantId": "TENANT_ID_SAME_AS_USED_FOR_AAD_TOKEN"
}'
```

   Example response from the self-test VM api call

```
{
    "TrackingId": "9bffc887-dd1d-40dd-a8a2-34cee4f4c4c3",
    "Response": "{\"SchemaVersion\":1,\"AppCertificationCategory\":\"Microsoft Single VM
Certification\",\"ProviderID\":\"050DE427-2A99-46D4-817C-5354D3BF2AE8\",\"OSName\":\"Ubuntu
18.04\",\"OSDistro\":\"Ubuntu 18.04.5 LTS\",\"KernelVersion\":\"5.4.0-1023-
azure\",\"KernelFullVersion\":\"Linux version 5.4.0-1023-azure (buildd@lgw01-amd64-053) (gcc version
7.5.0 (Ubuntu 7.5.0-3ubuntu1~18.04)) #23~18.04.1-Ubuntu SMP Thu Aug 20 14:46:48 UTC
2020\\n\",\"OSVersion\":\"18.04\",\"CreatedDate\":\"09/08/2020
01:13:47\",\"TestResult\":\"Pass\",\"APIVersion\":\"1.5\",\"Tests\":
[{\"TestID\":\"48\",\"TestCaseName\":\"Bash History\",\"Description\":\"Bash history files should be
cleared before creating the VM image.\",\"Result\":\"Passed\",\"ActualValue\":\"No file
Exist\",\"RequiredValue\":\"1024\"},{\"TestID\":\"39\",\"TestCaseName\":\"Linux Agent
Version\",\"Description\":\"Azure Linux Agent Version 2.2.41 and above should be
installed.\",\"Result\":\"Passed\",\"ActualValue\":\"2.2.49\",\"RequiredValue\":\"2.2.41\"},
{\"TestID\":\"40\",\"TestCaseName\":\"Required Kernel Parameters\",\"Description\":\"Verifies the
following kernel parameters are set console=ttyS0, earlyprintk=ttyS0,
rootdelay=300\",\"Result\":\"Warning\",\"ActualValue\":\"Missing Parameter:
rootdelay=300\\r\\nMatched Parameter:
console=ttyS0,earlyprintk=ttyS0\",\"RequiredValue\":\"console=ttyS0#earlyprintk=ttyS0#rootdelay=300\"
},{\"TestID\":\"41\",\"TestCaseName\":\"Swap Partition on OS Disk\",\"Description\":\"Verifies that
no Swap partitions are created on the OS disk.\",\"Result\":\"Passed\",\"ActualValue\":\"No. of Swap
Partitions: 0\",\"RequiredValue\":\"swap\"},{\"TestID\":\"42\",\"TestCaseName\":\"Root Partition on
OS Disk\",\"Description\":\"It is recommended that a single root partition is created for the OS
disk.\",\"Result\":\"Passed\",\"ActualValue\":\"Root Partition: 1\",\"RequiredValue\":\"1\"},
{\"TestID\":\"44\",\"TestCaseName\":\"OpenSSL Version\",\"Description\":\"OpenSSL Version should be
>=0.9.8.\",\"Result\":\"Passed\",\"ActualValue\":\"1.1.1\",\"RequiredValue\":\"0.9.8\"},
{\"TestID\":\"45\",\"TestCaseName\":\"Python Version\",\"Description\":\"Python version 2.6+ is
highly recommended. \",\"Result\":\"Passed\",\"ActualValue\":\"2.7.17\",\"RequiredValue\":\"2.6\"},
{\"TestID\":\"46\",\"TestCaseName\":\"Client Alive Interval\",\"Description\":\"It is recommended to
set ClientAliveInterval to 180. On the application need, it can be set between 30 to 235. \\nIf you
are enabling the SSH for your end users this value must be set as
explained.\",\"Result\":\"Warning\",\"ActualValue\":\"120\",\"RequiredValue\":\"ClientAliveInterval
180\"},{\"TestID\":\"49\",\"TestCaseName\":\"OS Architecture\",\"Description\":\"Only 64-bit
operating system should be
supported.\",\"Result\":\"Passed\",\"ActualValue\":\"x86_64\\n\",\"RequiredValue\":\"x86_64,amd64\"},
{\"TestID\":\"50\",\"TestCaseName\":\"Security threats\",\"Description\":\"Identifies OS with recent
high profile vulnerability that may need patching.  Ignore warning if system was patched as
appropriate.\",\"Result\":\"Passed\",\"ActualValue\":\"Ubuntu 18.04\",\"RequiredValue\":\"OS impacted
by GHOSTS\"},{\"TestID\":\"51\",\"TestCaseName\":\"Auto Update\",\"Description\":\"Identifies if
Linux Agent Auto Update is enabled or not.\",\"Result\":\"Passed\",\"ActualValue\":\"#
AutoUpdate.Enabled=y\\n\",\"RequiredValue\":\"Yes\"},{\"TestID\":\"52\",\"TestCaseName\":\"SACK
Vulnerability patch verification\",\"Description\":\"Checks if the running Kernel Version has SACK
vulnerability patch.\",\"Result\":\"Passed\",\"ActualValue\":\"Ubuntu 18.04.5 LTS,Linux version
5.4.0-1023-azure (buildd@lgw01-amd64-053) (gcc version 7.5.0 (Ubuntu 7.5.0-3ubuntu1~18.04))
#23~18.04.1-Ubuntu SMP Thu Aug 20 14:46:48 UTC 2020\",\"RequiredValue\":\"Yes\"}]}"
}
```


Next steps

- Sign in to Partner Center.

Generate a SAS URI for a VM image

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> **NOTE**
>
> You don't need a SAS URI to publish your VM. You can simply share an image in Partner Center. Refer to Create a virtual machine using an approved base or Create a virtual machine using your own image instructions.

Generating SAS URIs for your VHDs has these requirements:

- Only List and Read permissions are required. Don't provide Write or Delete access.
- The duration for access (expiry date) should be a minimum of three weeks from when the SAS URI is created.
- To protect against UTC time changes, set the start date to one day before the current date. For example, if the current date is June 16, 2020, select 6/15/2020.

Extract vhd from a VM

> **NOTE**
>
> You can skip this step if you already have a vhd uploaded in a Storage Account.

To extract the vhd from your VM, you need to take a snapshot of your VM disk and extract vhd from the snapshot.

Start by taking a snapshot of the VM disk:

1. Sign in to the Azure portal.
2. Starting at the upper-left, select Create a resource, then search for and select Snapshot.
3. In the Snapshot blade, select Create.
4. Enter a Name for the snapshot.
5. Select an existing resource group or enter the name for a new one.
6. For Source disk, select the managed disk to snapshot.
7. Select the Account type to use to store the snapshot. Use Standard HDD unless you need it stored on a high performing SSD.
8. Select Create.

Extract the VHD

Use the following script to export the snapshot into a VHD in your storage account.

```
#Provide the subscription Id where the snapshot is created
$subscriptionId=yourSubscriptionId

#Provide the name of your resource group where the snapshot is created
$resourceGroupName=myResourceGroupName

#Provide the snapshot name
$snapshotName=mySnapshot

#Provide Shared Access Signature (SAS) expiry duration in seconds (such as 3600)
#Know more about SAS here: https://docs.microsoft.com/azure/storage/storage-dotnet-shared-access-signature-part-1
$sasExpiryDuration=3600

#Provide storage account name where you want to copy the underlying VHD file. Currently, only general purpose v1 storage is supported.
$storageAccountName=mystorageaccountname

#Name of the storage container where the downloaded VHD will be stored.
$storageContainerName=mystoragecontainername

#Provide the key of the storage account where you want to copy the VHD
$storageAccountKey=mystorageaccountkey

#Give a name to the destination VHD file to which the VHD will be copied.
$destinationVHDFileName=myvhdfilename.vhd

az account set --subscription $subscriptionId

$sas=$(az snapshot grant-access --resource-group $resourceGroupName --name $snapshotName --duration-in-seconds $sasExpiryDuration --query [accessSas] -o tsv)

az storage blob copy start --destination-blob $destinationVHDFileName --destination-container $storageContainerName --account-name $storageAccountName --account-key $storageAccountKey --source-uri $sas
```

Script explanation

This script uses following commands to generate the SAS URI for a snapshot and copies the underlying VHD to a storage account using the SAS URI. Each command in the table links to command specific documentation.

COMMAND	NOTES
az disk grant-access	Generates read-only SAS that is used to copy the underlying VHD file to a storage account or download it to on-premises
az storage blob copy start	Copies a blob asynchronously from one storage account to another. Use az storage blob show to check the status of the new blob.

Generate the SAS address

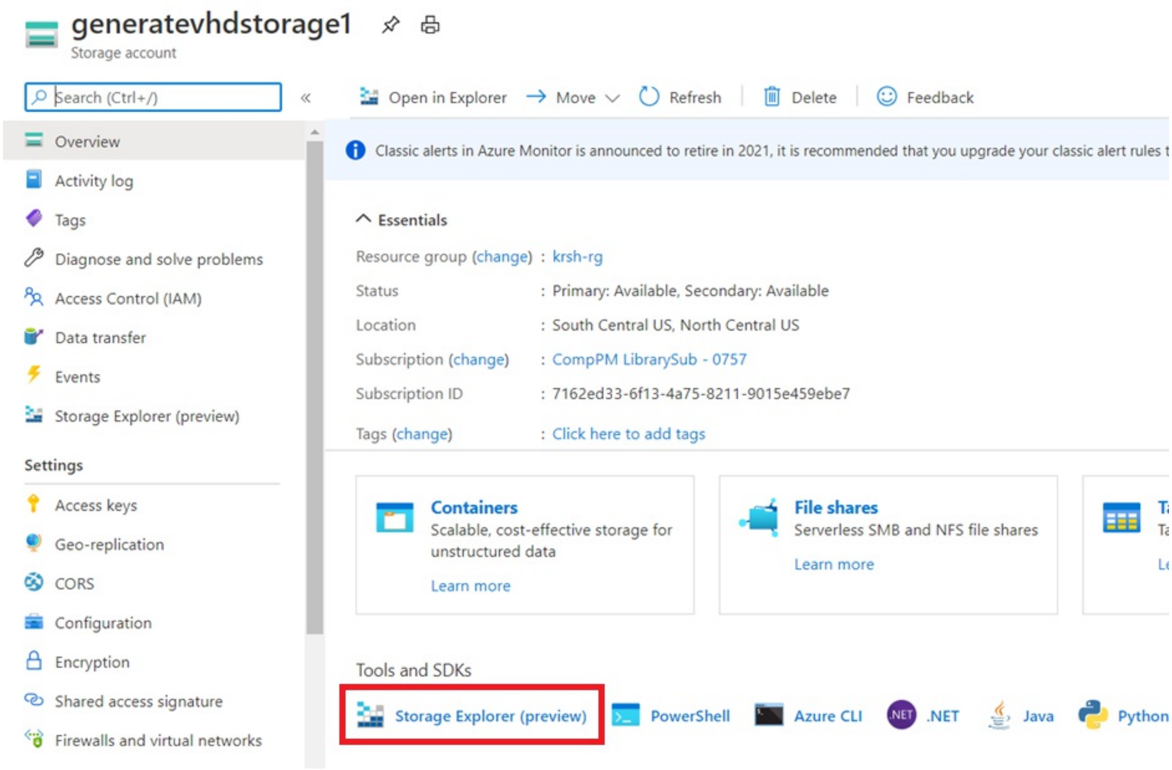
There are two common tools used to create a SAS address (URL):

1. **Azure Storage Explorer** – Available on the Azure portal.
2. **Azure CLI** – Recommended for non-Windows operating systems and automated or continuous integration environments.

Using Tool 1: Azure Storage Explorer

1. Go to your **Storage Account**.

2. Open **Storage Explorer**.



3. In the **Container**, right-click the VHD file and select **Get Share Access Signature**.

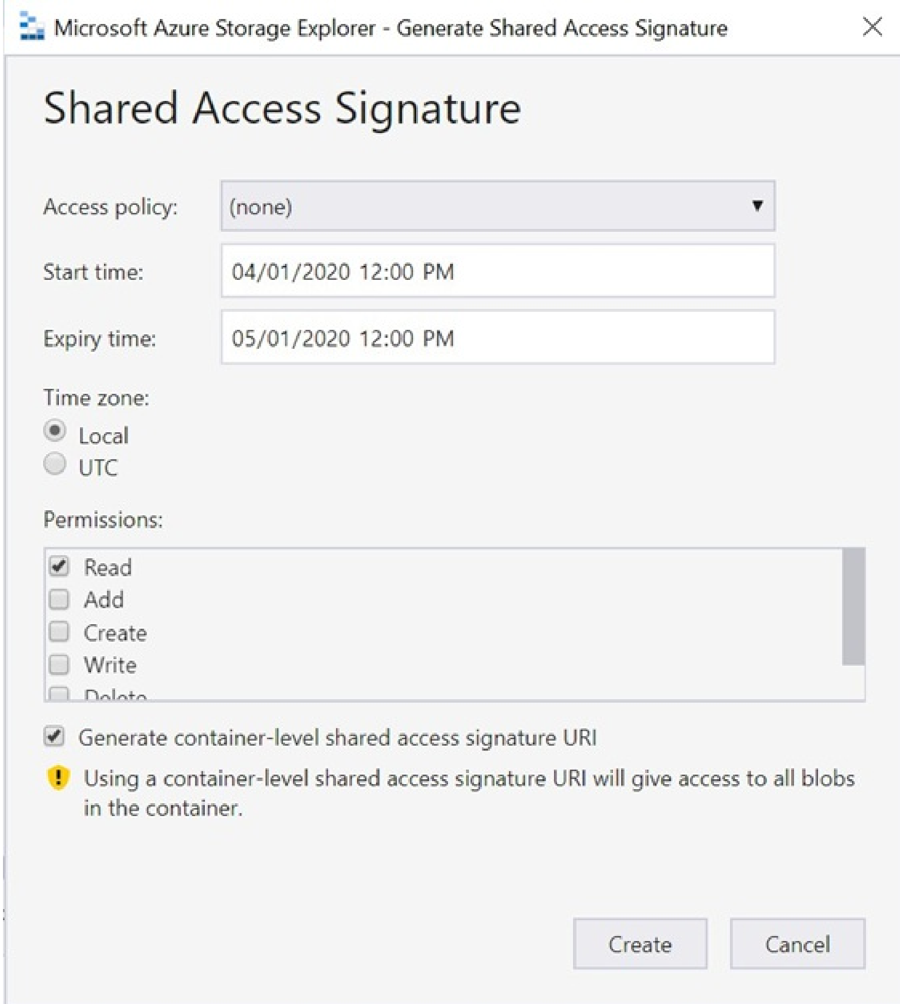
4. In the **Shared Access Signature** dialog box, complete the following fields:

   a. Start time – Permission start date for VHD access. Provide a date that is one day before the current date.

   b. Expiry time – Permission expiration date for VHD access. Provide a date at least three weeks beyond the current date.

   c. Permissions – Select the Read and List permissions.

   d. Container-level – Check the Generate container-level shared access signature URI check box.



5. To create the associated SAS URI for this VHD, select **Create**.

6. Copy the URI and save it to a text file in a secure location. This generated SAS URI is for container-level access. To make it specific, edit the text file to add the VHD name.

7. Insert your VHD name after the vhds string in the SAS URI (include a forward slash). The final SAS URI should look like this:

```
<blob-service-endpoint-url> + /vhds/ + <vhd-name>? + <sas-connection-string>
```

8. Repeat these steps for each VHD in the plans you will publish.

Using Tool 2: Azure CLI

1. Download and install Microsoft Azure CLI. Versions are available for Windows, macOS, and various distros of Linux.

2. Create a PowerShell file (.ps1 file extension), copy in the following code, then save it locally.

```
az storage container generate-sas --connection-string 'DefaultEndpointsProtocol=https;AccountName=
<account-name>;AccountKey=<account-key>;EndpointSuffix=core.windows.net' --name <container-name> --
permissions rl --start '<start-date>' --expiry '<expiry-date>'
```

3. Edit the file to use the following parameter values. Provide dates in UTC datetime format, such as 2020-04-01T00:00:00Z.

   - account-name – Your Azure storage account name.
   - account-key – Your Azure storage account key.
   - start-date – Permission start date for VHD access. Provide a date one day before the current date.
   - expiry-date – Permission expiration date for VHD access. Provide a date at least three weeks after the

current date.

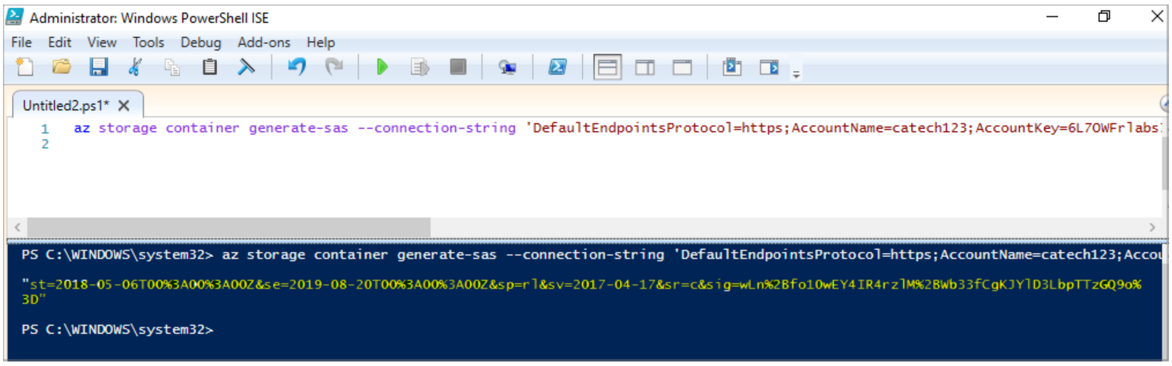
Here's an example of proper parameter values (at the time of this writing):

```
az storage container generate-sas --connection-string
'DefaultEndpointsProtocol=https;AccountName=st00009;AccountKey=6L7OWFrlabs7Jn23OaR3rvY5RykpLCNHJhxsbn
9ON c+bkCq9z/VNUPNYZRKoEV1FXSrvhqq3aMIDI7N3bSSvPg==;EndpointSuffix=core.windows.net' --name
<container-name> -- permissions rl --start '2020-04-01T00:00:00Z' --expiry '2021-04-01T00:00:00Z'
```

4. Save the changes.

5. Using one of the following methods, run this script with administrative privileges to create a SAS connection string for container-level access:

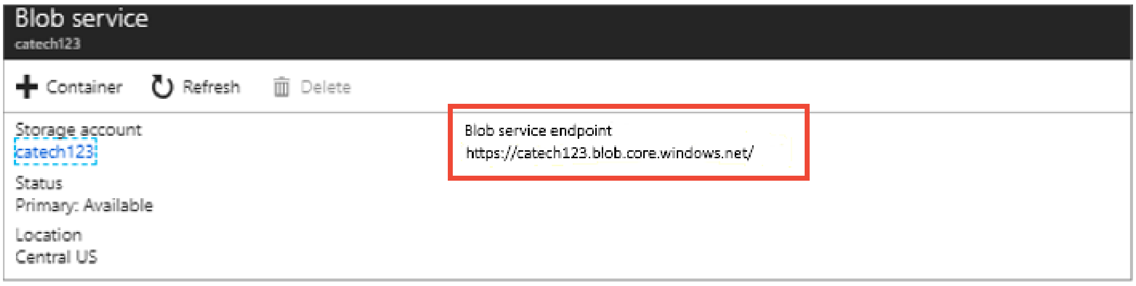
   - Run the script from the console. In Windows, right-click the script and select **Run as administrator**.
   - Run the script from a PowerShell script editor such as Windows PowerShell ISE. This screen shows the creation of a SAS connection string within this editor:



6. Copy the SAS connection string and save it to a text file in a secure location. Edit this string to add the VHD location information to create the final SAS URI.

7. In the Azure portal, go to the blob storage that includes the VHD associated with the new URI.

8. Copy the URL of the blob service endpoint:



9. Edit the text file with the SAS connection string from step 6. Create the complete SAS URI using this format:

```
<blob-service-endpoint-url> + /vhds/ + <vhd-name>? + <sas-connection-string>
```

Virtual machine SAS failure messages

Following are common issues encountered when working with shared access signatures (which are used to identify and share the uploaded VHDs for your solution), along with suggested resolutions.

ISSUE	FAILURE MESSAGE	FIX
Failure in copying images		

ISSUE	FAILURE MESSAGE	FIX
"?" is not found in SAS URI	`Failure: Copying Images. Not able to download blob using provided SAS Uri.`	Update the SAS URI using recommended tools.
"st" and "se" parameters not in SAS URI	`Failure: Copying Images. Not able to download blob using provided SAS Uri.`	Update the SAS URI with proper **Start Date** and **End Date** values.
"sp=rl" not in SAS URI	`Failure: Copying Images. Not able to download blob using provided SAS Uri.`	Update the SAS URI with permissions set as `Read` and `List`.
SAS URI has white spaces in VHD name	`Failure: Copying Images. Not able to download blob using provided SAS Uri.`	Update the SAS URI to remove white spaces.
SAS URI Authorization error	`Failure: Copying Images. Not able to download blob due to authorization error.`	Review and correct the SAS URI format. Regenerate if necessary.
SAS URI "st" and "se" parameters do not have full date-time specification	`Failure: Copying Images. Not able to download blob due to incorrect SAS Uri.`	SAS URI **Start Date** and **End Date** parameters (`st` and `se` substrings) must have full date-time format, such as `11-02-2017T00:00:00Z`. Shortened versions are invalid (some commands in Azure CLI may generate shortened values by default).

For details, see Grant limited access to Azure Storage resources using shared access signatures (SAS).

Verify the SAS URI

Check the SAS URI before publishing it on Partner Center to avoid any issues related to SAS URI post submission of the request. This process is optional but recommended.

- The URI includes your VHD image filename, including the filename extension `.vhd`.
- `Sp=rl` appears near the middle of your URI. This string shows Read and List access is specified.
- When `sr=c` appears, this means that container-level access is specified.
- Copy and paste the URI into a browser to test-download the blob (you can cancel the operation before the download completes).

Next steps

- If you run into issues, see VM SAS failure messages
- Sign in to Partner Center
- Create a virtual machine offer on Azure Marketplace

Plan a consulting service offer

11/22/2021 • 7 minutes to read • Edit Online

This article introduces the different options and requirements for publishing a consulting service offer to the commercial marketplace. Read this article to prepare your offer for publishing using Partner Center.

What's a consulting service?

Consulting services are virtual or in-person customer engagements that support and extend the customers' use of Microsoft products. With a consulting service, customers can assess, evaluate, and deploy solutions that further their business goals. You choose the scope, duration, and pricing structure (fixed-price or free) of your service.

Consulting service offers are published as **Contact me** listings. This means that customers will contact you directly from the information you provide in your listing. While Microsoft hosts the listing in the commercial marketplace, you manage all interactions with customers. You're responsible for fulfilling the service, billing, invoicing, and collecting from the customer.

Primary products and online stores

Each consulting service must focus on one of these Microsoft products, called the **primary product** of the offer:

Azure

Dynamics 365 Business Central

Dynamics 365 Commerce

Dynamics 365 Customer Insights

Dynamics 365 Customer Service

Dynamics 365 Field Service

Dynamics 365 Finance

Dynamics 365 Marketing

Dynamics 365 Project Service Automation

Dynamics 365 Sales

Dynamics 365 Supply Chain Management

Microsoft 365

Power Apps

Power Automate

Power BI

Power Virtual Agents

The primary product you select in Partner Center determines whether your offer will be published to Microsoft AppSource or Azure Marketplace.

- If the primary product of your consulting service is Azure, the offer will be listed on Azure Marketplace.
- If the primary product is not Azure, the offer will be listed on AppSource.

To learn more about the differences between AppSource and Azure Marketplace, see Commercial marketplace online stores.

Eligibility requirements

To demonstrate to customers your expertise in a field, you must meet a set of eligibility requirements before publishing a consulting service offer. The requirements depend on the product at the core of your offer. The complete list of eligibility requirements for each primary product is in the certification policies for consulting services.

> **NOTE**
>
> For some primary products, you must have a Gold or Silver Microsoft competency in your solution area. For more information, see Microsoft Partner Network Competencies.

Service type and duration

The commercial marketplace supports five types of consulting service:

- **Assessment**: an evaluation of a customer's environment to determine the applicability of a solution and to estimate the cost and timeline of its implementation.
- **Briefing**: an introduction to a solution or a service using frameworks, demos, and customer examples.
- **Implementation**: a complete installation that results in a fully working solution.
- **Proof of concept**: a limited-scope implementation to determine whether a solution meets the customer's requirements.
- **Workshop**: an interactive engagement conducted on the customer's premises. It can involve training, briefings, assessments, or demos built on the customer's data or environment.

Your service should have a predetermined duration of up to 12 months. The service duration must be explicitly defined in the offer listing.

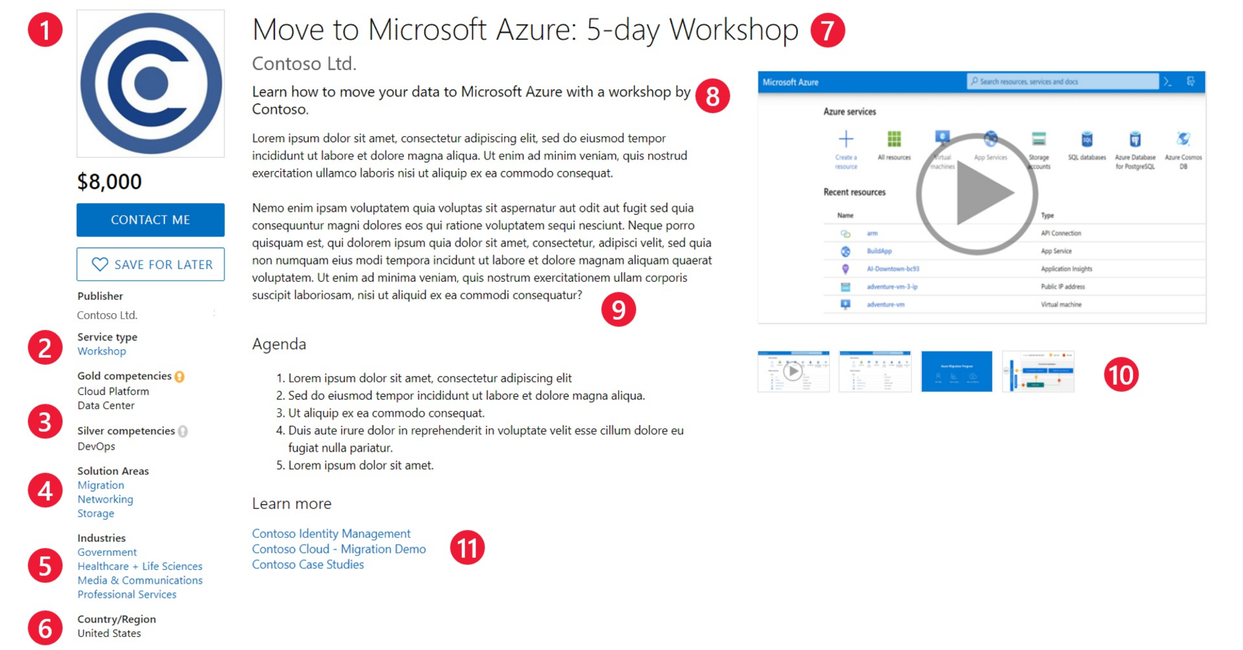
Customer leads

You must connect your offer to your customer relationship management (CRM) system to collect customer information. The customer will be asked for permission to share their information. These customer details, along with the offer name, ID, and online store where they found your offer, will be sent to the CRM system that you've configured. The commercial marketplace supports different kinds of CRM systems, along with the option to use an Azure table or configure an HTTPS endpoint using Power Automate.

You can add or modify a CRM connection at any time during or after offer creation. For detailed guidance, see Customer leads from your commercial marketplace offer.

Offer listing details

When you create your consulting service offer in Partner Center, you'll enter text, images, documents, and other offer details. This is what customers will see when they discover your offer in AppSource or Azure Marketplace. See the following example:



Call-out descriptions

1. Logo
2. Service type
3. Competencies
4. Solution areas (Azure Marketplace) / Products (AppSource)
5. Industries
6. Country/region
7. Offer name
8. Search result summary
9. Description
10. Screenshots/videos
11. Supporting documents

> **NOTE**
>
> If you'll deliver your service in a language other than English, the offer listing can be in that language, but the description must begin or end with the English phrase "This service is available in <language of your offer content>". You can also provide supporting documents in a language that's different from the one used in the offer listing details.

To help create your offer more easily, prepare some of these items ahead of time. The following items are required unless otherwise noted.

Name: This name will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It can't contain emojis (unless they're the trademark and copyright symbols) and must be limited to 50 characters. The name must include the duration and service type of the offer to maximize search engine optimization (SEO). The required format is *Name: Duration + type*. Don't include your company name unless it's also the product name. Here are some examples:

DON'T SAY	SAY
Getting Started with Azure IoT in Manufacturing	Manufacturing IoT: 2-Day Assessment
Workshop on Smart Toasters	Smart Toasters: 1-Week Workshop

DON'T SAY	SAY
SQL Server Migration PoC by Contoso	SQL Migration: 3-Wk Proof of Concept

Search results summary: Describe the purpose or goal of your offer in 200 characters or less. This summary is used in the commercial marketplace listing search results. It shouldn't be identical to the title. Consider including your top SEO keywords.

Description: This description will be displayed in the commercial marketplace listing. Consider including a value proposition, key benefits, intended user base, and any category or industry associations.

When writing the description, follow these criteria, according to your service type:

SERVICE TYPE	DESCRIPTION REQUIREMENTS
Assessment	Include a detailed agenda for assessments longer than a day, and articulate what deliverable the customer can expect.
Briefing	Explain what deliverable the customer can expect.
Implementation	Include a detailed agenda for implementations longer than a day, and describe what engineering changes, technical artifacts, or other artifacts a customer can expect as outcomes of the engagement.
Proof of concept	Describe what engineering changes, technical artifacts, or other artifacts a customer can expect as outcomes of the engagement.
Workshop	Include a detailed daily, weekly, or monthly agenda depending on the duration of your offer. Articulate the learning goals or other deliverables of your workshop.

Here are some tips for writing your description:

- Clearly describe the value of your offer in the first few sentences, including:
  - The type of user who benefits from the offer.
  - Customer needs or issues that the offer addresses.
- Remember that the first few sentences might be displayed in search results.
- If the price of your offer is estimated, explain what variables will determine the final price.
- Use industry-specific vocabulary.

You can use HTML tags to format your description. You can enter up to 2,000 characters of text in this box, including HTML tags and spaces. For information about HTML formatting, see HTML tags supported in the commercial marketplace offer descriptions.

Search keywords (optional): Provide up to three search keywords that customers can use to find your offer in the online stores. You don't need to include the offer **Name** and **Description**.

Duration: your consulting service offer must have a predetermined duration of up to 12 months.

Contact information: in Partner Center, you'll be asked to provide name, email address, and phone number of two people in your company (you can be one of the two contacts). We'll use this information to communicate with you about your offer. This information isn't shown to customers but may be provided to Cloud Solution

Provider (CSP) partners.

Supporting documents: upload at least one and up to three customer-facing PDF documents that provide information about your offer. For example, they could be white papers or brochures.

Marketplace media – logos: Provide a PNG file for the large-size logo. Partner Center will use it to create a small logo. You can optionally replace the small logo with a different image later.

- Large (from 216 x 216 to 350 x 350 px, required)
- Small (48 x 48 px, optional)

The large logo appears on your offer listing page in Azure Marketplace or AppSource. The small logo appears in Azure Marketplace search results or on the AppSource main page and search results page.

Follow these guidelines for your logos:

- Make sure the image isn't blurry or stretched.
- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- Avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name.

Marketplace media – screenshots: Add at least one and up to five images that demonstrate your offer. All images must be 1280 x 720 pixels in size and in .PNG format.

Marketplace media – videos (optional): you can add up to four videos that demonstrate your offer. The videos must be hosted on YouTube or Vimeo and have a thumbnail (1280 x 720 PNG file).

Pricing and availability

Your consulting service offer can be made available in one or more countries or regions. In Partner Center, you can decide the price for each market you select. For the complete list of supported markets and currencies, see Geographic availability and currency support for the commercial marketplace.

Next steps

- Create a consulting service offer in the commercial marketplace
- Offer listing best practices

Create a consulting service offer

11/22/2021 • 3 minutes to read • Edit Online

This article explains how to create a consulting service offer for the commercial marketplace using Partner Center.

Before you begin

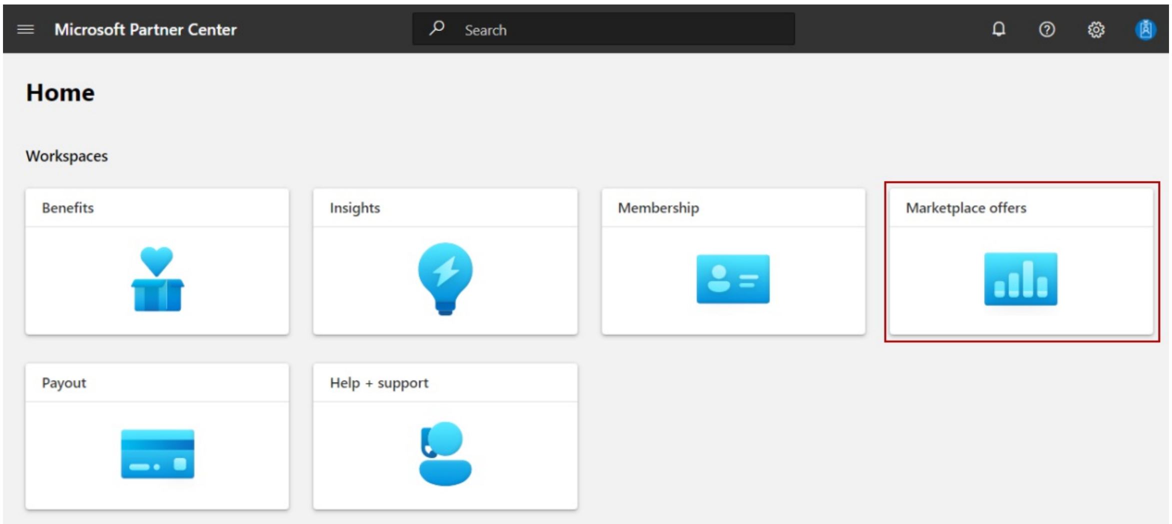
To publish a consulting service offer, you must meet certain eligibility requirements to demonstrate expertise in your field. If you haven't already done so, read Plan a consulting service offer. It describes the prerequisites and assets you'll need on hand to create a consulting service offer in Partner Center.

Create a consulting service offer

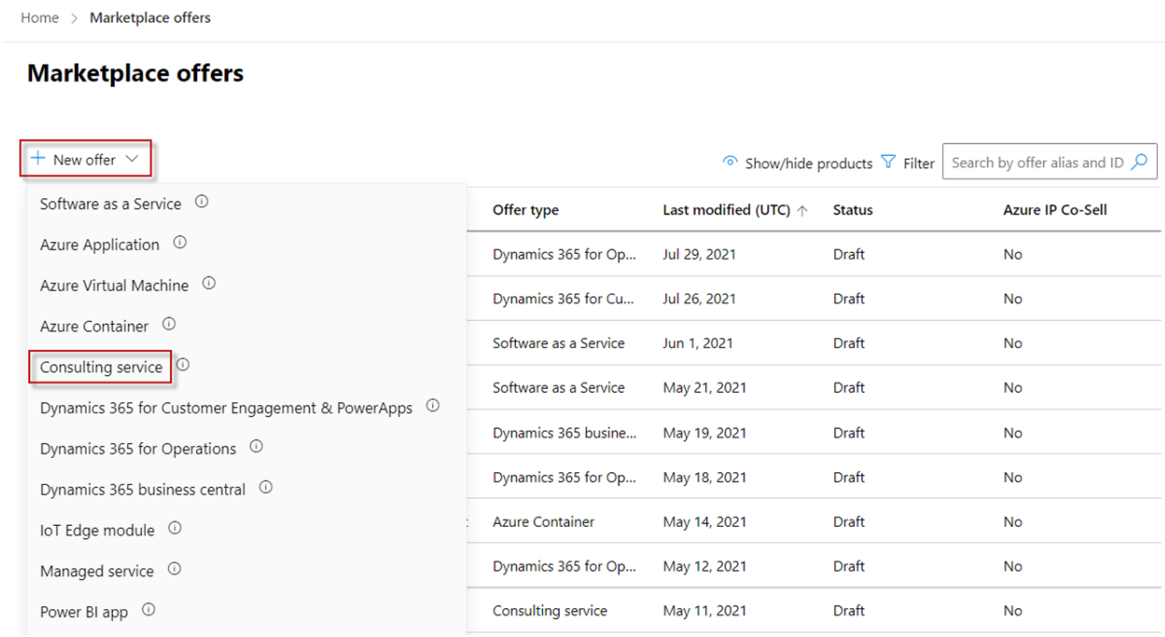
> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Consulting service**.



4. In the **New Consulting service** dialog box, enter an **Offer ID**. This ID is visible in the URL of the commercial marketplace listing. For example, if you enter test-offer-1 in this box, the offer web address will be `https://azuremarketplace.microsoft.com/marketplace/../test-offer-1`.
   - Each offer in your account must have a unique offer ID.
   - Use only lowercase letters and numbers. The offer ID can include hyphens and underscores, but no spaces, and is limited to 50 characters.
   - The offer ID can't be changed after you select **Create**.
5. Enter an **Offer alias**. This is the name used for the offer in Partner Center. It isn't visible in the online stores and is different from the offer name shown to customers.
6. To generate the offer and continue, select **Create**.

Configure lead management

Connect your customer relationship management (CRM) system with your commercial marketplace offer so you can receive customer contact information when a customer expresses interest in your consulting service. You can modify this connection at any time during or after you create the offer. For detailed guidance, see Customer leads from your commercial marketplace offer.

To configure the lead management in Partner Center:

1. In Partner Center, go to the **Offer setup** tab.
2. Under **Customer leads**, select the **Connect** link.
3. In the **Connection details** dialog box, select a lead destination from the list.
4. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint
   - Configure your offer to send leads to Marketo
   - Configure your offer to send leads to Salesforce
5. To validate the configuration you provided, select the **Validate link**.

6. When you’ve configured the connection details, select **Connect**.

7. Select **Save draft**.

After you submit your offer for publication in Partner Center, we'll validate the connection and send you a test lead. While you preview the offer before it goes live, test your lead connection by trying to purchase the offer yourself in the preview environment.

> **TIP**
>
> Make sure the connection to the lead destination stays updated so you don't lose any leads.

Next steps

- How to configure your consulting service offer properties

Configure consulting service offer properties

11/22/2021 • 2 minutes to read • Edit Online

This article describes how to configure the properties of a consulting service offer in the Microsoft commercial marketplace.

On the **Properties** tab of your offer in Partner Center, you'll define the primary product at the core of your consulting service, the service type, and the applicable industries. You'll also indicate the relevant Microsoft competencies you earned. The information in this tab ensures your consulting service is displayed correctly in the commercial marketplace and offered to the right set of customers.

Select the primary product

In the **Primary Product** dropdown list, select the Microsoft product that will be the focus of your consulting service offer. The product you select will determine whether your offer will be published to Microsoft AppSource or Azure Marketplace. Accurately representing your offer makes it easier for customers to find your offer. Keep in mind that you must meet the eligibility requirements for the products you select.

- If you select Azure, the offer will be listed on Azure Marketplace. Select up to three **Solution Areas** which best represent your offer.
- If you select Microsoft 365, also choose up to three **Solution Areas** which best represent your offer. The offer will be listed in Microsoft AppSource.
- If you select any Dynamics 365 or Power Platform product, you may also select two additional **Applicable products**. The offer will be listed in Microsoft AppSource.

Select the consulting service type

In the **Consulting service type** dropdown, select the type of consulting service you'll offer to customers. The available types are:

- **Assessment**: An evaluation of a customer's environment to determine the applicability of a solution and to estimate the cost and timeline of its implementation.
- **Briefing**: An introduction to a solution or a service using frameworks, demos, and customer examples.
- **Implementation**: A complete installation that results in a fully working solution.
- **Proof of concept**: A limited-scope implementation to determine whether a solution meets the customer's requirements.
- **Workshop**: An interactive engagement conducted on the customer's premises. It can involve training, briefings, assessments, or demos built on the customer's data or environment.

Select relevant industries

The information in this section helps us categorize your offer so that customers will easily find it on the Microsoft online stores.

- If you selected Azure as primary product, select up to six **Industries**. See the full list of industries in Offer Listing Best Practices.
- If you selected a primary product other than Azure, you have the option to select up to two **Industries** and two **Sub-industries** for each industry. See the full list of industries and sub-industries in Offer Listing Best Practices.

Select your competencies

Select up to three competencies that are relevant to the service area of your offer. Your selection will be displayed to customers in the offer listing.

> **IMPORTANT**
>
> Having at least one competency may be a requirement to publish your offer, depending on its primary product. See the certification policies for details.

Save the draft before continuing.

Next steps

- Configure your offer listing details

Configure consulting service offer listing details

11/22/2021 • 3 minutes to read • Edit Online

The information you provide on the **Offer listing** page of Partner Center will be displayed in the Microsoft commercial marketplace online stores. This includes your offer name, description, media, and other marketing assets.

> **NOTE**
> If you'll deliver your service in a language other than English, the offer listing can be in that language, but the description must begin or end with the English phrase "This service is available in <language of your offer content>". You can also provide supporting documents in a language that's different from the one used in the offer listing details.

On the **Offer listing** page, provide the information described below. To learn more about the listing details for your consulting service offer, review Offer listing details.

Offer details

1. The **Name** box is pre-filled with the name you entered earlier in the **New offer** dialog box, but you can change it at any time. This name will appear as the title of your offer listing on the online store.

   > **IMPORTANT**
   > The offer name must be in the format *Name: Duration + type*. For more information, see offer listing details.

2. In the **Search results summary** box, describe the purpose or goal of your offer in 200 characters or less.

3. In the **Description** field, describe your consulting service offer. You can use HTML tags to format your description. You can enter up to 2,000 characters of text in this box, including HTML tags and spaces. For information about HTML formatting, see HTML tags supported in the offer descriptions.

4. You have the option to enter up to three **search keywords**. These keywords will help customers find your offer in the online store. You don't need to include the offer name and description.

5. Enter the expected duration of your consulting service in the **Duration** drop-down lists. The duration you select must match the duration you mentioned in the offer name.

Contact information

Enter the name, email address, and phone number of two people in your company (you can be one of them). Microsoft will use this information to communicate with you about your offer. This information isn't shown to customers but may be provided to Cloud Solution Provider (CSP) partners.

Supporting documents

Add at least one and up to three PDF documents to support your offer listing. After you've uploaded each file, provide a name for the document. This name will be displayed in your offer listing.

Marketplace media

> **NOTE**
>
> If you have an issue uploading files, make sure your local network does not block the `https://upload.xboxlive.com` service used by Partner Center.

Add logos

Under **Logos**, upload a **Large** logo in PNG format between 216 x 216 and 350 x 350 pixels. Partner Center will automatically create a **Small** (48 x 48) logo, which you can replace later.

The two logo sizes are used in different places in the online stores:

- The **Large** logo appears on your offer listing page on Azure Marketplace or AppSource.
- The **Small** logo appears on Azure Marketplace search results or on the AppSource main page and search result pages.

Add screenshots

Add at least one and up to five images that demonstrate your offer. All images must be 1280 x 720 pixels in size and in .PNG format.

1. Under **Screenshots**, drag and drop your .PNG file onto the **Screenshot** box.
2. Next to **Add image caption**, select the **Edit** icon.
3. In the dialog box that appears, enter a caption.
4. Repeat steps 1 through 3 to add additional screenshots

Add videos (optional)

You can add links to YouTube or Vimeo videos that demonstrate your offer. These videos are shown to customers along with your offer. You must enter a thumbnail image of the video, sized to 1280 x 720 pixels in size and in .PNG format. Add a maximum of four videos per offer.

1. Under **Videos**, select the **Add video** link.
2. In the boxes that appear, enter the name and link for your video.
3. Drag and drop a .PNG file (1280 x 720 pixels) onto the gray Thumbnail box.
4. To add another video, repeat steps 1 through 3.

Select **Save draft** before continuing to the next tab: **Pricing and availability**.

Next steps

- Configure pricing and availability

Configure consulting service offer pricing and availability

11/22/2021 • 2 minutes to read • Edit Online

This article explains how to define the market availability and the pricing details for your consulting service offer in the Microsoft commercial marketplace.

> **NOTE**
> Consulting service offers are listing-only. Any transactions must be managed between you and your customers outside of the commercial marketplace.

Markets

In the **Markets** section, you select the countries or regions where your consulting service will be available.

1. Under **Markets**, select the **Edit markets** link.
2. In the dialog box that appears, select the market locations where you want to make your offer available. You must select a minimum of one and maximum of 141 markets.
3. Select **Save** to close the dialog box.

Preview audience

When you publish or update your consulting service offer, Partner Center creates a preview version of the listing. This preview is visible only to users that have a **hide key**.

In the **Hide Key** field, enter an alphanumeric string that you'll use to access the preview version of your offer.

Pricing (informational only)

In the **Pricing** section, define whether this is a free or paid offer.

For paid offers, specify whether the price is fixed or estimated. If the price is estimated, your offer description must describe what factors will affect the price.

If you chose a single country or region in the **Markets** section, provide the price in a currency supported for that market and select **Save draft**. See Geographic availability and currency support for the commercial marketplace for the list of supported currencies.

If you chose multiple countries or regions in the **Markets** section, provide the price in United States dollars (USD) and select **Save draft**. Partner Center will convert that price into the local currency of all selected markets using the exchange rates available when you saved the draft.

To validate the conversion or to set custom prices in an individual market, you need to export, modify, and then import the pricing spreadsheet:

1. Under **Pricing**, select the **Export pricing data** link. This will download a file to your device.
2. Open the exportedPrice.xlsx file in Microsoft Excel.
3. In the spreadsheet, you can adjust prices and currencies for each market. See Geographic availability and currency support for the commercial marketplace for the list of supported currencies. When you're done,

save the file.

4. In Partner Center, under **Pricing**, select the **Import pricing data** link. Importing the file will overwrite previous pricing information.

> **IMPORTANT**
>
> The prices you define in Partner Center are static and don't follow variations in the exchange rates. To change the price in one or more markets after publication, update and resubmit your offer in Partner Center.

Select **Save draft** before continuing.

Next steps

- Review and publish

Plan a Microsoft Dynamics 365 offer

11/22/2021 • 6 minutes to read • Edit Online

This article explains the different options and features of a Dynamics 365 offer in Microsoft AppSource in the commercial marketplace. AppSource includes offers that build on or extend Microsoft 365, Dynamics 365, Power Apps, and Power BI.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program. Also, review the publishing process and guidelines.

Licensing options

As you prepare to publish a new offer, you need to decide which licensing option to choose. This will determine what additional information you'll need to provide later as you create the offer in Partner Center.

These are the available licensing options for Dynamics 365 offer types:

OFFER TYPE	LISTING OPTION
Dynamics 365 for Operations	Contact me
Dynamics 365 Customer Engagement & Power Apps	Get it now Get it now (Free) Free trial (listing) Contact me
Dynamics 365 Business Central	Get it now (Free) Free trial (listing) Contact me

The following table describes the transaction process of each listing option.

LICENSING OPTION	TRANSACTION PROCESS
Contact me	Collect customer contact information by connecting your Customer Relationship Management (CRM) system. The customer will be asked for permission to share their information. These customer details, along with the offer name, ID, and marketplace source where they found your offer, will be sent to the CRM system that you've configured. For more information about configuring your CRM, see the **Customer leads** section of your offer type's **Offer setup** page.
Free trial (listing)	Offer your customers a one-, three- or six-month free trial. Offer listing free trials are created, managed, and configured by your service and do not have subscriptions managed by Microsoft.
Get it now (free)	List your offer to customers for free.

LICENSING OPTION	TRANSACTION PROCESS
Get it now	Enables you to manage your ISV app0 licenses in Partner Center. Currently available to the following offer type only: • Dynamics 365 for Customer Engagement & Power Apps For more information about this option, see ISV app license management.

Test drive

You can enable a test drive that lets customers try your offer prior to purchase by giving them access to a preconfigured environment for a fixed number of hours, resulting in highly qualified leads and an increased conversion rate. Test drives differ depending on the offer type and marketplace. To learn more about types of test drives and how they work, see What is a test drive?. For information about configuring different kinds of test drives, see Test drive technical configuration.

> **TIP**
>
> A test drive is different from a free trial. You can offer a test drive, free trial, or both. They both provide your customers with your solution for a fixed period-of-time. But, a test drive also includes a hands-on, self-guided tour of your product's key features and benefits being demonstrated in a real-world implementation scenario.

Customer leads

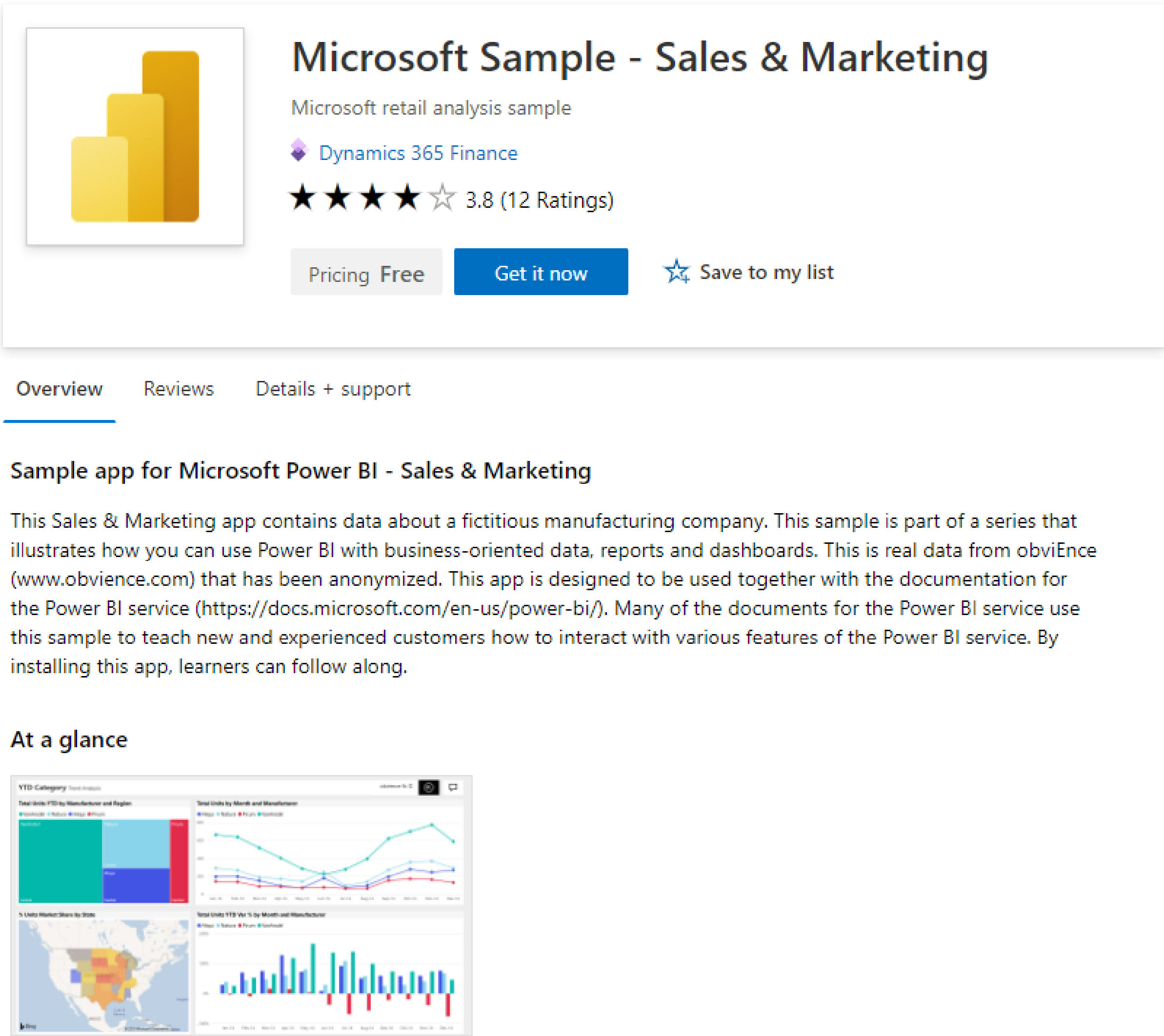
When you're publishing an offer to the commercial marketplace with Partner Center, you'll want to connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive; otherwise, connecting to a CRM is optional. Partner Center supports Azure table, Dynamics 365 Customer Engagement, HTTPS endpoint, Marketo, and Salesforce.

Legal

Create your **Terms and conditions**. Customers will need to accept these before they can try your offer. Microsoft has a standard contract, but it does not apply to Dynamics 365 offers.

Offer listing details

Here's an example of how offer information appears in Microsoft AppSource (any listed prices are for example purposes only and do not reflect actual costs):



> **NOTE**
>
> Offer listing content is not required to be in English if the offer description begins with the phrase "This application is available only in [non-English language]".

To help create your offer more easily, prepare these items ahead of time. All are required except where noted.

- **Name** – The name will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It cannot contain emojis (unless they are the trademark and copyright symbols) and is limited to 50 characters.
- **Search results summary** – The purpose or function of your offer as a single sentence with no line breaks in 100 characters or less. This is used in the commercial marketplace listing(s) search results.
- **Description** – This description displays in the commercial marketplace listing(s) overview. Consider including a value proposition, key benefits, intended user base, any category or industry associations, in-app purchase opportunities, any required disclosures, and a link to learn more. This text box has rich text editor controls to make your description more engaging. Optionally, use HTML tags for formatting.
- **Search keywords** (optional) – Up to three search keywords that customers can use to find your offer. Don't include the offer **Name** and **Description**; that text is automatically included in search.
- **Product your app works with** (optional) – The names of up to three products your offer works with.
- **Help and privacy policy links** – The URLs for your offer's help and company's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations.
- **Contact information**

- **Support contact** – The name, phone, and email that Microsoft partners will use when your customers open tickets. Include the URL for your support website.
- **Engineering contact** – The name, phone, and email for Microsoft to use directly when there are problems with your offer. This contact information isn't listed in the commercial marketplace.

- **Supporting documents** – Up to three customer-facing documents, such as whitepapers, brochures, checklists, or PowerPoint presentations, in PDF form.
- **Media**
  - **Logos** – A PNG file for the **Large** logo. Partner Center will use this to create other required logo sizes. You can optionally replace these with different images later.
  - **Screenshots** – At least one and up to five screenshots that show how your offer works. Images must be 1280 x 720 pixels, in PNG format, and include a caption.
  - **Videos** (optional) – Up to four videos that demonstrate your offer. Include a name, URL for YouTube or Vimeo, and a 1280 x 720 pixel PNG thumbnail.

> **NOTE**
>
> Your offer must meet the general commercial marketplace certification policies to be published to the commercial marketplace.

Additional sales opportunities

You can choose to opt into Microsoft-supported marketing and sales channels. When creating your offer in Partner Center, you will see two a tab toward the end of the process for **Co-sell with Microsoft**. This option lets Microsoft sales teams consider your IP co-sell eligible solution when evaluating their customers' needs. See Co-sell option in Partner Center for detailed information on how to prepare your offer for evaluation.

Next steps

After you've considered the planning items described above, select one of the following (also available in the table of contents on the left) to begin creating your offer.

PUBLISHING GUIDE	NOTES
Dynamics 365 for Operations	When you're building for Enterprise Edition, first review these additional publishing processes and guidelines. Product types include Commerce, Finance, Human Resources, Project Operations, and Supply Chain Management.
Dynamics 365 for Business Central	n/a
Dynamics 365 for Customer Engagement & Power Apps	First review these additional publishing processes and guidelines. Product types include Customer Service, Customer Voice, Project Operations, Field Service, Marketing, Mixed Reality, Power Apps, Power Automate, Power Virtual Agents, Project Service Automation, and Sales.

Create a Dynamics 365 for Customer Engagement & Power Apps offer

11/22/2021 • 5 minutes to read • Edit Online

This article describes how to create a Dynamics 365 for Customer Engagement & Power Apps offer. All offers for Dynamics 365 go through our certification process. The trial experience allows users to deploy your solution to a live Dynamics 365 environment.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program.

Before you begin

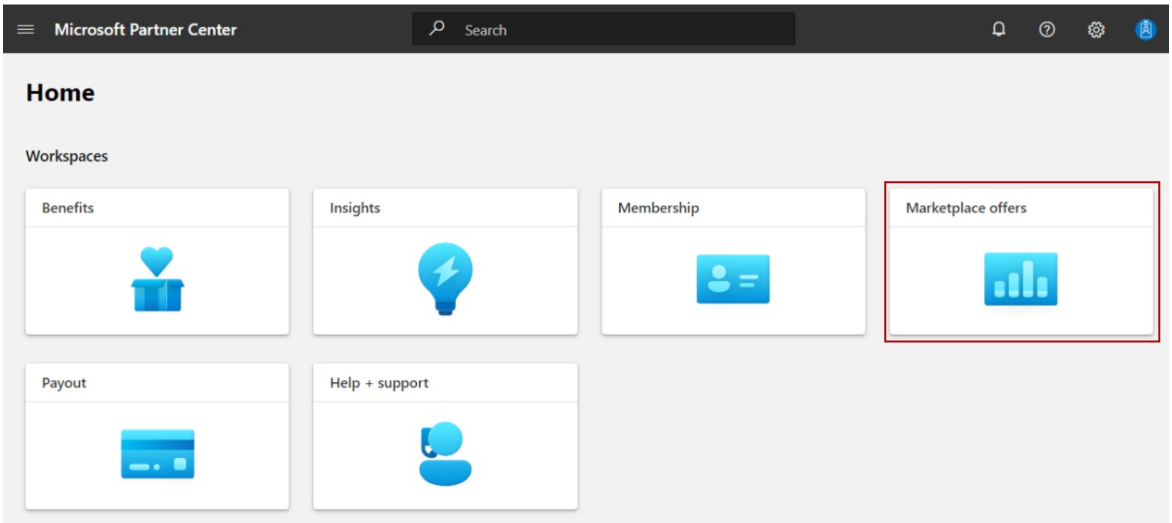
Review Plan a Dynamics 365 offer. It will explain the technical requirements for this offer and list the information and assets you'll need when you create it.

Create a new offer

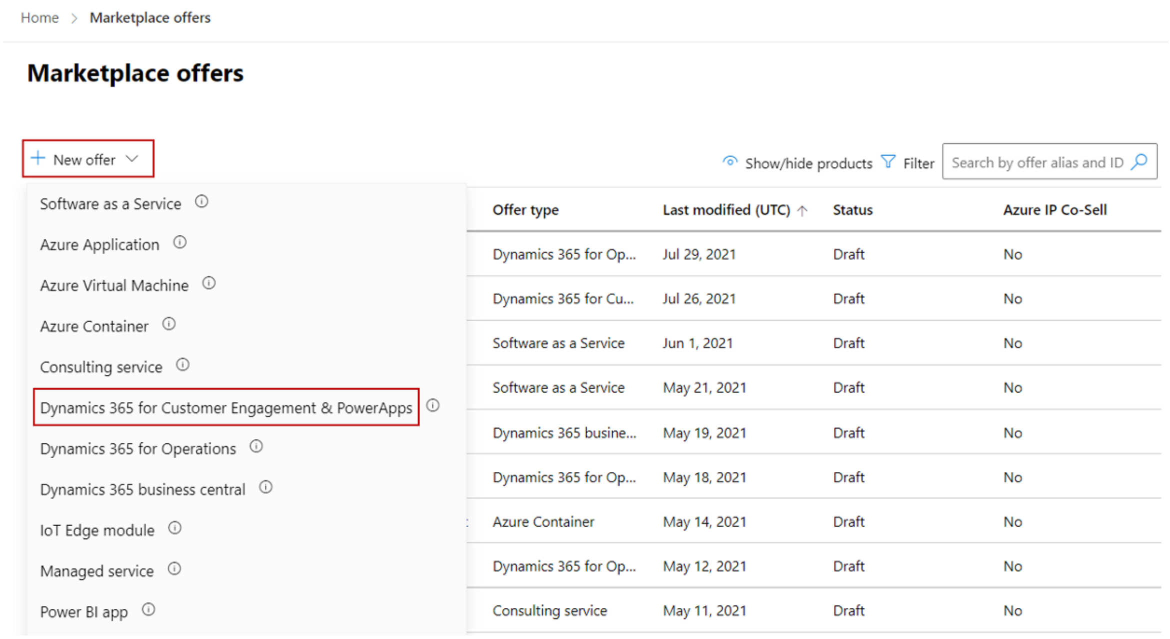
> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Dynamics 365 for Customer Engagement & Power Apps**.



IMPORTANT

After an offer is published, any edits you make to it in Partner Center appear on Microsoft AppSource only after you republish the offer. Be sure to always republish an offer after changing it.

New offer

Enter an **Offer ID**. This is a unique identifier for each offer in your account.

- This ID is visible to customers in the web address for the offer and in Azure Resource Manager templates, if applicable.
- Use only lowercase letters and numbers. The ID can include hyphens and underscores, but no spaces, and is limited to 50 characters. For example, if your Publisher ID is `testpublisherid` and you enter **test-offer-1**, the offer web address will be `https://appsource.microsoft.com/product/dynamics-365/testpublisherid.test-offer-1`.
- The Offer ID can't be changed after you select **Create**.

Enter an **Offer alias**. This is the name used for the offer in Partner Center.

- This name isn't used on AppSource. It is different from the offer name and other values shown to customers.
- This name can't be changed after you select **Create**.

Select **Create** to generate the offer. Partner Center opens the **Offer setup** page.

Alias

Enter a descriptive name that we'll use to refer to this offer solely within Partner Center. The offer alias (pre-populated with what you entered when you created the offer) won't be used in the marketplace and is different than the offer name shown to customers. If you want to update the offer name later, see the Offer listing page.

Setup details

For **How do you want potential customers to interact with this listing offer?**, select the option you want to use for this offer:

- **Enable app license management through Microsoft** – Manage your app licenses through

Microsoft. To let customers run your app's base functionality without a license and run premium features after they've purchased a license, select the **Allow customers to install my app even if licenses are not assigned box**. If you select this second box, you need to configure your solution package to not require a license.

> **NOTE**
>
> You cannot change this setting after you publish your offer. To learn more about this setting, see ISV app license management.

- **Get it now (free)** – List your offer to customers for free.
- **Free trial (listing)** – List your offer to customers with a link to a free trial. Offer listing free trials are created, managed, and configured by your service and do not have subscriptions managed by Microsoft.

> **NOTE**
>
> The tokens your application will receive through your trial link can only be used to obtain user information through Azure Active Directory (Azure AD) to automate account creation in your app. Microsoft accounts are not supported for authentication using this token.

- **Contact me** – Collect customer contact information by connecting your Customer Relationship Management (CRM) system. The customer will be asked for permission to share their information. These customer details, along with the offer name, ID, and marketplace source where they found your offer, will be sent to the CRM system that you've configured. For more information about configuring your CRM, see Customer leads.

Test drive

A test drive is a great way to showcase your offer to potential customers by giving them access to a preconfigured environment for a fixed number of hours. Offering a test drive results in an increased conversion rate and generates highly qualified leads. To learn more, start with What is a test drive?.

> **TIP**
>
> A test drive is different from a free trial. You can offer either a test drive, free trial, or both. They both provide customers with your solution for a fixed period-of-time. But, a test drive also includes a hands-on, self-guided tour of your product's key features and benefits being demonstrated in a real-world implementation scenario.

To enable a test drive, select the **Enable a test drive** check box and select the **Type of test drive**. You will configure the test drive later. With test drive, you must also configure your offer to a CRM system for customer leads (see next section). To remove test drive from your offer, clear this check box.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.

3. Complete the fields that appear. For detailed steps, see the following articles:

   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint
   - Configure your offer to send leads to Marketo
   - Configure your offer to send leads to Salesforce

4. To validate the configuration you provided, select the **Validate** link.

5. Select **Connect**.

For more information, see Customer leads from your commercial marketplace offer.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Properties**.

Next steps

- Configure offer properties
- Offer listing best practices

Configure Dynamics 365 for Customer Engagement & Power Apps offer properties

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the categories used to group your offer on Microsoft AppSource, your application version, and the legal contracts that support your offer.

Categories

Select categories and subcategories to place your offer in the appropriate AppSource search areas. Be sure to describe later in the offer description how your offer supports these categories.

- Select a Primary category.
- To add a second optional category (Secondary), select the **+Categories** link.
- Select up to two subcategories for the Primary and/or Secondary category. If no subcategory is applicable to your offer, select **Not applicable**. Use Ctrl+click to select a second subcategory.

See the full list of categories and subcategories in Offer Listing Best Practices.

Industries

Optionally, select up to two industries and two verticals under each industry. These categories are used for displaying your offer when industry and verticals are used in search filters and applied in the online store. If your offer is targeting a specific industry and/or vertical, explain how your offer supports the selected industries or verticals in the offer description. Otherwise, if your offer is not industry-specific, do not make a selection and leave this section blank. See the full list of industries and verticals in Offer listing best practices.

Select the **Applicable products** that apply to the offer: Customer Service, Customer Voice, Project Operations, Field Service, Marketing, Mixed Reality, Power Apps, Power Automate, Power Virtual Agents, Project Service Automation, and/or Sales. These selections allow customers to find your offer based on the AppSource Dynamics 365 product filters it displays under.

Enter an **App version** for your offer. Customers will see this number listed on the offer's detail page.

Legal

Provide the **Terms and conditions** customers must accept before they can try your offer. You can also provide the web address where your terms and conditions can be found.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Next steps

- Configure offer listing

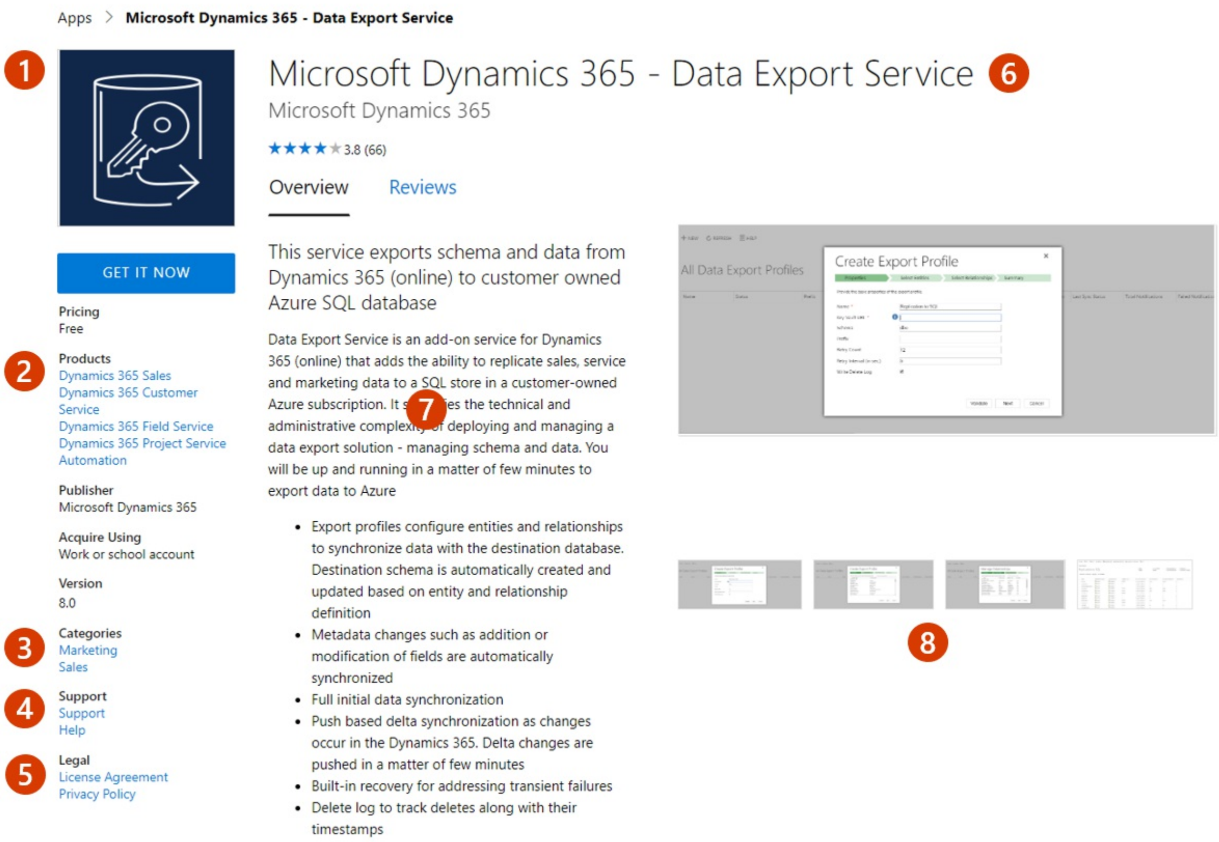
Configure Dynamics 365 for Customer Engagement & Power Apps offer listing details

11/22/2021 • 4 minutes to read • Edit Online

This page lets you define the offer details such as offer name, description, links, contacts, logo, and screenshots.

> **NOTE**
>
> Provide offer listing details in one language only. English is not required as long as the offer description begins with the phrase, "This application is available only in [non-English language]." It is also acceptable to provide a *Useful link URL* to offer content in a language other than the one used in the Offer listing content.

Here's an example of how offer information appears in Microsoft AppSource (any listed prices are for example purposes only and not intended to reflect actual costs):



Call-out descriptions

1. Logo
2. Products
3. Categories
4. Support address (link)
5. Terms of use
6. Offer name
7. Description
8. Screenshots/videos

Marketplace details

The **Name** you enter here is shown to customers as the title of the offer. This field is pre-populated with the name you entered for **Offer alias** when you created the offer, but you can change it. The name:

- Can include trademark and copyright symbols.
- Must be 50 characters or less.
- Can't include emojis.

Provide a short description of your offer for the **Search results summary** (up to 100 characters). This description may be used in marketplace search results.

Provide a thorough **Description** of your offer, up to 3,000 characters. Customers will see this in the Marketplace listing overview.

Include one or more of the following items in your description:

- The value and key benefits of your offer
- Category and/or industry associations
- In-app purchase opportunities
- Any required disclosures

Here are some tips for writing an informative and impactful description:

- Clearly describe the value of your offer in the first few sentences. Keep in mind that the first few sentences might be displayed in search results.
- Focus on the value your offer provides. Don't rely on features and functionality to sell your product.
- Use industry-specific vocabulary and language that describes the benefits of your offer.
- Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

You can optionally enter up to three **Search keywords** to help customers find your offer in the marketplace. For best results, also use these keywords in your description.

If you want to let customers know what **Products your app works with**, enter up to three product names.

Help/Privacy URLs

Enter the **Help link for your app** (URL) where customers can learn more about your offer. Your Help URL cannot be the same as your Support URL.

Enter the **Privacy policy link** (URL) to your organization's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations, and for providing a valid privacy policy.

Contact information

Provide the name, email, and phone number for a **Support contact** and an **Engineering contact**. This information is not shown to customers, but will be available to Microsoft, and may be provided to CSP partners.

In the **Support contact** section, provide the **Support URL** where CSP partners can find support for your offer. Your Support URL cannot be the same as your Help URL.

Supporting documents

Provide at least one (and up to three) related PDF marketing documents here, such as white papers, brochures, checklists, or presentations.

Marketplace media

Provide logos and images to use with your offer. All images must be in PNG format. Blurry images will cause your submission to be rejected.

> **NOTE**
>
> If you have an issue uploading files, ensure that your local network doesn't block the https://upload.xboxlive.com service that's used by Partner Center.

Logos

Provide a PNG file for the **Large** size logo. Partner Center will use this to create other required sizes. You can optionally replace this with a different image later.

These logos are used in different places in the listing:

- The large logo appears on your offer listing page in Microsoft AppSource.
- The small logo appears on the Microsoft AppSource main page and search results page.

Follow these guidelines for your logos:

- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The theme colors of the portal are white and black. Don't use these colors as the background color for your logo. Use a color that makes your logo prominent in the portal. We recommend simple primary colors.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat and avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name.
- Make sure the logo isn't stretched.

Screenshots

Add at least one (and up to five) screenshots that show how your offer works. All screenshots must be 1280 x 720 pixels and in PNG format. Add a caption for each screenshot.

Videos

Add up to four optional videos that demonstrate your offer. They should be hosted on an external video service. Enter each video's name, web address, and a thumbnail PNG image of the video at 1280 x 720 pixels.

For additional marketplace listing resources, see Best practices for marketplace offer listings.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Availability**.

Next steps

- Set offer availability

Configure Dynamics 365 for Customer Engagement & Power Apps offer availability

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define where and how to make your offer available, including markets and preview audience.

Markets

To specify the markets in which your offer should be available, select **Edit markets**.

On the **Market selection** popup window, select at least one market. Choose **Select all** to make your offer available in every possible market or select only the specific markets you want. When you're finished, select **Save**.

Your selections here apply only to new acquisitions; if someone already has your app in a certain market, and you later remove that market, the people who already have the offer in that market can continue to use it, but no new customers in that market will be able to get your offer.

> **IMPORTANT**
> It is your responsibility to meet any local legal requirements, even if those requirements aren't listed here or in Partner Center. Even if you select all markets, local laws, restrictions, or other factors may prevent certain offers from being listed in some countries and regions.

Preview audience

Before you publish your offer live to the broader marketplace offer, you'll first need to make it available to a limited **Preview audience**. Enter a **Hide key** (any string using only lowercase letters and/or numbers) here. Members of your preview audience can use this hide key as a token to view a preview of your offer in the marketplace.

Then, when you're ready to make your offer available and remove the preview restriction, you'll need to remove the **Hide key** and publish again.

Select **Save draft** before continuing to the next tab in the left-nav menu.

Next steps

Do one of the following:

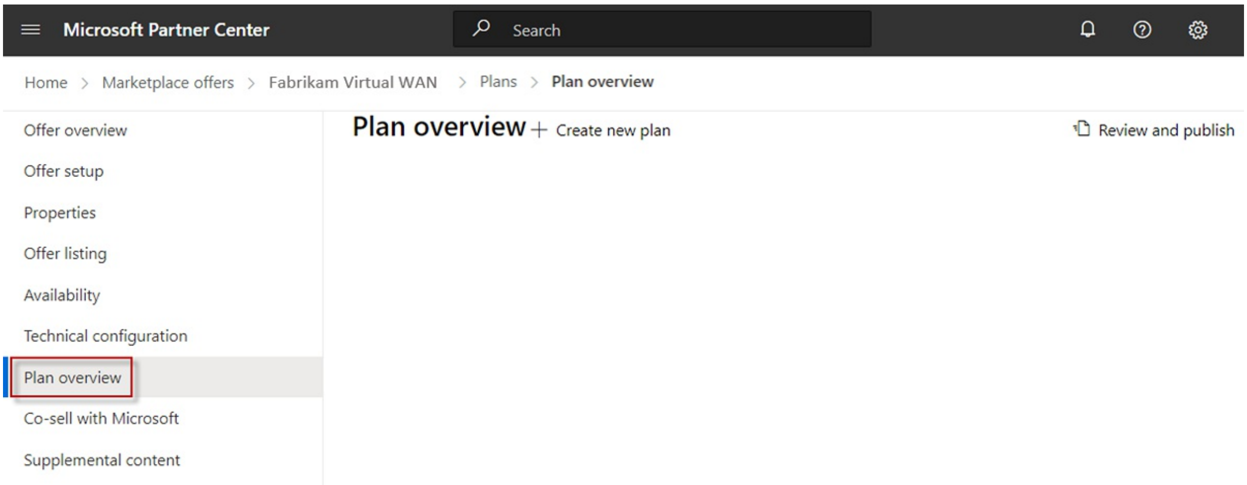
- If you chose to enable app license management through Microsoft, then go to Create Dynamics 365 for Customer Engagement & Power Apps plans.
- Otherwise, go to Set offer technical configuration.

Create Dynamics 365 for Customer Engagement & Power Apps plans

11/22/2021 • 3 minutes to read • Edit Online

If you enabled app license management for your offer, the **Plans overview** tab appears as shown in the following screenshot. Otherwise, go to Set up Dynamics 365 for Customer Engagement & Power Apps offer technical configuration.

- Workspaces view
- Current view



You need to define at least one plan, if your offer has app license management enabled. You can create a variety of plans with different options for the same offer. These plans (sometimes referred to as SKUs) can differ in terms of monetization or tiers of service. Later, you will map the Service IDs of these plans in your solution package to enable a runtime license check by the Dynamics platform against these plans. You will map the Service ID of each plan in your solution package. This enables the Dynamics platform to run a license check against these plans.

Create a plan

1. Near the top of the **Plan overview** page, select **+ Create new plan**.
2. In the dialog box that appears, in the **Plan ID** box, enter a unique plan ID. Use up to 50 lowercase alphanumeric characters, dashes, or underscores. You cannot modify the plan ID after you select **Create**.
3. In the **Plan name** box, enter a unique name for this plan. Use a maximum of 50 characters.
4. Select **Create**.

Define the plan listing

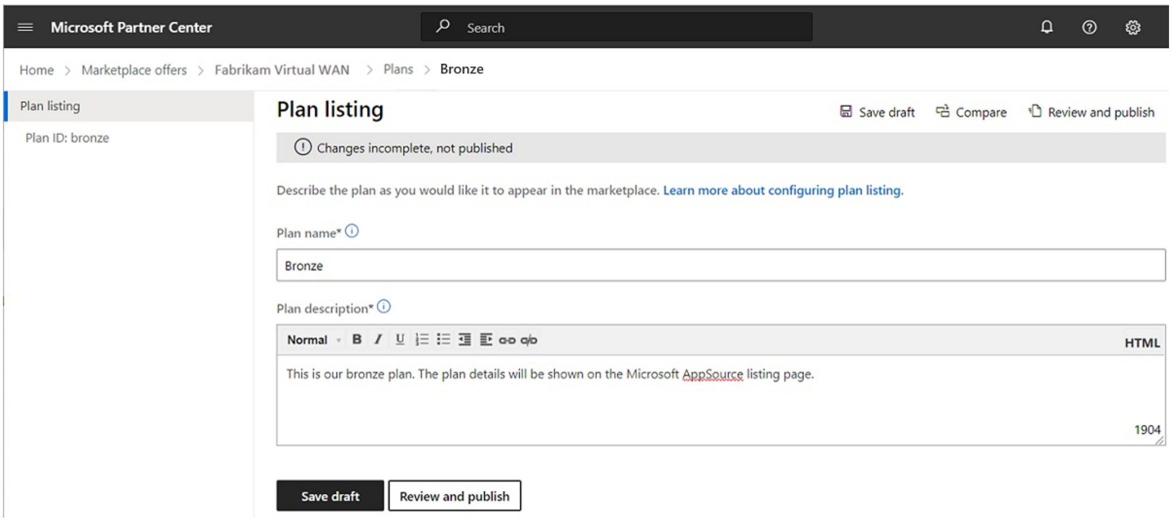
On the **Plan listing** tab, you can define the plan name and description as you want them to appear in the commercial marketplace. This information will be shown on the Microsoft AppSource listing page.

- Workspaces view
- Current view

1. In the **Plan name** box, the name you provided earlier for this plan appears here. You can change it at any time. This name will appear in the commercial marketplace as the title of your offer's software plan.

2. In the **Plan description** box, explain what makes this software plan unique and any differences from other plans within your offer. This description may contain up to 500 characters.

3. Select **Save draft**, and then in the breadcrumb at the top of the page, select **Plans**.



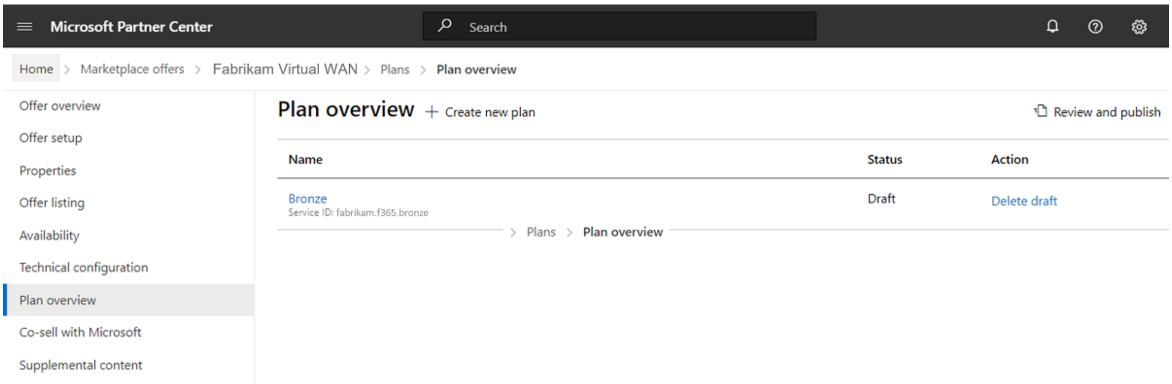
4. To create another plan for this offer, at the top of the **Plan overview** page, select **+ Create new plan**. Then repeat the steps in the Create a plan section. Otherwise, if you're done creating plans, go to the next section: Copy the Service IDs.

Copy the Service IDs

You need to copy the Service ID of each plan you created so you can map them to your solution package in the next step.

- Workspaces view
- Current view

- For each plan you created, copy the Service ID to a safe place. You'll add them to your solution package in the next step. The service ID is listed on the **Plan overview** page in the form of `ISV name.offer name.plan ID`. For example, Fabrikam.F365.bronze.



Add Service IDs to your solution package

1. Add the Service IDs you copied in the previous step to your solution package. To learn how, see Adding license metadata to your solution and Create an AppSource package for your app.
2. After you create the CRM package .zip file, upload it to Azure Blob Storage. You will need to provide the SAS URL of the Azure Blob Storage account that contains the uploaded CRM package .zip file.

Next steps

- Go to Set up Dynamics 365 for Customer Engagement & Power Apps offer technical configuration to upload the solution package to your offer.

Set up Dynamics 365 for Customer Engagement & Power Apps offer technical configuration

11/22/2021 • 2 minutes to read • Edit Online

This page defines the technical details used to connect to your offer. This connection lets us provision your offer for the customers who choose to acquire it.

Offer information

Base license model determines how customers are assigned your application in the CRM Admin Center. Do one of the following:

- Select **Resource** for instance-based licensing
- Select **User** if licenses are assigned one per tenant or if you chose to manage your app licenses through Microsoft.

The **Requires S2S outbound and CRM Secure Store Access** check box enables configuration of CRM Secure Store or Server-to-Server (S2S) outbound access. This feature requires specialized consideration from the Dynamics 365 Team during the certification phase. Microsoft will contact you to complete additional steps to support this feature.

Leave **Application configuration URL** blank; it is for future use.

CRM package

In the **URL of your package location** box, enter the URL of the Azure Blob Storage account that contains the uploaded CRM package .zip file. Include a read-only SAS key in the URL so Microsoft can pick up your package for verification.

> **IMPORTANT**
>
> To avoid a publishing block, make sure that the expiration date in the URL of your Blob storage hasn't expired. You can revise the date by accessing your policy. We recommend the **Expiry time** be at least one month in the future.

Select the **There is more than one CRM package in my package file** box if applicable. If so, be sure to include all the packages in your .zip file.

For detailed information on how to build your package and update its structure, see Step 3: Create an AppSource package for your app.

CRM package availability

Select **+ Add region** to specify the geographic regions in which your CRM package will be available to customers. Do not select any of the following sovereign regions: US Gov Cloud Sovereign, China Cloud Sovereign, Germany Sovereign, US Gov High Cloud Sovereign, Test in production Sovereign, or US DoD Cloud Sovereign.

By default, the **Application configuration URL** you entered above will be used for each region. Leave the Application Configuration URL field blank.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Co-sell with Microsoft**. For information on setting up co-sell with Microsoft (optional), see Co-sell with Microsoft sales teams and partners overview. If you're not setting up co-sell or you've finished, continue with **Next steps** below.

Next steps

- Configure supplemental content

Set up Dynamics 365 for Customer Engagement & Power Apps offer supplemental content

11/22/2021 • 2 minutes to read • Edit Online

This page lets you provide additional information to help us validate your offer. This information is not shown to customers or published to the marketplace.

Key usage scenario

Upload a PDF file that lists your offer's key usage scenarios. All scenarios may be verified by our validation team before we approve your offer for the marketplace.

Select **Save draft**, then continue with review and publish in **Next steps** below.

Next steps

- Review and publish

Create a Dynamics 365 for Operations offer

11/22/2021 • 4 minutes to read • Edit Online

This article describes how to create a Dynamics 365 for Operations offer. This offer type is an enterprise resource planning (ERP) service that supports advanced operations, finance, manufacturing, and supply chain management. All offers for Dynamics 365 go through our certification process.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program.

Before you begin

Review Plan a Dynamics 365 offer. It will explain the technical requirements for this offer and list the information and assets you'll need when you create it.

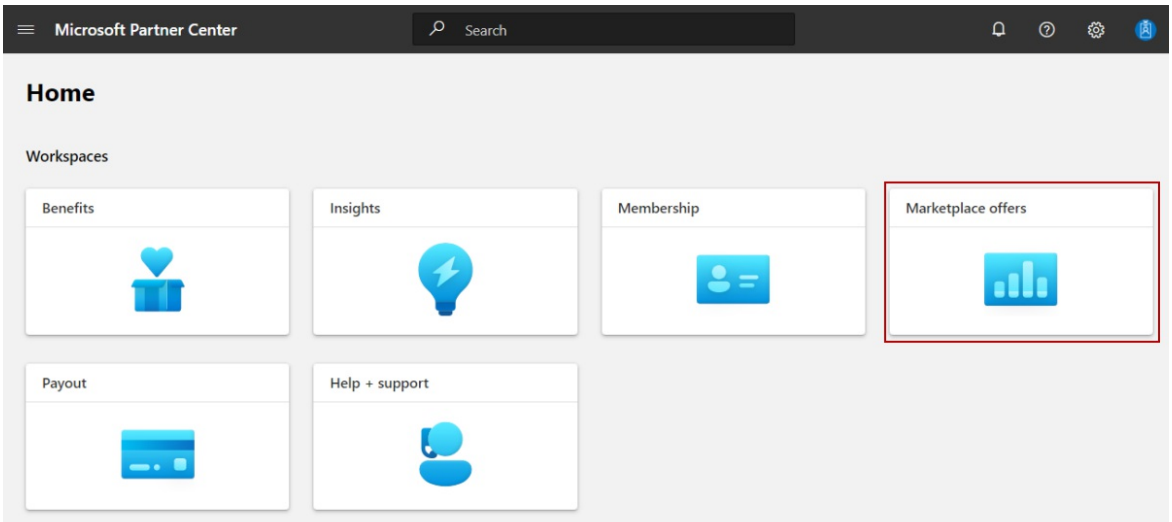
Create a new offer

NOTE

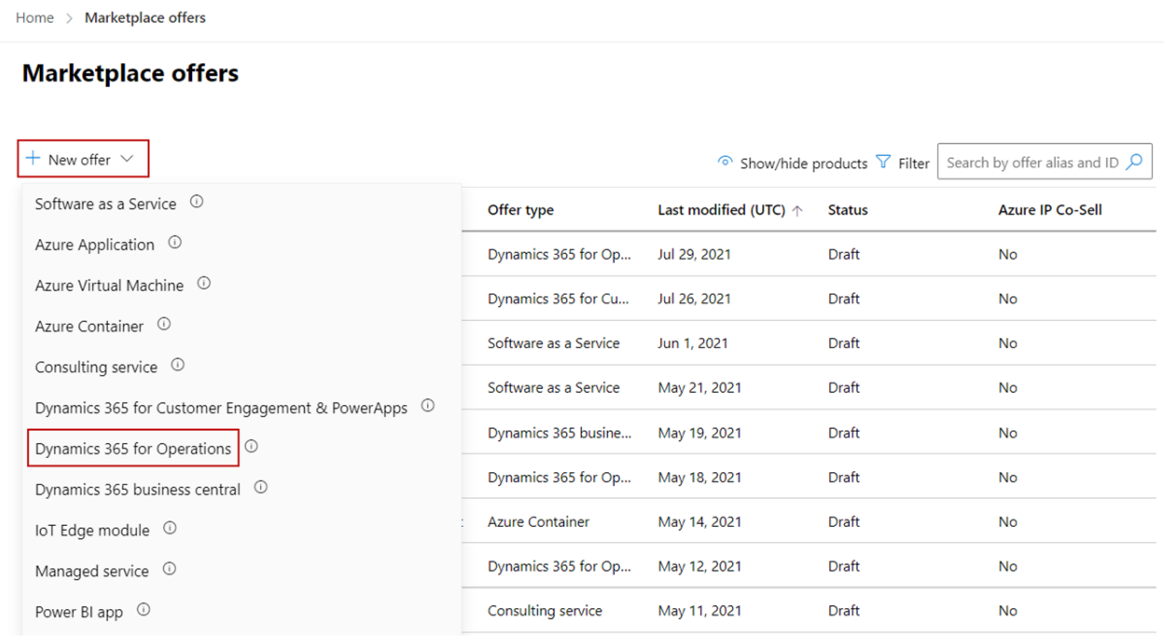
The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Dynamics 365 for operations**.



> **IMPORTANT**
>
> After an offer is published, any edits you make to it in Partner Center appear on Microsoft AppSource only after you republish the offer. Be sure to always republish an offer after changing it.

New offer

Enter an **Offer ID**. This is a unique identifier for each offer in your account.

- This ID is visible to customers in the web address for the offer and in Azure Resource Manager templates, if applicable.
- Use only lowercase letters and numbers. The ID can include hyphens and underscores, but no spaces, and is limited to 50 characters. For example, if you enter **test-offer-1**, the offer web address will be `https://azuremarketplace.microsoft.com/marketplace/../test-offer-1`.
- The Offer ID can't be changed after you select **Create**.

Enter an **Offer alias**. This is the name used for the offer in Partner Center.

- This name isn't used on AppSource. It is different from the offer name and other values shown to customers.
- This name can't be changed after you select **Create**.

Select **Create** to generate the offer. Partner Center opens the **Offer setup** page.

Alias

Enter a descriptive name that we'll use to refer to this offer solely within Partner Center. The offer alias (pre-populated with what you entered when you created the offer) won't be used in the marketplace and is different than the offer name shown to customers. If you want to update the offer name later, see the Offer listing page.

Setup details

For **How do you want potential customers to interact with this listing offer?**, select **Contact me**.

Collect customer contact information by connecting your Customer Relationship Management (CRM) system. The customer will be asked for permission to share their information. These customer details, along with the offer name, ID, and marketplace source where the customer found your offer, will be sent to the CRM system that you've configured. For more information about configuring your CRM, see Customer leads.

Test drive

A test drive is a great way to showcase your offer to potential customers by giving them access to a preconfigured environment for a fixed number of hours. Offering a test drive results in an increased conversion rate and generates highly qualified leads. To learn more, start with What is a test drive?.

> **TIP**
> A test drive is different from a free trial. You can offer either a test drive, free trial, or both. They both provide customers with your solution for a fixed period-of-time. But, a test drive also includes a hands-on, self-guided tour of your product's key features and benefits being demonstrated in a real-world implementation scenario.

To enable a test drive, select the **Enable a test drive** check box and select the **Type of test drive**. You will configure the test drive later. With test drive, you must also configure your offer to a CRM system for customer leads (see next section). To remove test drive from your offer, clear this check box.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.
3. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint
   - Configure your offer to send leads to Marketo
   - Configure your offer to send leads to Salesforce
4. To validate the configuration you provided, select the **Validate** link.
5. Select **Connect**.

For more information, see Customer leads from your commercial marketplace offer.

Business Applications ISV Program

Your offer is initially enrolled in the Standard tier.

Before publishing your offer, complete the Co-sell module.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Properties**.

Next steps

- Configure offer Properties
- Offer listing best practices

Configure Dynamics 365 for Operations offer properties

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the categories used to group your offer on Microsoft AppSource, your application version, and the legal contracts that support your offer.

Categories

Select categories and subcategories to place your offer in the appropriate AppSource search areas. Be sure to describe later in the offer description how your offer supports these categories.

- Select a Primary category.
- To add a second optional category (Secondary), select the **+Categories** link.
- Select up to two subcategories for the Primary and/or Secondary category. If no subcategory is applicable to your offer, select **Not applicable**. Use Ctrl+click to select a second subcategory.

See the full list of categories and subcategories in Offer Listing Best Practices.

Industries

Optionally, select up to two industries and two verticals under each industry. These categories are used for displaying your offer when industry and verticals are used in search filters and applied in the online store. If your offer is targeting a specific industry and/or vertical, explain how your offer supports the selected industries or verticals in the offer description. Otherwise, if your offer is not industry-specific, do not make a selection and leave this section blank. See the full list of industries and verticals in Offer listing best practices.

Select the **Applicable products** that apply to the offer: Commerce, Finance, Human Resources, Project Operations, and/or Supply Chain Management. These selections allow customers to find your offer based on the AppSource Dynamics 365 product filters it displays under.

Enter an **App version** for your offer. Customers will see this number listed on the offer's detail page.

Legal

Provide the **Terms and conditions** customers must accept before they can try your offer. You can also provide the web address where your terms and conditions can be found.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Next steps

- Configure offer listing

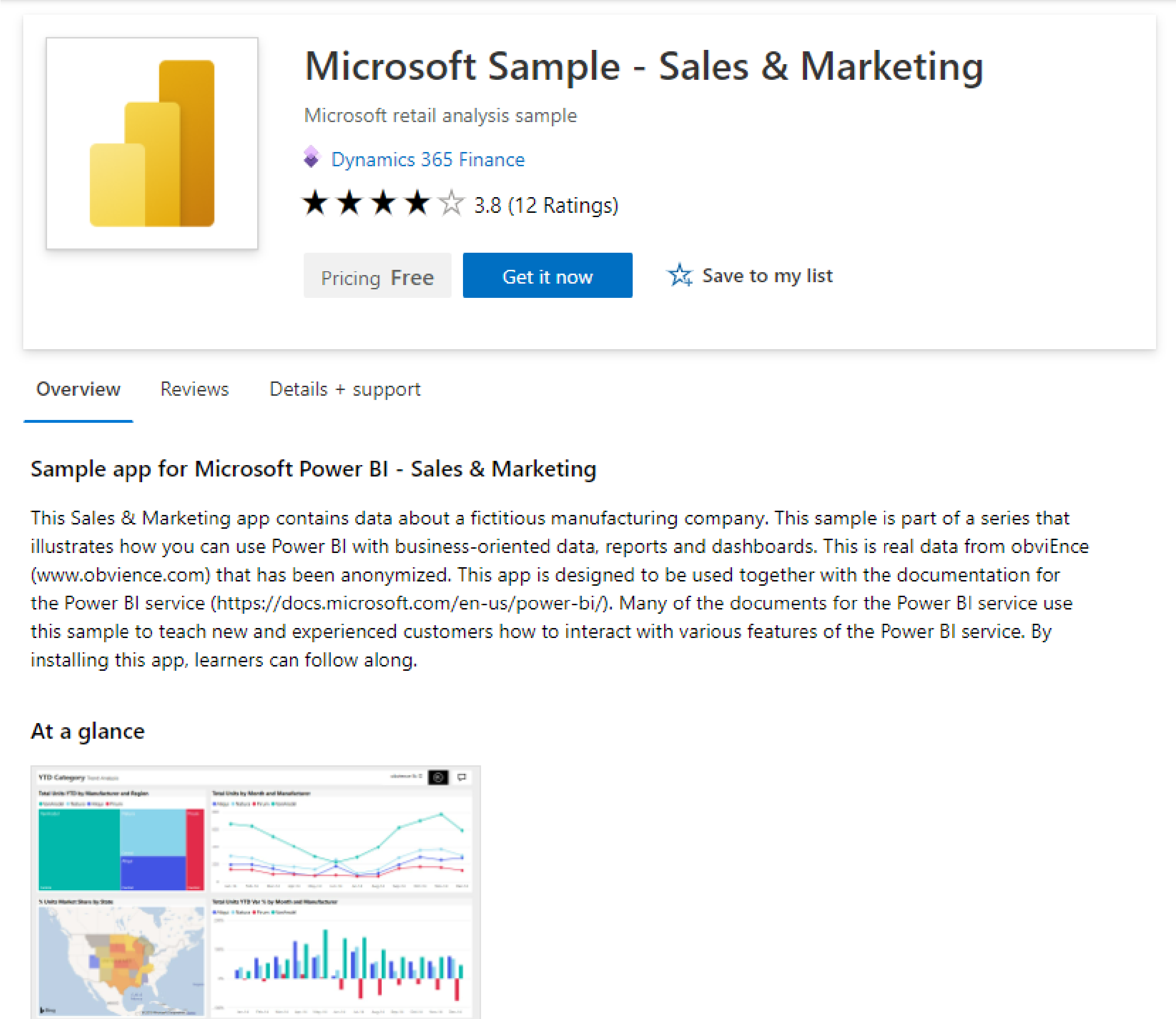
Configure D365 for Operations offer listing details

11/22/2021 • 4 minutes to read • Edit Online

This page lets you define the offer details such as offer name, description, links, contacts, logo, and screenshots.

> **NOTE**
>
> Provide offer listing details in one language only. English is not required as long as the offer description begins with the phrase, "This application is available only in [non-English language]." It is also acceptable to provide a *Useful link URL* to offer content in a language other than the one used in the Offer listing content.

Here's an example of how offer information appears in Microsoft AppSource (any listed prices are for example purposes only and not intended to reflect actual costs):



- The boxed section at the top contains your logo and offer name, followed by your search results summary, ratings, and pricing selection.
- The **Overview** tab contains your search results summary, description, and sample screenshots and (optionally) linked video thumbnails.
- The **Details + support** tab contains the information you provide for topics like pricing structure, version, license agreement, privacy policy, and support.

Continue reading below for how to enter these marketplace details.

Marketplace details

The **Name** you enter here is shown to customers as the title of the offer. This field is pre-populated with the name you entered for **Offer alias** when you created the offer, but you can change it. The name:

- Can include trademark and copyright symbols.
- Must be 50 characters or less.
- Can't include emojis.

Provide a short description of your offer for the **Search results summary** (up to 100 characters). This description may be used in marketplace search results.

Provide a thorough **Description** of your offer, up to 3,000 characters. Customers will see this in the Marketplace listing overview.

Include one or more of the following items in your description:

- The value and key benefits of your offer
- Category and/or industry associations
- In-app purchase opportunities
- Any required disclosures

Here are some tips for writing an informative and impactful description:

- Clearly describe the value of your offer in the first few sentences. Keep in mind that the first few sentences might be displayed in search results.
- Focus on the value your offer provides. Don't rely on features and functionality to sell your product.
- Use industry-specific vocabulary and language that describes the benefits of your offer.
- Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

You can optionally enter up to three **Search keywords** to help customers find your offer in the marketplace. For best results, also use these keywords in your description.

If you want to let customers know what **Products your app works with**, enter up to three product names.

Help/Privacy URLs

Enter the **Help link for your app** (URL) where customers can learn more about your offer. Your Help URL cannot be the same as your Support URL.

Enter the **Privacy policy link** (URL) to your organization's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations, and for providing a valid privacy policy.

Contact information

Provide the name, email, and phone number for a **Support contact** and an **Engineering contact**. This information is not shown to customers, but will be available to Microsoft, and may be provided to CSP partners.

In the **Support contact** section, provide the **Support URL** where CSP partners can find support for your offer. Your Support URL cannot be the same as your Help URL.

Supporting documents

Provide at least one (and up to three) related PDF marketing documents here, such as white papers, brochures, checklists, or presentations.

Marketplace media

Provide logos and images to use with your offer. All images must be in PNG format. Blurry images will cause your submission to be rejected.

> **NOTE**
>
> If you have an issue uploading files, ensure that your local network doesn't block the https://upload.xboxlive.com service that's used by Partner Center.

Logos

Provide a PNG file for the **Large** size logo. Partner Center will use this to create other required sizes. You can optionally replace this with a different image later.

These logos are used in different places in the listing:

- The large logo appears on your offer listing page in Microsoft AppSource.
- The small logo appears on the Microsoft AppSource main page and search results page.

Follow these guidelines for your logos:

- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The theme colors of the portal are white and black. Don't use these colors as the background color for your logo. Use a color that makes your logo prominent in the portal. We recommend simple primary colors.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat and avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name.
- Make sure the logo isn't stretched.

Screenshots

Add at least one (and up to five) screenshots that show how your offer works. All screenshots must be 1280 x 720 pixels and in PNG format. Add a caption for each screenshot.

Videos

Add up to five optional videos that demonstrate your offer. They should be hosted on an external video service. Enter each video's name, web address, and a thumbnail PNG image of the video at 1280 x 720 pixels.

For additional marketplace listing resources, see Best practices for marketplace offer listings.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Availability**.

Next steps

- Set offer availability

Configure Dynamics 365 for Operations offer availability

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define where and how to make your offer available, including markets and preview audience.

Markets

To specify the markets in which your offer should be available, select **Edit markets**.

On the **Market selection** popup window, select at least one market. Choose **Select all** to make your offer available in every possible market, or select only the specific markets you want. When you're finished, select **Save**.

Your selections here apply only to new acquisitions; if someone already has your app in a certain market, and you later remove that market, the people who already have the offer in that market can continue to use it, but no new customers in that market will be able to get your offer.

> **IMPORTANT**
> It is your responsibility to meet any local legal requirements, even if those requirements aren't listed here or in Partner Center. Even if you select all markets, local laws, restrictions, or other factors may prevent certain offers from being listed in some countries and regions.

Preview audience

Before you publish your offer live to the broader marketplace offer, you'll first need to make it available to a limited **Preview audience**. Enter a **Hide key** (any string using only lowercase letters and/or numbers) here. Members of your preview audience can use this hide key as a token to view a preview of your offer in the marketplace.

Then, when you're ready to make your offer available and remove the preview restriction, you'll need to remove the **Hide key** and publish again.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Technical configuration**.

Next steps

- Set offer technical configuration

Set up Dynamics 365 for Operations offer technical configuration

11/22/2021 • 2 minutes to read • Edit Online

This page defines the technical details used to connect to your offer. This connection lets us provision your offer for the end customer if they choose to acquire it.

Solution identifier

Provide the solution identifier (GUID) for your solution. To find your solution identifier:

1. In Microsoft Dynamics Lifecycle Services (LCS), select **Solution Management**.
2. Select your solution, then look for the **Solution Identifier** in the **Package overview**. If the identifier is blank, select **Edit** and republish your package, then try again.

Release version

Select the version of Dynamics 365 for Operations this solution works with.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Co-sell with Microsoft**. For information on setting up co-sell with Microsoft (optional), see Co-sell partner engagement. If you're not setting up co-sell or you've finished, continue with **Next steps** below.

Test drive technical configuration

This page lets you set up a demonstration ("test drive") that allows customers to try your offer before purchasing it. Learn more in What is test drive.

To enable a test drive, select the **Enable a test drive** check box on the Offer setup tab. To remove test drive from your offer, clear this check box.

Next steps

- Configure supplemental content

Set up Dynamics 365 for Operations offer supplemental content

11/22/2021 • 2 minutes to read • Edit Online

This page lets you provide additional information to help us validate your offer. This information is not shown to customers or published to the marketplace.

Validation assets

Upload a Customization Analysis Report (CAR) in this section. This report is generated by analyzing your customization and extension models, based on a predefined set of best practice rules.

This file must be in XLS or XLSX format. If you have more than one report, you can upload a ZIP file containing all of the reports.

Does solution include localizations?

Select **Yes** if the solution enables use of local standards and policies (for example, if it accommodates the different payroll rules required by different countries/regions). Otherwise, select **No**.

Does solution enable translation(s)?

Select **Yes** if the text in your solution can be translated into other languages. Otherwise, select **No**.

Select **Save draft**, then continue **Functional validation**, which is not in the left-nav menu.

Next steps

- Functional validation

Dynamics 365 for Operations functional validation

11/22/2021 • 3 minutes to read • Edit Online

Publishing a Dynamics 365 for Operations offer in Partner Center requires two functional validations:

- Upload a demonstration video of the Dynamics 365 environment that shows basic functionality.
- Present screenshots that demonstrate the solution's Lifecycle Services (LCS) environment.

> **NOTE**
> Subsequent recertification publishes do not require demonstration. To learn more, see the AppSource Policy document.

How to validate

There are two options for functional validation:

- Hold a 30-minute conference call with us during Pacific Standard time (PST) business hours to demonstrate and record the LCS environment and solution, or
- In Partner Center, go to Commercial Marketplace and upload a demo video URL and LCS screenshots on the offer's Supplemental Content tab.

The Microsoft certification team reviews the video and files, then either approves the solution or emails you about next steps.

> **NOTE**
> If the solution/offer you are creating is a connector only, demo the connector working during the call or use one of the video upload options listed below.

Option 1: 30-minute conference call

To schedule a final review call, contact appsourceCRM@microsoft.com with the name of your offer and some potential time slots between 8 AM and 5 PM Pacific Time.

Option 2: Upload a demo video and LCS screenshots

- Workspaces view
- Current view

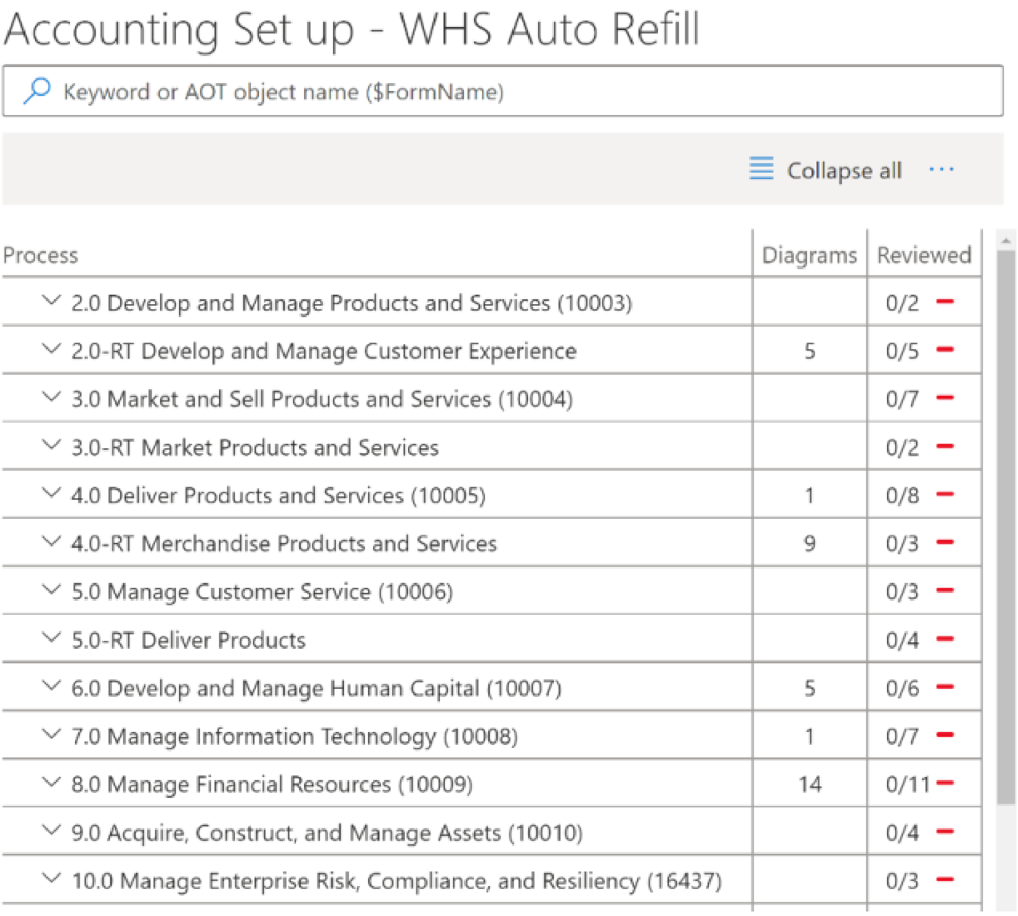
1. Record a video and upload the address to the hosting site of your choice. Follow these guidelines:
   - Viewable by the Microsoft certification team.
   - Less than 20 minutes long.
   - Includes up to three core functionality highlights of your solution in the Dynamics 365 environment.

   > **NOTE**
   > It is acceptable to use an existing marketing video if it meets the guidelines.

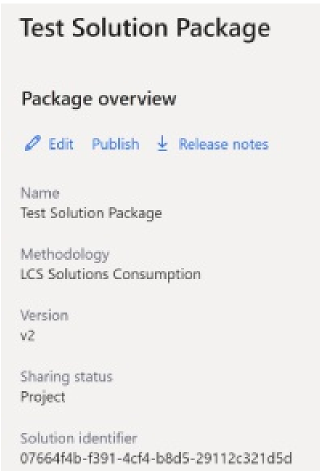
2. Take the following screenshots of the LCS environment that match the offer or solution you want to publish. They must be clear enough for the certification team to read the text. Save the screenshots as

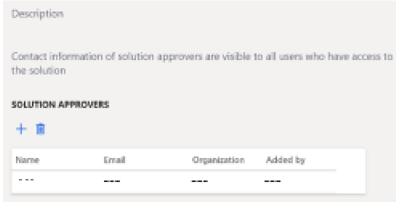
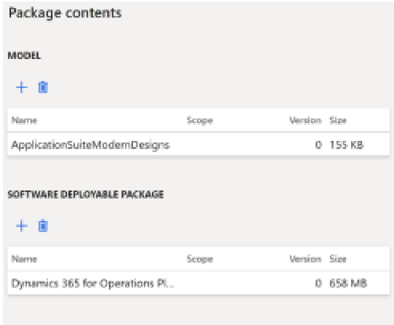
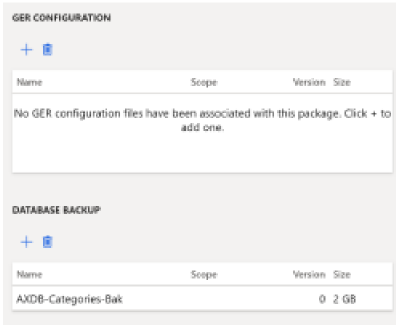
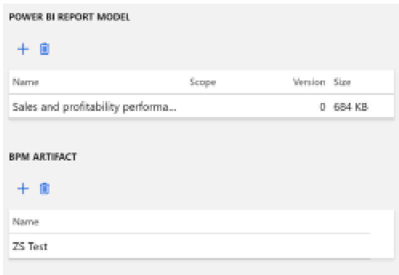
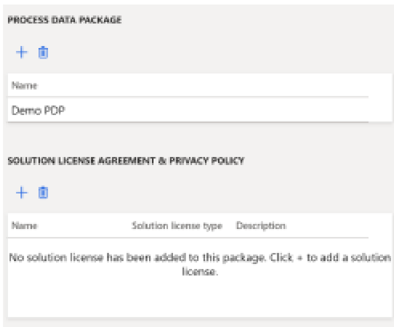
JPG files. You may provide appSourceCRM@microsoft.com permission to your LCS environment so we can verify the setup in lieu of providing screenshots.

a. Go to **LCS** > **Business Process Modeler** > **Project library**. Take screenshots of all the Process steps. Include the **Diagrams** and **Reviewed** columns, as shown here:



b. Go to **LCS** > **Solution Management** > **Test Solution Package**. Take screenshots that include the package overview and contents shown in these examples:

FIELD	IMAGE
Package overview	

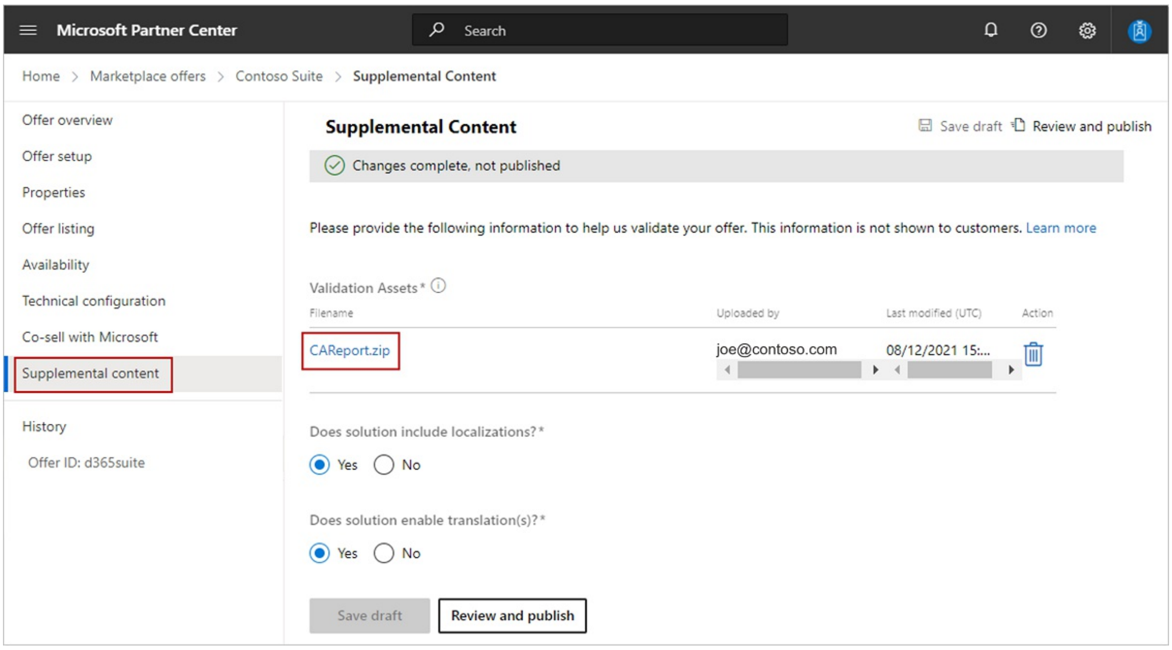
FIELD	IMAGE
• Solution approvers	
Package contents • Model • Software deployable package	
• GER configuration • Database backup Artifacts are not required in the **GER configuration** section.	
• Power BI report model • BPM artifact Artifacts are not required in the **Power BI** section.	
• Process data package • Solution license agreement and privacy policy The **GER configuration** and **Power BI report model** sections are optional to include for operations offers.	

To learn more about each section of the LCS portal, see the LCS User Guide.

3. Upload to Partner Center.

   a. Create a text document that includes the demo video address and screenshots, or save the screenshots as separate JPG files.

   b. Add the text and images to a .zip file in Partner Center on the offer's **Supplemental content** tab.



Next steps

- To start creating an offer, see Planning a Microsoft Dynamics 365 offer
- If you're finished creating your offer, it's time to Review and publish

Create a Dynamics 365 for Business Central offer

11/22/2021 • 5 minutes to read • Edit Online

This article describes how to create a Dynamics 365 for Business Central offer. This offer type is an enterprise resource planning (ERP) service that supports a wide range of business processes, including finance, operations, supply chain, CRM, project management, and electronic commerce. All offers for Dynamics 365 go through our certification process.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program.

Before you begin

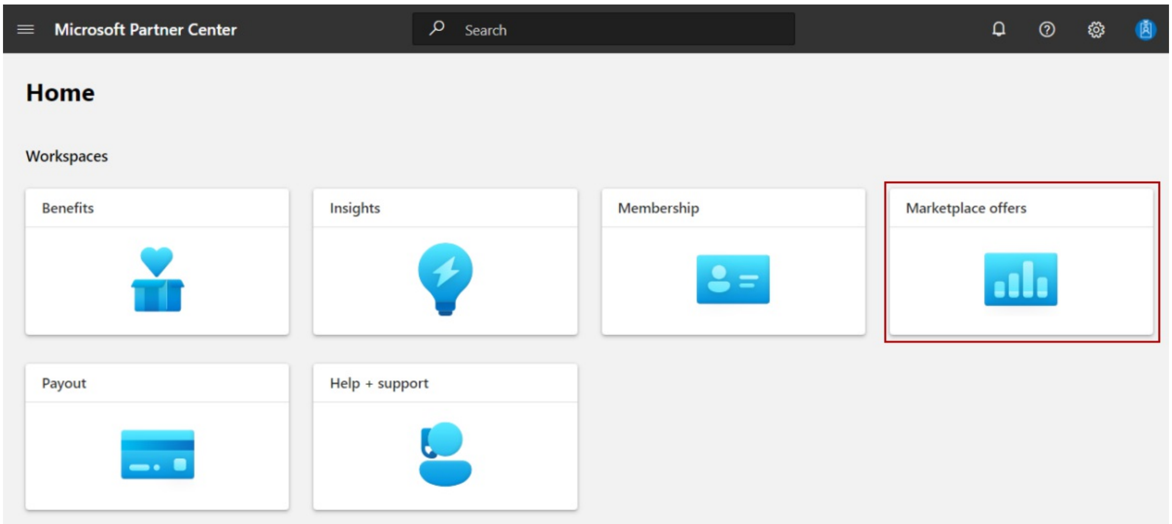
Review Plan a Dynamics 365 offer. It explains the technical requirements for this offer and lists the information and assets you'll need when you create it.

Create a new offer

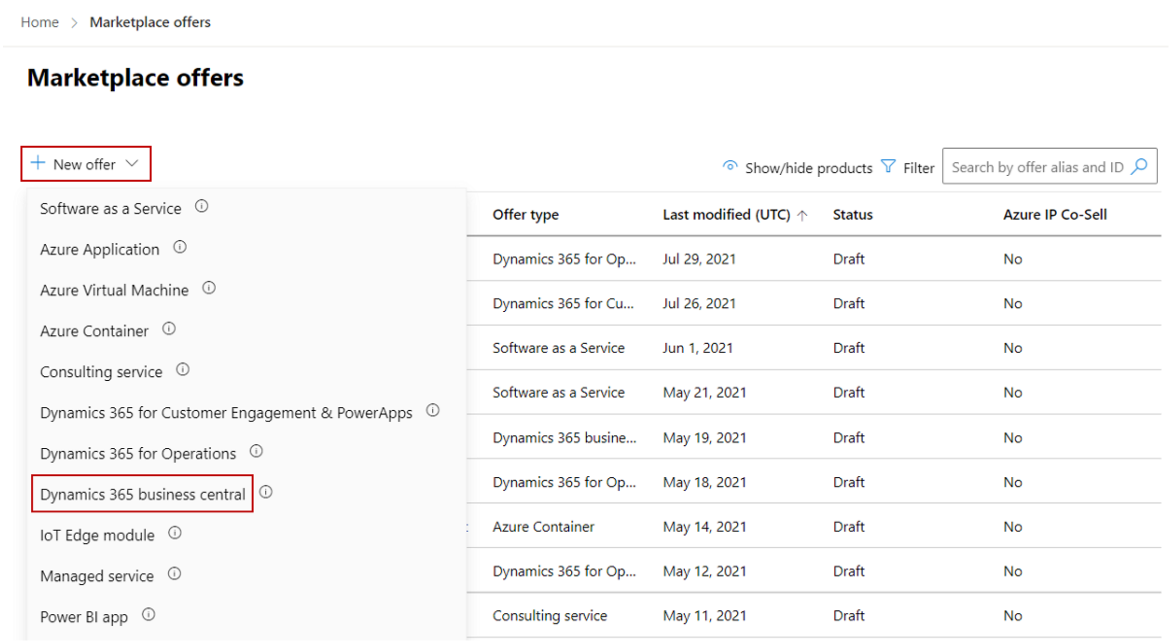
> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Dynamics 365 for business central**.



> **IMPORTANT**
>
> After an offer is published, any edits you make to it in Partner Center appear on Microsoft AppSource only after you republish the offer. Be sure to always republish an offer after changing it.

New offer

In the dialog box that appears, enter an **Offer ID**. This is a unique identifier for each offer in your account.

- This ID is visible to customers in the web address for the offer and in Azure Resource Manager templates, if applicable.
- Use only lowercase letters and numbers. The ID can include hyphens and underscores, but no spaces, and is limited to 50 characters. For example, if your Publisher ID is `testpublisherid` and you enter **test-offer-1**, the offer web address will be `https://appsource.microsoft.com/product/dynamics-365/testpublisherid.test-offer-1`.
- The Offer ID can't be changed after you select **Create**.

Enter an **Offer alias**. This is the name used for the offer in Partner Center.

- This name isn't used on AppSource. It is different from the offer name and other values shown to customers.
- This name can't be changed after you select **Create**.

Select **Create** to generate the offer. Partner Center opens the **Offer setup** page.

Alias

Enter a descriptive name that we'll use to refer to this offer solely within Partner Center. The offer alias (pre-populated with what you entered when you created the offer) won't be used in the marketplace and is different than the offer name shown to customers. If you want to update the offer name later, see the Offer listing page.

Setup details

Select the **Package type** that applies to your offer: (Biz Central)

- An **Add-on** app extends the experience and the existing functionality of Dynamics 365 Business Central. For details, see Add-on apps.

- A **Connect** app can be used in the scenario where there must be established a point-to-point connection between Dynamics 365 Business Central and a third-party solution or service. For details, see Connect Apps.

For **How do you want potential customers to interact with this listing offer?**, select the option you'd like to use for this offer.

- **Get it now (free)** – List your offer to customers for free.
- **Free trial (listing)** – List your offer to customers with a link to a free trial. Offer listing free trials are created, managed, and configured by your service and do not have subscriptions managed by Microsoft.

  > **NOTE**
  >
  > The tokens your application will receive through your trial link can only be used to obtain user information through Azure Active Directory (Azure AD) to automate account creation in your app. Microsoft accounts are not supported for authentication using this token.

- **Contact me** – Collect customer contact information by connecting your Customer Relationship Management (CRM) system. The customer will be asked for permission to share their information. These customer details, along with the offer name, ID, and marketplace source where they found your offer, will be sent to the CRM system that you've configured. For more information about configuring your CRM, see Customer leads.

Test drive

A test drive is a great way to showcase your offer to potential customers by giving them the option to "try before you buy", resulting in increased conversion and the generation of highly qualified leads. To learn more, see What is test drive?.

To enable a test drive for a fixed period of time, select the **Enable a test drive** check box. To remove test drive from your offer, clear this check box.

> **TIP**
>
> A test drive is different from a free trial. You can offer either a test drive, free trial, or both. They both provide customers with your solution for a fixed period-of-time. But, a test drive also includes a hands-on, self-guided tour of your product's key features and benefits being demonstrated in a real-world implementation scenario.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.
3. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint

- Configure your offer to send leads to Marketo
- Configure your offer to send leads to Salesforce

4. To validate the configuration you provided, select the **Validate** link.

5. Select **Connect**.

For more information, see Customer leads from your commercial marketplace offer.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Properties**.

Next steps

- Configure offer properties
- Offer listing best practices

Configure Dynamics 365 for Business Central offer properties

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the categories used to group your offer on Microsoft AppSource, your application version, and the legal contracts that support your offer.

Categories

Select categories and subcategories to place your offer in the appropriate AppSource search areas. Be sure to describe later in the offer description how your offer supports these categories.

- Select a Primary category.
- To add a second optional category (Secondary), select the **+Categories** link.
- Select up to two subcategories for the Primary and/or Secondary category. If no subcategory is applicable to your offer, select **Not applicable**. Use Ctrl+click to select a second subcategory.

See the full list of categories and subcategories in Offer Listing Best Practices.

Industries

Optionally, select up to two industries and two verticals under each industry. These categories are used for displaying your offer when industry and verticals are used in search filters and applied in the online store. If your offer is targeting a specific industry and/or vertical, explain how your offer supports the selected industries or verticals in the offer description. Otherwise, if your offer is not industry-specific, do not make a selection and leave this section blank. See the full list of industries and verticals in Offer listing best practices..

Enter an **App version** for your offer. Customers will see this number listed on the offer's detail page.

Legal

Provide the **Terms and conditions** customers must accept before they can try your offer. You can also provide the web address where your terms and conditions can be found.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Next steps

- Configure offer listing

Configure Dynamics 365 for Business Central offer listing details

11/22/2021 • 4 minutes to read • Edit Online

Overview

This page lets you define the offer details such as offer name, description, links, contacts, logo, and screenshots.

> **NOTE**
>
> Provide offer listing details in one language only. English is not required as long as the offer description begins with the phrase, "This application is available only in [non-English language]." It is also acceptable to provide a *Useful link URL* to offer content in a language other than the one used in the Offer listing content.

Here's an example of how offer information appears in Microsoft AppSource (any listed prices are for example purposes only and not intended to reflect actual costs):

Call-out descriptions

1. Logo
2. Products
3. Categories
4. Support address (link)
5. Terms of use
6. Privacy policy
7. Offer name
8. Summary
9. Description

10. Screenshots/videos

Marketplace details

The **Name** you enter here is shown to customers as the title of the offer. This field is pre-populated with the name you entered for **Offer alias** when you created the offer, but you can change it. The name:

- Can include trademark and copyright symbols.
- Must be 50 characters or less.
- Can't include emojis.

Provide a short description of your offer for the **Search results summary** (up to 100 characters). This description may be used in marketplace search results.

Provide a thorough **Description** of your offer, up to 3,000 characters. Customers will see this in the Marketplace listing overview.

Include one or more of the following items in your description:

- The value and key benefits of your offer
- Category and/or industry associations
- In-app purchase opportunities
- Any required disclosures

Here are some tips for writing an informative and impactful description:

- Clearly describe the value of your offer in the first few sentences. Keep in mind that the first few sentences might be displayed in search results.
- Focus on the value your offer provides. Don't rely on features and functionality to sell your product.
- Use industry-specific vocabulary and language that describes the benefits of your offer.
- Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

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You can optionally enter up to three **Search keywords** to help customers find your offer in the marketplace. For best results, also use these keywords in your description.

If you want to let customers know what **Products your app works with**, enter up to three product names.

Help/Privacy URLs

Enter the **Help link for your app** (URL) where customers can learn more about your offer. Your Help URL cannot be the same as your Support URL.

Enter the **Privacy policy link** (URL) to your organization's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations, and for providing a valid privacy policy.

Contact information

Provide the name, email, and phone number for a **Support contact** and an **Engineering contact**. This information is not shown to customers, but will be available to Microsoft, and may be provided to CSP partners.

In the **Support contact** section, provide the **Support URL** where CSP partners can find support for your offer. Your Support URL cannot be the same as your Help URL.

Supporting documents

Provide at least one (and up to three) related PDF marketing documents here, such as white papers, brochures, checklists, or presentations.

Marketplace media

Provide logos and images to use with your offer. All images must be in PNG format. Blurry images will cause your submission to be rejected.

> **NOTE**
>
> If you have an issue uploading files, ensure that your local network doesn't block the https://upload.xboxlive.com service that's used by Partner Center.

Logos

Provide a PNG file for the **Large** size logo. Partner Center will use this to create other required sizes. You can optionally replace this with a different image later.

These logos are used in different places in the listing:

- The large logo appears on your offer listing page in Microsoft AppSource.
- The small logo appears on the Microsoft AppSource main page and search results page.

Follow these guidelines for your logos:

- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The theme colors of the portal are white and black. Don't use these colors as the background color for your logo. Use a color that makes your logo prominent in the portal. We recommend simple primary colors.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat and avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name.
- Make sure the logo isn't stretched.

Screenshots

Add at least three (and up to five) screenshots that show how your offer works. All screenshots must be 1280 x 720 pixels and in PNG format. Add a caption for each screenshot.

Videos

Add up to four optional videos that demonstrate your offer. They should be hosted on an external video service. Enter each video's name, web address, and a thumbnail PNG image of the video at 1280 x 720 pixels.

For additional marketplace listing resources, see Best practices for marketplace offer listings.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Availability**.

Next steps

- Set offer availability

Configure Dynamics 365 for Business Central offer availability

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define where and how to make your offer available, including markets and preview audience.

Markets

To specify the markets in which your offer should be available, select **Edit markets**.

On the **Market selection** popup window, select at least one market. Choose **Select all** to make your offer available in every possible market, or select only the specific markets you want. When you're finished, select **Save**.

Your selections here apply only to new acquisitions; if someone already has your app in a certain market, and you later remove that market, the people who already have the offer in that market can continue to use it, but no new customers in that market will be able to get your offer.

> **IMPORTANT**
> It is your responsibility to meet any local legal requirements, even if those requirements aren't listed here or in Partner Center. Even if you select all markets, local laws, restrictions, or other factors may prevent certain offers from being listed in some countries and regions.

Preview audience

Before you publish your offer live to the broader marketplace offer, you'll first need to make it available to a limited **Preview audience**. Enter a **Hide key** (any string using only lowercase letters and/or numbers) here. Members of your preview audience can use this hide key as a token to view a preview of your offer in the marketplace.

Then, when you're ready to make your offer available and remove the preview restriction, you'll need to remove the **Hide key** and publish again.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Technical configuration**.

Next steps

- Set offer technical configuration

Set up Dynamics 365 for Business Central offer technical configuration

11/22/2021 • 2 minutes to read • Edit Online

This page defines the technical details used to connect to your offer. This connection lets us provision your offer for the end customer if they choose to acquire it.

Extension package file

Upload the extension package file (.app) file for your offer.

Library extension package file

Required if your offer must be installed along with another extension that will not be published to the marketplace. If so upload its .app file here.

> **NOTE**
>
> The dependency package file is no longer used. Upload a library extension package file instead.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Co-sell with Microsoft**. For information on setting up co-sell with Microsoft (optional), see Co-sell partner engagement. If you're not setting up co-sell or you've finished, continue with **Next steps** below.

Next steps

- Configure supplemental content

Set up Dynamics 365 for Business Central offer supplemental content

11/22/2021 • 2 minutes to read • Edit Online

This page lets you provide additional information to help us validate your offer. This information is not shown to customers or published to the marketplace.

Target release

Indicate which release of Microsoft Dynamics Business Central your solution targets: **Current**, **Next Major**, or **Next Minor**. This information lets us test your solution appropriately.

Supported editions

If your offer requires the Premium edition of Microsoft Dynamics 365 Business Central, select **Premium** only. Otherwise, select both **Essentials** and **Premium**.

Key usage scenario

Upload a PDF file that lists your offer's key usage scenarios. All scenarios listed here may be verified by our validation team before we approve your offer for the marketplace.

Test accounts

If a test account is needed in order for our certification team to properly review your offer, upload a .pdf, .doc, or .docx file with your **Test accounts** information.

App tests automation

If your offer is an Add-on app, you must upload an **App tests automation** file (.app). This file is not applicable to Connect apps.

Select **Save draft**, then continue with review and publish in **Next steps** below.

Next steps

- Review and publish

Review and publish a Dynamics 365 offer

11/22/2021 • 2 minutes to read • Edit Online

This article shows you how to use Partner Center to preview your draft Dynamics 365 offer and then publish it to the commercial marketplace. It also covers how to check publishing status as it proceeds through the publishing steps.

Offer status

You can review your offer status on the **Overview** tab of the commercial marketplace dashboard in Partner Center. The **Status** of each offer will be one of the following:

STATUS	DESCRIPTION
Draft	Offer has been created but it isn't being published.
Publish in progress	Offer is working its way through the publishing process.
Attention needed	We discovered a critical issue during certification or during another publishing phase.
Preview	We certified the offer, which now awaits a final verification by the publisher. Select **Go live** to publish the offer live.
Live	Offer is live in the marketplace and can be seen and acquired by customers.
Pending stop sell	Publisher selected "stop sell" on an offer or plan, but the action has not yet been completed.
Not available in the marketplace	A previously published offer in the marketplace has been removed.

Validation and publishing steps

Your offer's publish status will change as it moves through the publication process. For detailed information on this process, see Validation and publishing steps.

When you are ready to submit an offer for publishing, select **Review and publish** at the upper-right corner of the portal. You'll see the status of each page for your offer listed as one of the following:

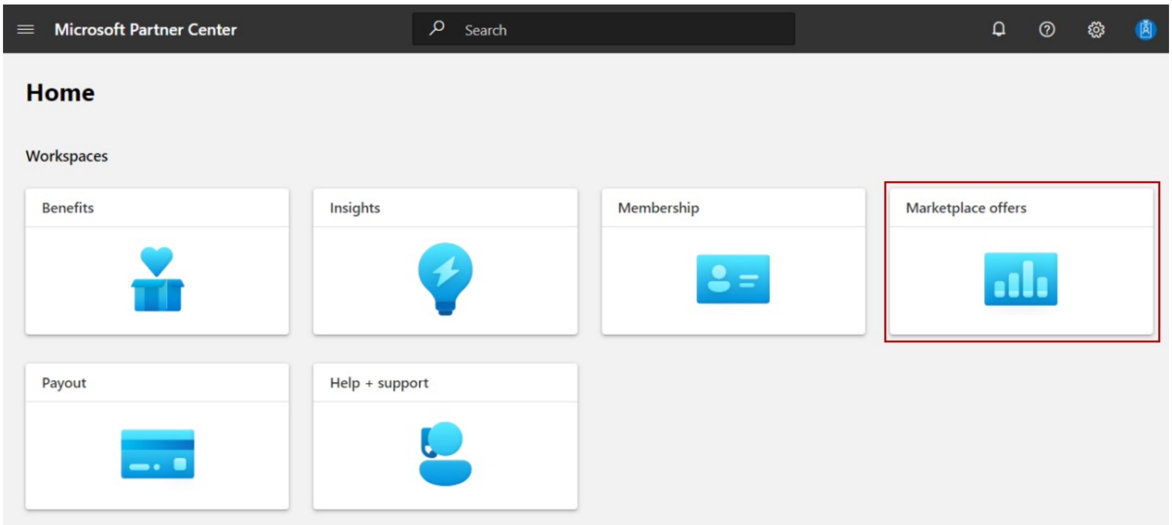
- **Not started** – The page is incomplete.
- **Incomplete** – The page is missing required information or has errors that need to be fixed. You'll need to go back to the page and update it.
- **Complete** – The page is complete. All required data has been provided and there are no errors.

If any of the pages have a status other than **Complete**, you need to correct the issue on that page and then return to the **Review and publish** page to confirm the status now shows as **Complete**. Some offer types require testing. If so, you will see a **Notes for certification** field where you need to provide testing instructions to the certification team and any supplementary notes helpful for understanding your app.

After all pages are complete and you have entered applicable testing notes, select **Publish** to submit your offer. We will email you when a preview version of your offer is available to approve. At that time complete the following steps:

- Workspaces view
- Current view

1. Return to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select the offer.
4. Select **Review and publish**.
5. Select **Go live** to make your offer publicly available.

After you select **Review and publish**, we will perform certification and other verification processes before your offer is published to AppSource. We will notify you when your offer is available in preview so you can go live. If there is an issue, we will notify you with the details and provide guidance on how to fix it.

Next steps

- If you enabled *Third-party app license management through Microsoft* for your offer, after you sell your offer, you'll need to register the deal in Partner Center. To learn more, see Managing licensing in marketplace offers.
- Update an existing offer in the Commercial Marketplace

Plan an IoT Edge module offer

11/22/2021 • 6 minutes to read • Edit Online

The Azure IoT Edge platform is backed by Microsoft Azure. This platform enables users to deploy cloud workloads to run directly on IoT devices. An IoT Edge module can run offline workloads and do data analysis locally. This offer type helps to save bandwidth, safeguard local and sensitive data, and offers low-latency response time. You now have the options to take advantage of these pre-built workloads. Until now, only a handful of first-party solutions from Microsoft were available. You had to invest the time and resources into building your own custom IoT solutions.

With IoT Edge modules in Azure Marketplace, we now have a single destination for publishers to expose and sell their solutions to the IoT audience. IoT developers can ultimately find and purchase capabilities to accelerate their solution development.

Key benefits of IoT Edge modules in Azure Marketplace

FOR PUBLISHERS	FOR CUSTOMERS (IOT DEVELOPERS)
Reach millions of developers looking to build and deploy IoT Edge solutions.	Compose an IoT Edge solution with the confidence of using secure and tested components.
Publish once and run across any IoT Edge hardware that supports containers.	Reduce time to market by finding and deploying 1st and 3rd party IoT Edge modules for specific needs.
Monetize with flexible billing options • Free and Bring Your Own License (BYOL).	Make purchases with your choice of billing models. • Free and Bring Your Own License (BYOL).

What is an IoT Edge module?

Azure IoT Edge lets you deploy and manage business logic on the edge in the form of modules. Azure IoT Edge modules are the smallest computation units managed by IoT Edge, and can contain Microsoft services (such as Azure Stream Analytics), third-party services or your own solution-specific code. To learn more about IoT Edge modules, see Understand Azure IoT Edge modules.

What is the difference between a Container offer type and an IoT Edge module offer type?

The IoT Edge module offer type is a specific type of container running on an IoT Edge device. It comes with default configuration settings to run in the IoT Edge context, and optionally uses the IoT Edge module SDK to be integrated with the IoT Edge runtime.

Select the right online store

IoT Edge Modules are only published to Azure Marketplace; AppSource does not apply. For more information on the differences across online stores, see Determine your publishing option.

Technical Requirements

The technical requirements to get an IoT Edge Module certified and published in Azure Marketplace are detailed in the Prepare your IoT Edge module technical assets.

Eligibility prerequisites

All the terms of the Microsoft Azure Marketplace agreements and policies apply to IoT Edge module offers. Additionally, there are prerequisites and technical requirements for IoT Edge modules.

To publish an IoT Edge module to Azure Marketplace, you need to meet the following prerequisites:

- Access to the Partner Center. For more information, see Create a commercial marketplace account in Partner Center.
- Host your IoT Edge module in an Azure Container Registry.
- Have your IoT Edge module metadata ready such as (non-exhaustive list):
  - A title
  - A description (in HTML format)
  - A logo image (in sizes of 48 x 48 (optional), 90 x 90 (optional), and from 216 x 216 to 350 x 350 px, all in PNG format)
  - A term of use and privacy policy
  - Default module configuration (route, twin desired properties, createOptions, environment variables)
  - Documentation
  - Support contacts

Licensing options

These are the available licensing options for Azure Container offers:

LICENSING OPTION	TRANSACTION PROCESS
Free	List your offer to customers for free.
BYOL	The Bring Your Own Licensing option lets your customers bring existing software licenses to Azure.*

* As the publisher, you support all aspects of the software license transaction, including (but not limited to) order, fulfillment, metering, billing, invoicing, payment, and collection.

Publishing options

In all cases, IoT Edge modules should select the **Transact** publishing option. See choose a publishing option for more details on publishing options.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, you'll want to connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive; otherwise, connecting to a CRM is optional. Partner Center supports Azure table, Dynamics 365 Customer Engagement, HTTPS endpoint, Marketo, and Salesforce.

Legal contracts

To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions.

You can choose to provide your own terms and conditions, instead of the standard contract. Customers must accept these terms before they can try your offer.

Offer listing details

> **NOTE**
>
> Offer listing content is not required to be in English if the offer description begins with the phrase "This application is available only in [non-English language]".

To help create your offer more easily, prepare these items ahead of time. All are required except where noted.

- **Name** – The name will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It cannot contain emojis (unless they are the trademark and copyright symbols) and is limited to 50 characters.
- **Search results summary** – The purpose or function of your offer as a single sentence with no line breaks in 100 characters or less. This is used in the commercial marketplace listing(s) search results.
- **Short description** – Details of the purpose or function of the offer, written in plain text with no line breaks. This will appear on your offer's details page.
- **Description** – This description displays in the commercial marketplace listing(s) overview. Consider including a value proposition, key benefits, intended user base, any category or industry associations, in-app purchase opportunities, any required disclosures, and a link to learn more. This text box has rich text editor controls to make your description more engaging. Optionally, use HTML tags for formatting.
- **Privacy policy link** – The URL for your company's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations.
- **Useful links** (optional): Links to various resources for users of your offer. For example, forums, FAQs, and release notes.
- **Contact information**
  - **Support contact** – The name, phone, and email that Microsoft partners will use when your customers open tickets. Include the URL for your support website.
  - **Engineering contact** – The name, phone, and email for Microsoft to use directly when there are problems with your offer. This contact information isn't listed in the commercial marketplace.
  - **CSP Program contact** (optional): The name, phone, and email if you opt in to the Cloud Solution Provider (CSP) program, so those partners can contact you with any questions. You can also include a URL to your marketing materials.
- **Media**
  - **Logos** – A PNG file for the **Large** logo. Partner Center will use this to create other required logo sizes. You can optionally replace these with different images later.
  - **Screenshots** – At least one and up to five screenshots that show how your offer works. Images must be 1280 x 720 pixels, in PNG format, and include a caption.
  - **Videos** (optional) – Up to four videos that demonstrate your offer. Include a name, URL for YouTube or Vimeo, and a 1280 x 720 pixel PNG thumbnail.

> **NOTE**
>
> Your offer must meet the general commercial marketplace certification policies to be published to the commercial marketplace.

Next steps

- Create an IoT Edge module offer in Partner Center.

Prepare IoT Edge module technical assets

11/22/2021 • 5 minutes to read • Edit Online

This article describes the requirements that your Internet of Things (IoT) Edge module technical assets must meet before being published in Azure Marketplace.

Get started

An IoT Edge module is a Docker-compatible container that runs on an IoT Edge device.

- To learn more about IoT Edge modules, see Understand Azure IoT Edge modules.
- To get started with your IoT Edge module development, see Develop your own IoT Edge modules.

Technical requirements

Your IoT Edge module must meet the following technical requirements to be certified and published in Azure Marketplace.

Platform support

Your IoT Edge module must support one of the following platform options:

Tier 1 platforms supported by IoT Edge

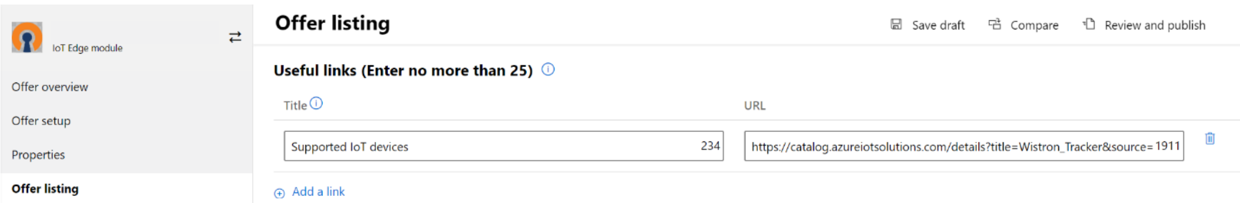
Your module must support all Tier 1 platforms supported by IoT Edge (as recorded in Azure IoT Edge support). We recommend this option because it provides a better customer experience. Modules that meet this criteria will be showcased. A module using this platform option must:

- Provide a latest tag and a version tag (for example, 1.0.1) that are manifest tags built with the GitHub Manifest-tool.
- Use the offer listing tab in Partner Center to add a link under the **Useful links** section to the Azure IoT Edge Certified device catalog.

A subset of Tier 1 platforms supported by IoT Edge

Your module must support a subset (at least one) of Tier 1 platforms supported by IoT Edge (as recorded in Azure IoT Edge support). A module using this platform option must:

- Provide a latest tag and a version tag (for example, 1.0.1) that are manifest tags built with the GitHub manifest-tool if more than one platform is supported. Manifest tags are optional only when one platform is supported.
- Use the offer listing tab in Partner Center to add a link under the **Useful links** section to at least one IoT Edge device from the Azure IoT Edge Certified device catalog.



Device dimensions

IoT Edge module dimensions (such as CPU, RAM, storage, and GPU) on targeted IoT Edge devices must meet the following requirements:

- The module must work with at least one IoT Edge device from the Azure IoT Edge Certified device catalog.
- The minimum hardware requirements must be documented as the last paragraph in the description of the offer (under the offer listing tab in Partner Center). Optionally, you can also list the recommended hardware requirements if they differ significantly. For example, add the following section at the end of your offer description:

Copy this HTML text or use the corresponding rich text functions in the editing window.

```
<p><u>Minimum hardware requirements:</u> Linux x64 and arm32 OS, 1GB of RAM, 500 Mb of storage</p>
```

Configuration

Your module must include default configuration settings to make the deployment to an IoT Edge device as straightforward as possible. This information can be provided in the **Technical configuration** page for the plan in Partner Center. The container may also include the IoT Edge Module SDK to enable communication with the edge Hub and IoT Hub.

Default configuration

IoT Edge modules must be able to start with the default settings provided in the **Technical configuration** page for the plan in Partner Center. The following default settings are available:

- Default **routes**
- Default **module twin desired properties**
- Default **environment variables**
- Default **container create options**

In a scenario where a parameter that's required for a default value doesn't make sense (for example, the IP address of a customer's server), add a parameter as the default value. This value is upper case and enclosed in brackets. For this example, you'd set up the following default environment variable:

```
ServerIPAddress = <MY_SERVER_IP_ADDRESS>
```

Configuration documentation

All configuration settings of an IoT Edge module must be clearly documented. For example, you must document how to use its routes, twin desired properties, environment variables, createOptions, and so on. You must either provide a link to your documentation or make it part of your offer or plan description. You can provide this information in the **Offer listing** and **Plan listing** page in Partner Center.

Tags and versioning

Customers must be able to easily deploy a module and automatically get updates from the marketplace (in a developer scenario). They also must be able to use and freeze an exact version they've tested (in a production scenario).

To meet these customer expectations and be published in the marketplace, IoT Edge modules must meet the following requirements

- Include a manifest latest tag that points to the latest version on all supported platforms.
- Make version tags in the form X.Y.Z, where X, Y, and Z are integers.
- Include a "version" tag, such as 1.0.1, that points to a specific version on all supported platforms.
- Don't update "version" tags, such as 1.0.1, because they must not be changed.

> **NOTE**
>
> Optionally, versioning can include "rolling version" tags, such as 2.0 and 1.0. This supports maintaining multiple major versions in parallel.

Telemetry

Modules using the IoT Module SDK must set the unique module identifier to PublisherId.OfferId.SkuId for telemetry purposes. A unique identifier helps Azure Marketplace identify the number of module instances that are running.

Use one of the following methods from the IoT Module SDKs to set the ProductInfo to this identifier:

- C#
- C
- Python
- Java

For modules that don't use the IoT Module SDK, less precise insights are available through Partner Center, such as the number of downloads.

Security

IoT Edge modules must avoid privileged modules. Instead ask for the least privileged access to the host as possible.

Module IoT SDK

Including the IoT Module SDK isn't a prerequisite for certification. However, including the IoT Module SDK may provide a better user experience. For example, to support routing or sending messages to the Cloud.

The IoT Module SDK is required to get telemetry data about the number of module instances that are running.

Recertification process

Partners are notified whenever there's a breaking change that affects their modules, such as:

- Tier 1 OS/arch support matrix supported by IoT Edge
- IoT Module SDK
- IoT Edge runtime
- IoT Edge module certification guidelines

Partners must update and recertify their offers by re-publishing them in Partner Center.

Your offer will also be recertified if you update it, such as adding new image tags.

Host module in Azure Container Registry

To upload your IoT Edge module to Azure Marketplace, you first need to host it in an Azure Container Registry (ACR). The module must include all the tags that you want to publish, including the image tags that are referenced by a manifest tag. For more information, see the tutorial Create an Azure container registry and push a container image.

Next steps

- Create an IoT Edge module offer

Create an IoT Edge Module offer

11/22/2021 • 3 minutes to read • Edit Online

This article describes how to create an IoT (Internet of Things) Edge Module offer. All offers go through our certification process, which checks your solution for standard requirements, compatibility, and proper practices.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program.

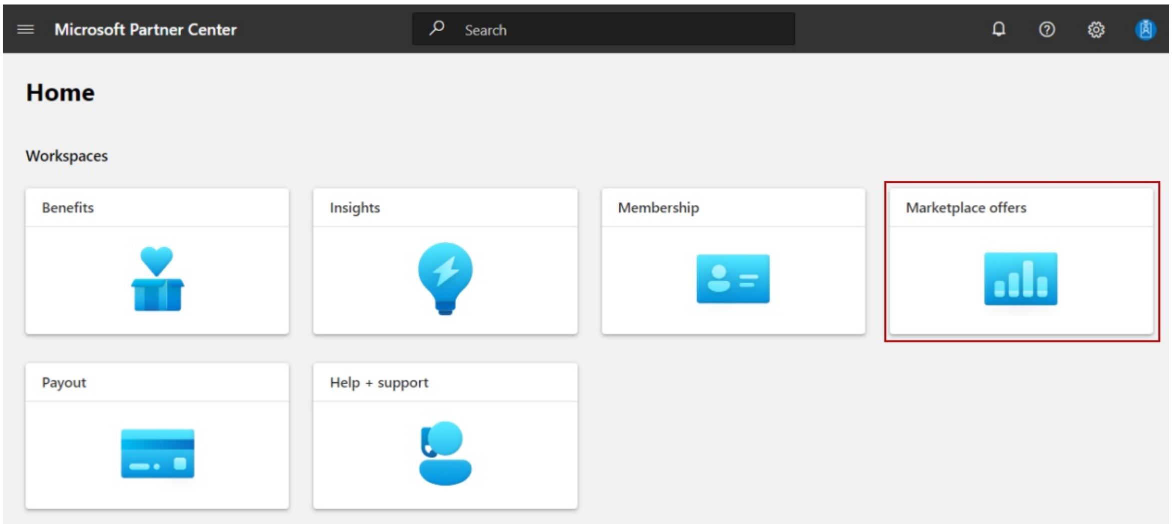
Before you begin

Review Plan an IoT Edge Module offer. It will explain the technical requirements for this offer and list the information and assets you'll need when you create it.

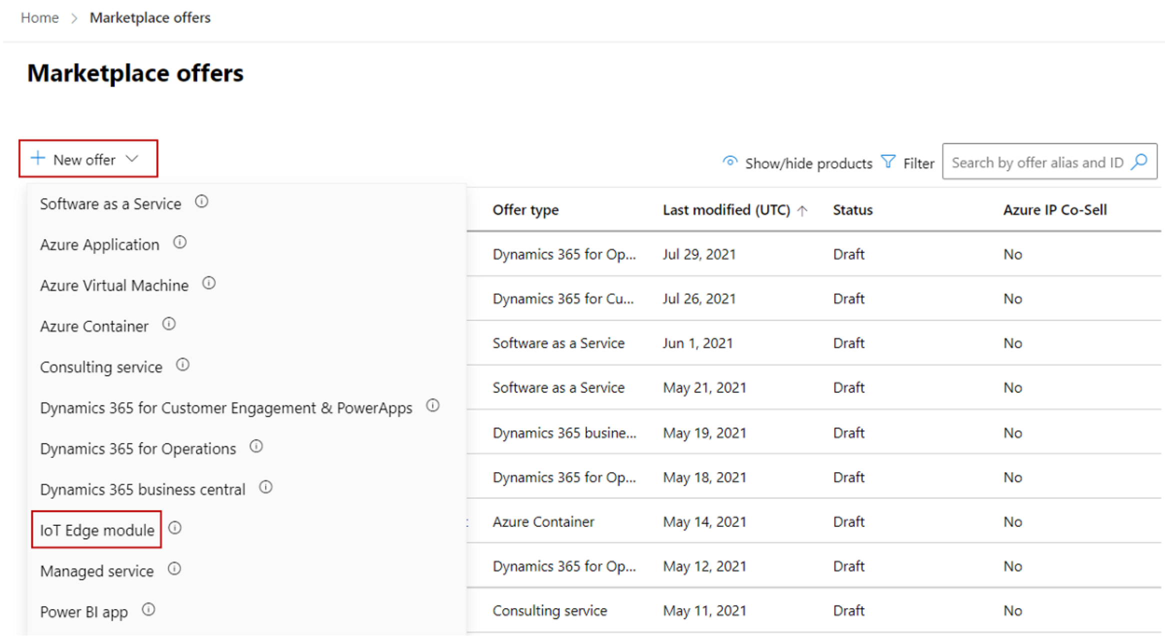
Create a new offer

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select + **New offer** > **IoT Edge module**.



> **IMPORTANT**
>
> After an offer is published, any edits you make to it in Partner Center appear on Azure Marketplace only after you republish the offer. Be sure to always republish an offer after changing it.

New offer

Enter an **Offer ID**. This is a unique identifier for each offer in your account.

- This ID is visible to customers in the web address for the offer and in Azure Resource Manager templates, if applicable.
- Use only lowercase letters and numbers. The ID can include hyphens and underscores, but no spaces, and is limited to 50 characters. For example, if your Publisher ID is `testpublisherid` and you enter **test-offer-1**, the offer web address will be `https://appsource.microsoft.com/product/dynamics-365/testpublisherid.test-offer-1`.
- The Offer ID can't be changed after you select **Create**.

Enter an **Offer alias**. This is the name used for the offer in Partner Center.

- This name isn't used on AppSource. It is different from the offer name and other values shown to customers.
- This name can't be changed after you select **Create**.

Select **Create** to generate the offer. Partner Center opens the **Offer setup** page.

Alias

Enter a descriptive name that we'll use to refer to this offer solely within Partner Center. The offer alias (pre-populated with what you entered when you created the offer) won't be used in the marketplace and is different than the offer name shown to customers. If you want to update the offer name later, see the Offer listing page.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.
3. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint
   - Configure your offer to send leads to Marketo
   - Configure your offer to send leads to Salesforce
4. To validate the configuration you provided, select the **Validate** link.
5. Select **Connect**.

For more information, see Customer leads from your commercial marketplace offer.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Properties**.

Next steps

- Configure offer properties
- Offer listing best practices

Configure IoT Edge Module offer properties

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the categories used to group your offer on Azure Marketplace, your application version, and the legal contracts that support your offer.

Categories

Select categories and subcategories to place your offer in the appropriate Azure Marketplace search areas. Be sure to describe later in the offer description how your offer supports these categories.

- Select a Primary category.
- To add a second optional category (Secondary), select the **+Categories** link.
- Select up to two subcategories for the Primary and/or Secondary category. If no subcategory is applicable to your offer, select **Not applicable**. Use Ctrl+click to select a second subcategory.

See the full list of categories and subcategories in Offer Listing Best Practices.

Legal

To use the **Standard contract for Microsoft's commercial marketplace**, check the box, then **Accept**. To provide your own **Terms and conditions** customers must accept before they can try your offer, enter them in the box. You can also provide the web address where your terms and conditions can be found.

> **NOTE**
> After you publish an offer using Microsoft's standard contract, you can't later change it to your own custom terms and conditions.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Next steps

- Configure offer listing

Configure IoT Edge Module offer listing details

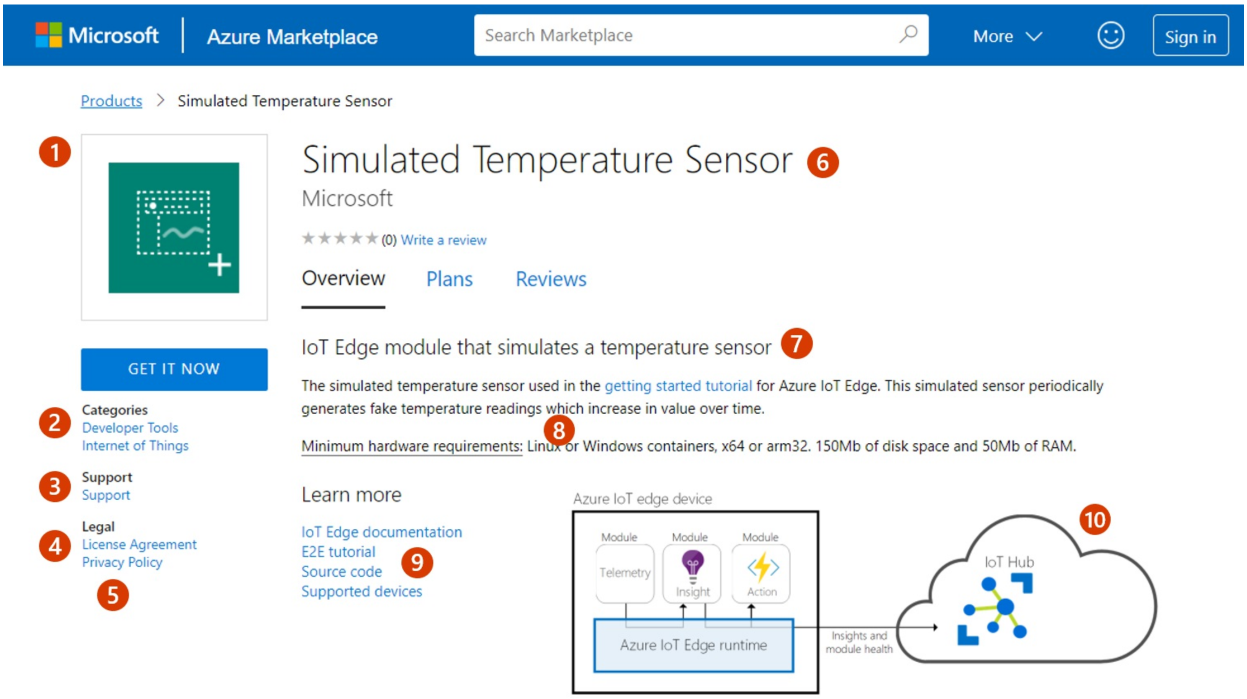
11/22/2021 • 5 minutes to read • Edit Online

This page lets you define the offer details such as offer name, description, links, contacts, logos, and screenshots.

NOTE

Provide offer listing details in one language only. English is not required as long as the offer description begins with the phrase, "This application is available only in [non-English language]." It is also acceptable to provide a *Useful link URL* to offer content in a language other than the one used in the Offer listing content.

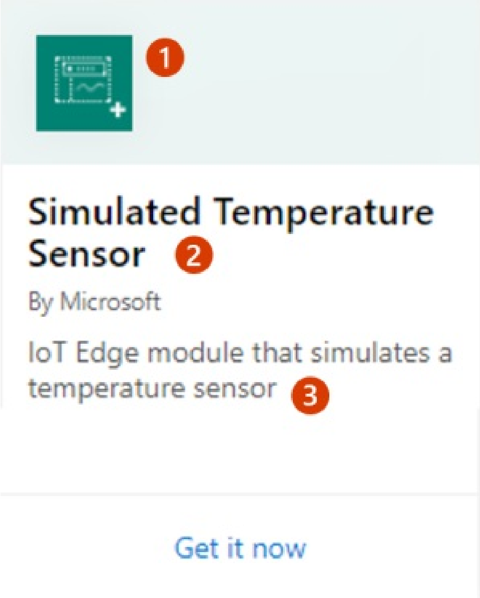
Here's an example of how offer information appears in Azure Marketplace (any listed prices are for example purposes only and not intended to reflect actual costs):



Call-out descriptions

1. Logo
2. Categories
3. Support address (link)
4. Terms of use
5. Privacy policy (link)
6. Offer name
7. Offer summary
8. Description
9. Learn More links
10. Screenshots/videos

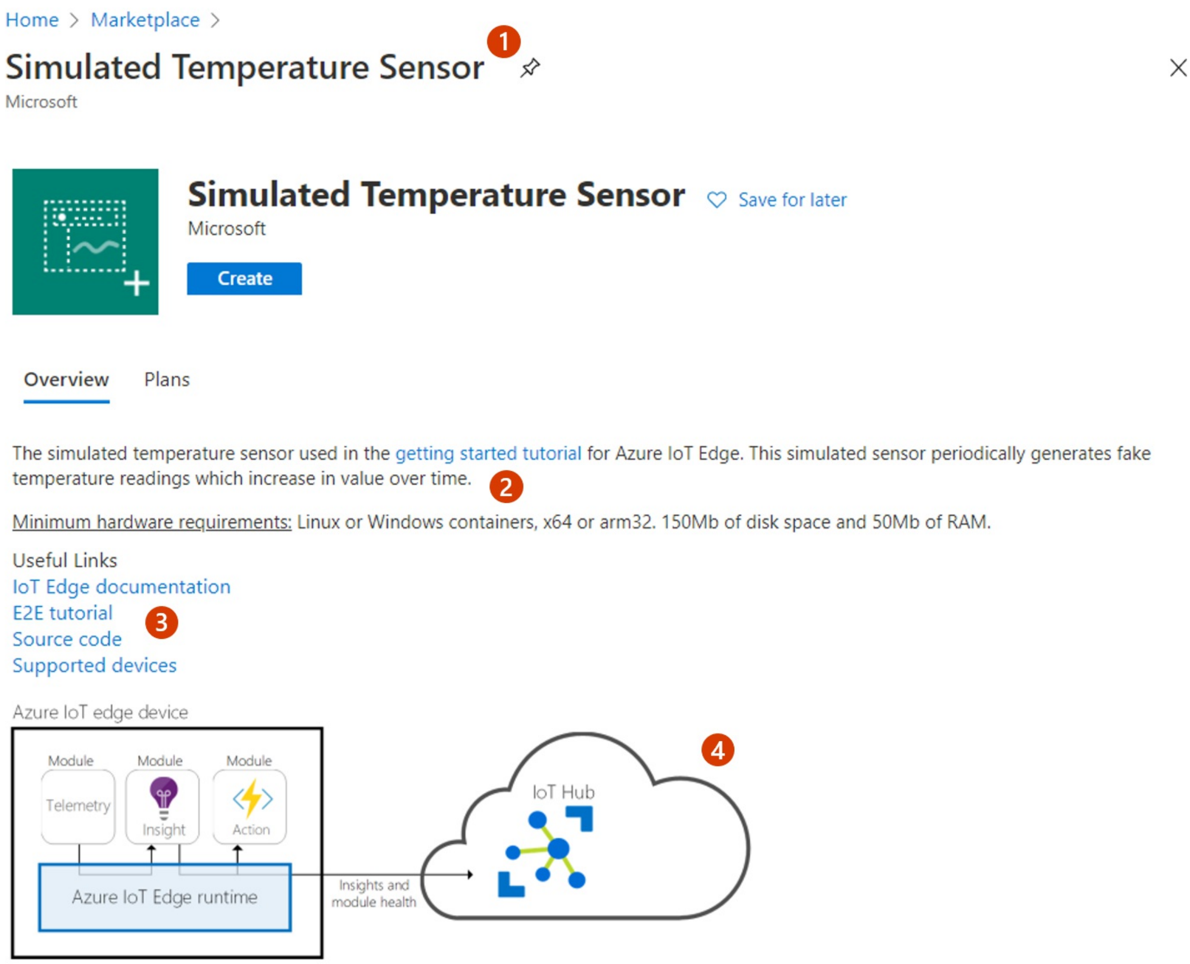
Here's an example of how offer information appears in Azure Marketplace search results:



Call-out descriptions

1. Small logo
2. Offer name
3. Search results summary

Here's an example of how offer information appears in the Azure portal:

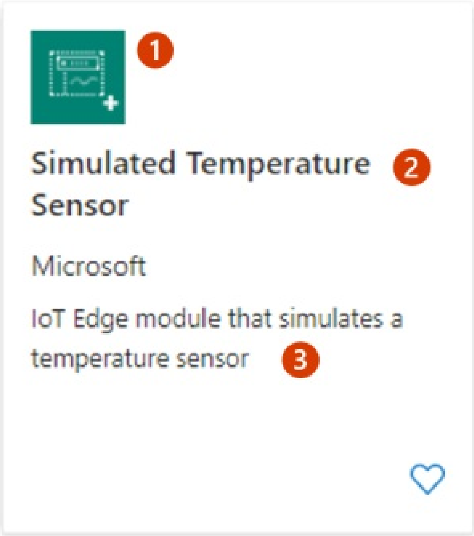


Call-out descriptions

1. Name
2. Description
3. Useful links

4. Screenshots

Here's an example of how offer information appears in the Azure portal search results:



Call-out descriptions

1. Small logo
2. Offer name
3. Search results summary

Marketplace details

The **Name** you enter here is shown to customers as the title of the offer. This field is pre-populated with the name you entered for **Offer alias** when you created the offer, but you can change it. The name:

- Can include trademark and copyright symbols.
- Must be 50 characters or less.
- Can't include emojis.

Provide a short description of your offer for the **Search results summary** (up to 100 characters). This description may be used in marketplace search results.

Provide a **Short description** of your offer, up to 256 characters. This will appear in search results and on your offer's details page.

Provide a thorough **Description** of your offer, up to 3,000 characters. Customers will see this in the Marketplace listing overview.

Include one or more of the following items in your description:

- The value and key benefits of your offer
- Category and/or industry associations
- In-app purchase opportunities
- Any required disclosures

Here are some tips for writing an informative and impactful description:

- Clearly describe the value of your offer in the first few sentences. Keep in mind that the first few sentences might be displayed in search results.
- Focus on the value your offer provides. Don't rely on features and functionality to sell your product.
- Use industry-specific vocabulary and language that describes the benefits of your offer.

- Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Enter the **Privacy policy link** (URL) to your organization's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations, and for providing a valid privacy policy.

Useful links

Provide supplemental online documents about your offer. You can add up to 25 links. To add a link, select **+ Add a link** and then complete the following fields:

- **Title** – Customers will see the title on your offer's details page.
- **Link (URL)** – Enter a link for customers to view your online document. The link must start with `http://` or `https://`.

Add at least one link to your documentation and one link to the compatible IoT Edge devices from theAzure IoT device catalog.

Contact information

Provide the name, email, and phone number for a **Support contact**, **Engineering contact**, and **Cloud Solution Provider Program contact**. This information is not shown to customers, but will be available to Microsoft, and may be provided to CSP partners.

In the **Cloud Solution Provider Program contact** section, provide the **Support website for Azure Global customers** address where partners can find support for your offer based on whether the offer is available in Azure Global, Azure Government, or both.

In the **Support contact** section, provide the **CSP Program Marketing Materials** address where CSP partners can find marketing materials and support for your offer.

Marketplace media

Provide logos and images to use with your offer. All images must be in PNG format. Blurry images will cause your submission to be rejected.

> **NOTE**
>
> If you have an issue uploading files, ensure that your local network doesn't block the https://upload.xboxlive.com service that's used by Partner Center.

Logos

Provide a PNG file for the **Large** size logo. Partner Center will use this to create other required sizes. You can optionally replace this with a different image later.

These logos are used in different places in the listing:

- The large logo appears on your offer listing page in Microsoft AppSource.
- The small logo appears on the Microsoft AppSource main page and search results page.

Follow these guidelines for your logos:

- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The theme colors of the portal are white and black. Don't use these colors as the background color for your

logo. Use a color that makes your logo prominent in the portal. We recommend simple primary colors.

- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat and avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name.
- Make sure the logo isn't stretched.

Screenshots

Add up to five optional screenshots that show how your offer works. Screenshots must be 1280 x 720 pixels and in PNG format. Add a caption for each screenshot.

Videos

Add up to five optional videos that demonstrate your offer. They should be hosted on an external video service. Enter each video's name, web address, and a thumbnail PNG image of the video at 1280 x 720 pixels.

For additional marketplace listing resources, see Best practices for marketplace offer listings.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Preview audience**.

Next steps

- Set preview audience

Set the preview audience for an IoT Edge Module offer

11/22/2021 • 2 minutes to read • Edit Online

Select **Preview audience** to choose a limited preview audience for validating your offer before publishing it live to the broader marketplace audience.

> **IMPORTANT**
> After you view your offer in Preview, you must select **Go live** to publish your offer to the public.

Select preview audience GUIDs

Specify your preview audience using at least one Azure subscription ID GUID, along with an optional description. You can find your Azure subscription ID on the Subscriptions page in the Azure portal. Neither of these fields can be seen by customers.

Add up to 10 GUIDs individually or up to 100 by uploading a CSV file. By adding these subscription IDs, you define who can preview your offer before it's published live. If your offer is already live, you can define a preview audience to test changes or updates to your offer.

Next steps

- Create plans

Create and edit plans for an IoT Edge Module offer

11/22/2021 • 2 minutes to read • Edit Online

This overview page lets you create different plan options within the same offer. Plans (formerly called SKUs) can differ in terms of in where they are available (Azure Global or Azure Government) and the image referenced by the plan. Your offer must contain at least one plan.

You can create up to 100 plans for each offer: up to 45 of these can be private. Learn more about private plans in Private offers in the Microsoft commercial marketplace.

After you create a plan, the **Plan overview** page shows:

- Plan names
- Pricing model
- Azure regions (Global or Government)
- Current publishing status
- Any available actions

The actions available for a plan vary depending on the current status of your plan. They include:

- **Delete draft** if the plan status is a Draft.
- **Stop distribution of a plan** if the plan status is Published Live.

Edit a plan

Select a plan **Name** to edit its details.

Create a plan

To set up a new plan, select **+ Create new plan**.

Enter a unique **Plan ID** for each plan. This ID will be visible to customers in the product's web address. Use only lowercase letters and numbers, dashes, or underscores, and a maximum of 50 characters. You cannot change the Plan ID after you select **Create**.

Enter a **Plan name**. Customers see this name when deciding which plan to select within your offer. Each plan in this offer must have a unique name. For example, you might use an offer name of **Windows Server** with plans **Windows Server 2016** and **Windows Server 2019**.

Select **Create** and continue below.

Next steps

- + Create new plan, or
- Exit plan setup and continue with optional Co-sell with Microsoft, or
- Review and publish your offer

Set up plans for an IoT Edge Module offer

11/22/2021 • 2 minutes to read • Edit Online

The **Plan setup** page lets you configure which clouds the plan is available in. Your answers on this tab affect which fields are displayed on other tabs.

Azure regions

Select from Azure Global or Azure Government.

Azure Global

All plans for IoT Edge module offers are automatically available in **Azure Global**. Your plan can be used by customers in all global Azure regions that use the marketplace. For details, see Geographic availability and currency support.

Azure Government

Select **Azure Government** to make your offer appear there. This is a government community cloud with controlled access for customers from U.S. federal, state, and local or tribal government agencies, as well as partners eligible to serve them. As the publisher, you're responsible for any compliance controls, security measures, and best practices for this cloud community. Azure Government uses physically isolated data centers and networks (located in the U.S. only). Before publishing to Azure Government, test and confirm your solution within that area as the results may be different. To stage and test your solution, request a trial account from Microsoft Azure Government trial.

> **NOTE**
>
> After your plan is published and available in a specific region, you can't remove that region.

Azure Government certifications

If you select **Azure Government**, add your **certifications**. Azure Government services handle data that's subject to certain government regulations and requirements. For example, FedRAMP, NIST 800.171 (DIB), ITAR, IRS 1075, DoD L4, and CJIS. To bring awareness to your certifications for these programs, you can provide up to 100 links that describe your certifications. These can be links to your listings on the program directly or to your own website. These links are visible to Azure Government customers only.

Select **Save draft** before continuing to the next tab in the **Plan overview** left-nav menu, **Plan listing**.

Next steps

- Set up the plan listing

Set up plan listing details for an IoT Edge Module offer

11/22/2021 • 2 minutes to read • Edit Online

This page in Partner Center displays information specific to the current plan.

Plan name

This is pre-filled with the name you gave your plan when you created it, but you can change it. It can be up to 50 characters long. This name appears as the title of this plan in Azure Marketplace and the Azure portal. It's used as the default module name after the plan is ready to be used.

Plan summary

Provide a short summary of your plan (not the offer). This summary appears in Azure Marketplace search results and can contain up to 100 characters.

Plan description

Describe what makes this plan unique, as well as differences between plans within your offer. Don't describe the offer, just the plan. This description will appear in Azure Marketplace and in the Azure portal on the offer listing page. It can be the same content you provided in the plan summary and contain up to 2,000 characters.

Select **Save draft** before continuing to the next tab in the **Plan overview** left-nav menu, **Availability**.

Next steps

- Set plan availability

Set plan availability for an IoT Edge Module offer

11/22/2021 • 2 minutes to read • Edit Online

If you want to hide your published offer so customers can't search, browse, or purchase it in the marketplace, select the **Hide plan** check box.

Set plan availability

This field is commonly used when:

- The offer is only to be used only indirectly when referenced though another application.
- The offer should not be purchased individually.
- The plan was used for initial testing and is no longer relevant.
- The plan was used for temporary or seasonal offers and should no longer be offered.

Select **Save draft** before continuing to the next tab in the **Plan overview** left-nav menu, **Technical configuration**.

Next steps

- Set plan technical configuration

Set plan technical configuration for an IoT Edge Module offer

11/22/2021 • 7 minutes to read • Edit Online

The IoT Edge Module offer type is a specific type of container that runs on an IoT Edge device. The plan **Technical configuration** tab lets you provide reference information for your container image repository inside the Azure Container Registry, along with configuration settings that help customers use the module.

After you submit the offer, your IoT Edge container image is copied to Azure Marketplace in a specific public container registry. All requests from Azure users to use your module are served from the Azure Marketplace public container registry, not your private container registry.

You can target multiple platforms and provide several versions of your module container image using tags. To learn more about tags and versioning, see Prepare your IoT Edge module technical assets.

Image repository details

Select **Azure Container Registry** as the image source.

Provide the **Azure subscription ID** where resource usage is reported and services are billed for the Azure Container Registry that includes your container image. You can find this ID on the Subscriptions page in the Azure portal.

Provide the **Azure resource group name** that contains the Azure Container Registry with your container image. The resource group must be accessible in the subscription ID (above). You can find the name on the Resource groups page in the Azure portal.

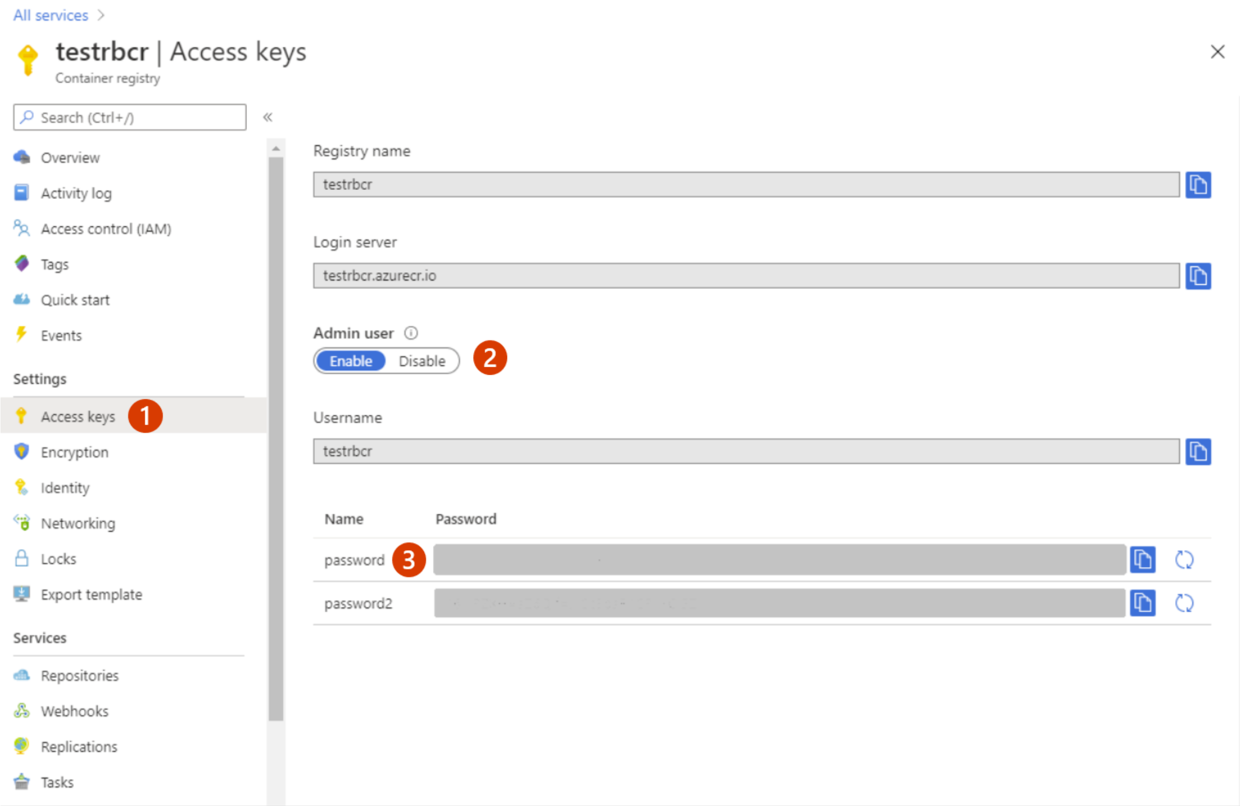
Provide the **Azure container registry name** that has your container image. The container registry must be present in the Azure resource group you provided earlier. Provide only the registry name, not the full login server name. Omit **azurecr.io** from the name. You can find the registry name on the Container Registries page in the Azure portal.

Provide the **Admin username for the Azure Container Registry** associated with the Azure Container Registry that has your container image. The username and password (next step) are required to ensure your company has access to the registry. To get the admin username and password, set the **admin-enabled** property to **True** using the Azure Command-Line Interface (CLI). You can optionally set **Admin user** to **Enable** in the Azure portal.

Call-out description

1. Admin user

Provide the **Admin password for the Azure Container Registry** for the admin username associated with the Azure Container Registry and has your container image. The username and password are required to ensure your company has access to the registry. You can get the password from the Azure portal by going to **Container Registry** > **Access Keys** or with Azure CLI using the show command.



Call-out descriptions

1. Access keys
2. Username
3. Password

Provide the **Repository name within the Azure Container Registry** that has your image. You specify the name of the repository when you push the image to the registry. You can find the name of the repository by going to the Container Registry > **Repositories page**. For more information, see View container registry repositories in the Azure portal. After the name is set, it can't be changed. Use a unique name for each offer in your account.

> **NOTE**
>
> We don't support Encrypted Azure Container Registry for Edge Module Certification. Azure Container Registry should be created without Encryption enabled.

Image versions

Customers must be able to automatically get updates from Azure Marketplace when you publish an update. If they don't want to update, they must be able to stay on a specific version of your image. You can do this by adding new image tags each time you make an update to the image.

Select **Add Image version** to include an **Image tag** that points to the latest version of your image on all supported platforms. It must also include a version tag (for example, starting with xx.xx.xx, where xx is a number). Customers should use manifest tags to target multiple platforms. All tags referenced by a manifest tag must also be added so we can upload them. All manifest tags (except the latest tag) must start with either X.Y- or X.Y.Z- where X, Y, and Z are integers. For example, if a latest tag points to `1.0.1-linux-x64`, `1.0.1-linux-arm32`, and `1.0.1-windows-arm32`, these six tags need to be added to this field. For details about tags and versioning, see Prepare IoT Edge module technical assets.

> **TIP**
>
> Add a test tag to your image so you can identify the image during testing.

Default deployment settings

Define the most common settings to deploy your IoT Edge module (optional). Optimize customer deployments by letting them launch your IoT Edge module out-of-the-box with these default settings.

Default routes. The IoT Edge Hub manages communication between modules, the IoT Hub, and devices. You can set default routes for data input and output between modules and the IoT Hub, which gives you the flexibility to send messages where they need to go without the need for additional services to process messages or writing additional code. Routes are constructed using name/value pairs. You can define up to five default route names, each up to 512 characters long.

Use the correct route syntax in your route value (usually defined as FROM/message/* INTO $upstream). This means that any messages sent by any modules go to your IoT Hub. To refer to your module, use its default module name, which will be your **Offer Name**, without spaces or special characters. To refer to other modules that are not yet known, use the <FROM_MODULE_NAME> convention to let your customers know that they need to update this info. For details about IoT Edge routes, see Declare routes).

For example, if module ContosoModule listens for inputs on ContosoInput and output data at ContosoOutput, it makes sense to define the following two default routes:

- Name #1: ToContosoModule
- Value #1: FROM /messages/modules/<FROM_MODULE_NAME>/outputs/* INTO BrokeredEndpoint("/modules/ContosoModule/inputs/ContosoInput")
- Name #2: FromContosoModuleToCloud
- Value #2: FROM /messages/modules/ContonsoModule/outputs/ContosoOutput INTO $upstream

Default module twin desired properties. A module twin is a JSON document in the IoT Hub that stores the state information for a module instance, including desired properties. Desired properties are used along with reported properties to synchronize module configuration or conditions. The solution backend can set desired properties and the module can read them. The module can also receive change notifications in the desired properties. Desired properties are created using up to five name/value pairs and each default value must be fewer than 512 characters. You can define up to five name/value twin desired properties. Values of twin desired properties must be valid JSON, non-escaped, without arrays with a maximum nested hierarchy of four levels. In a scenario where a parameter required for a default value doesn't make sense (for example, the IP address of a customer's server), you can add a parameter as the default value. To learn more about twin desired properties, see Define or update desired properties).

For example, if a module supports a dynamically configurable refresh rate using twin desired properties, it makes sense to define the following default twin desired property:

- Name #1: RefreshRate
- Value #1: 60

Default environment variables. Environment variables provide supplemental information to a module that's helping the configuration process. Environment variables are created using name/value pairs. Each default environment variable name and value must be fewer than 512 characters, and you can define up to five. When a parameter required for a default value doesn't make sense (for example, the IP address of a customer's server), you can add a parameter as the default value.

For example, if a module requires to accept terms of use before being started, you can define the following environment variable:

- Name #1: ACCEPT_EULA
- Value #1: Y

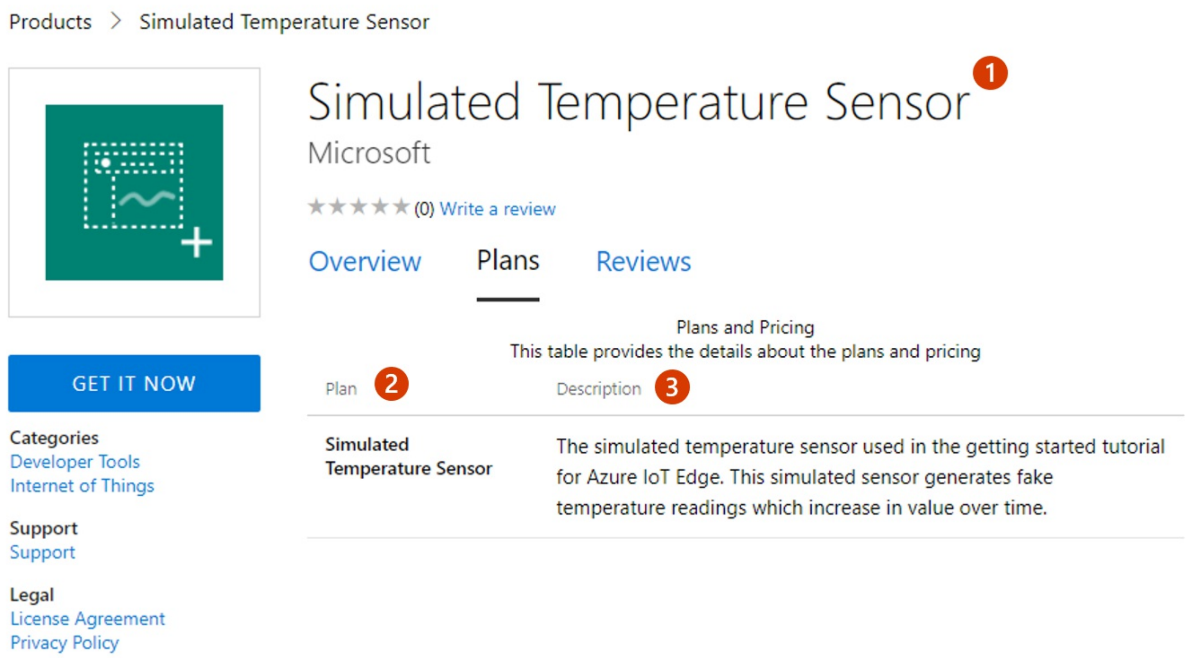
Default container create options. Container creation options direct the creation of the IoT Edge module Docker container. IoT Edge supports Docker engine API Create Container options. See all the options at List containers. The create options field must be valid JSON, non-escaped, and fewer than 512 characters.

For example, if a module requires port binding, define the following create options:

"HostConfig":{"PortBindings":{"5012/tcp":[{"HostPort":"5012"}]}

Samples

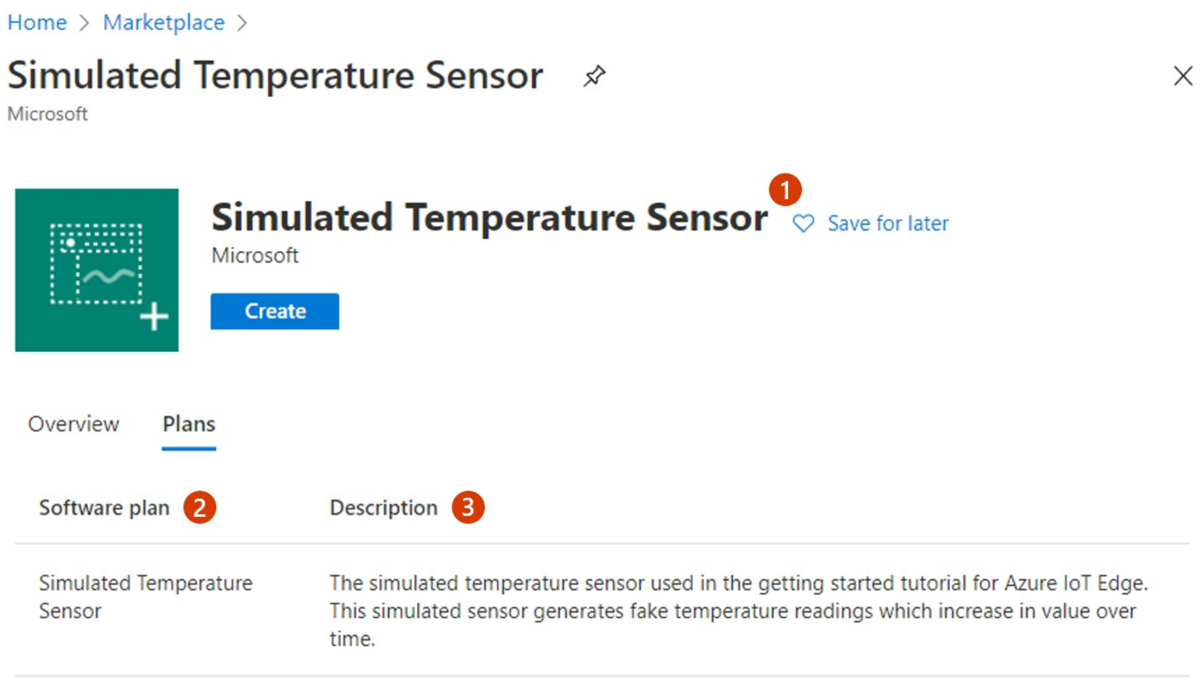
Here's an example of Azure Marketplace plan details (any listed prices are for example purposes only and not intended to reflect actual costs):



Call-out descriptions

1. Offer name
2. Plan name
3. Plan description

Here's an example of the Azure portal plan details (any listed prices are for example purposes only and not intended to reflect actual costs):



Call-out descriptions

1. Offer name
2. Plan name
3. Plan description

Select **Save draft**, then **← Plan overview** in the left-nav menu to return to the plan overview page.

Next steps

- To **Co-sell with Microsoft** (optional), select it in the left-nav menu. For details, see Co-sell partner engagement.
- If you're not setting up co-sell or you've finished, it's time to Review and publish your offer.

Plan a Managed Service offer

11/22/2021 • 6 minutes to read • Edit Online

This article introduces the requirements for publishing a Managed Service offer to the commercial marketplace using Partner Center.

Managed Services are Azure Marketplace offers that enable cross-tenant and multi-tenant management with Azure Lighthouse. To learn more, see What is Azure Lighthouse? When a customer purchases a Managed Service offer, they're able to delegate one or more subscription or resource group. You can then work on those resources by using the Azure delegated resource management capabilities of Azure Lighthouse.

Eligibility requirements

To publish a Managed Service offer, you must have earned a Gold or Silver Microsoft Competency in Cloud Platform. This competency demonstrates your expertise to customers. For more information, see Microsoft Partner Network Competencies.

Offers must meet all applicable commercial marketplace certification policies to be published on Azure Marketplace.

Customer leads

You must connect your offer to your customer relationship management (CRM) system to collect customer information. The customer will be asked for permission to share their information. These customer details, along with the offer name, ID, and online store where they found your offer, will be sent to the CRM system that you've configured. The commercial marketplace supports different kinds of CRM systems, along with the option to use an Azure table or configure an HTTPS endpoint using Power Automate.

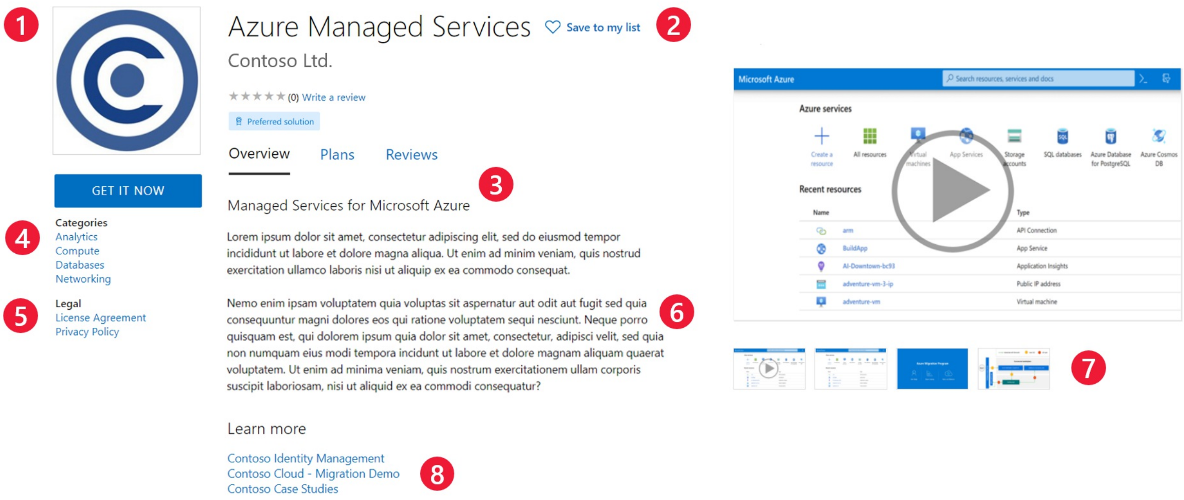
You can add or modify a CRM connection at any time during or after offer creation. For detailed guidance, see Customer leads from your commercial marketplace offer.

Legal contracts

In the Properties page of Partner Center, you'll be asked to provide **terms and conditions** for the use of your offer. You can either enter your terms directly in Partner Center or provide the URL where they can be found. Customers will be required to accept these terms and conditions before purchasing your offer.

Offer listing details

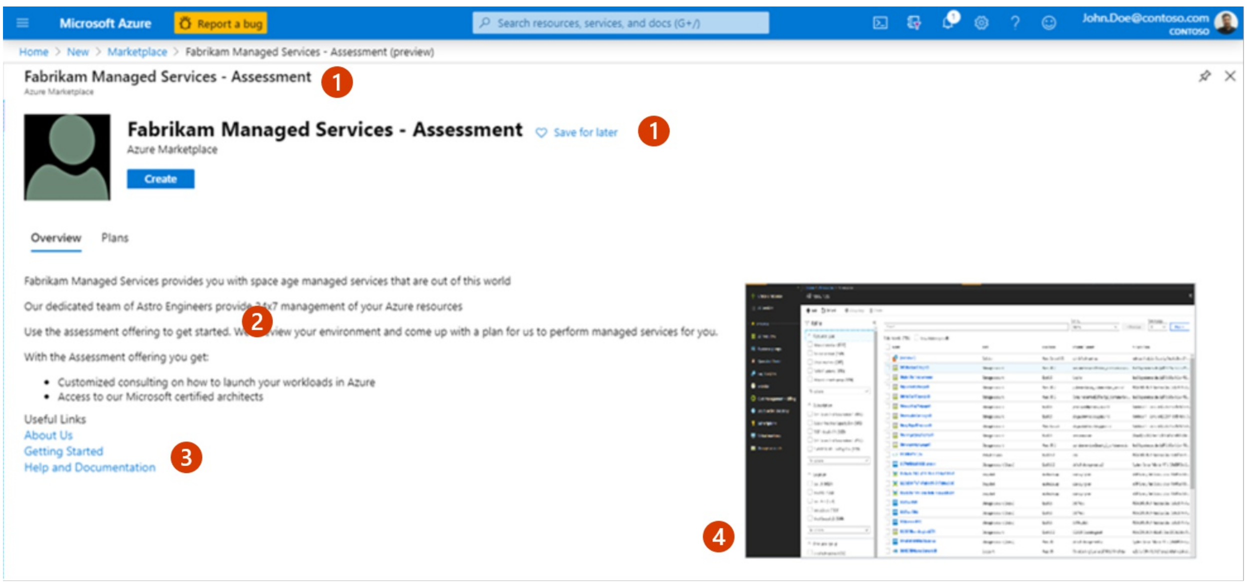
When you create your Managed Service offer in Partner Center, you'll enter text, images, documents, and other offer details. This is what customers will see when they discover your offer on Azure Marketplace. See the following example:



Call-out descriptions

1. Logo
2. Name
3. Short description
4. Categories
5. Legal contracts and privacy policy
6. Description
7. Screenshots/videos
8. Useful links

Here's an example of how the offer listing appears in the Azure portal:



Call-out descriptions

1. Name
2. Description
3. Useful links
4. Screenshots/videos

NOTE

If your offer is in a language other than English, the offer listing can be in that language, but the description must begin or end with the English phrase "This service is available in <language of your offer content>". You can also provide supporting documents in a language that's different from the one used in the offer listing details.

To help create your offer more easily, prepare some of these items ahead of time. The following items are required unless otherwise noted.

Name: this will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It can't contain emojis (unless they're the trademark and copyright symbols) and must be limited to 50 characters.

Search results summary: describe the purpose or goal of your offer in 100 characters or less. This summary is used in the commercial marketplace listing search results. It shouldn't be identical to the title. Consider including your top SEO keywords.

Short description: provide a short description of your offer (up to 256 characters). It'll be displayed on your offer listing in the Azure portal.

Description: describe your offer in 3,000 characters or less. This description will be displayed in the commercial marketplace listing. Consider including a value proposition, key benefit, category or industry associations, and any necessary disclosures.

Here are some tips for writing your description:

- Clearly describe the value of your offer in the first few sentences, including:
  - The type of user who benefits from the offer.
  - What customer needs or issues the offer addresses.
- Remember that the first few sentences might be displayed in search results.
- Use industry-specific vocabulary.

You can use HTML tags to format your description. For information about HTML formatting, see HTML tags supported in the commercial marketplace offer descriptions.

Privacy policy link: provide an URL to the privacy policy, hosted on your site. You're responsible for ensuring your offer complies with privacy laws and regulations, and for providing a valid privacy policy.

Useful links (optional): upload supplemental online documents about your offer.

Contact information: provide name, email address, and phone number of two people in your company (you can be one of them): a support contact and an engineering contact. We'll use this information to communicate with you about your offer. This information isn't shown to customers but may be provided to Cloud Solution Provider (CSP) partners

Support URLs (optional): if you have support websites for Azure Global Customers and/or Azure Government customers, provide those URLs.

Marketplace media – logos: provide a PNG file for the large-size logo of your offer. Partner Center will use it to create medium and small logos. You can optionally replace these logos with a different image later.

- The large logo (from 216x216 to 350x350 px) appears on your offer listing on Azure Marketplace.
- The medium logo (90x90 px) is shown when a new resource is created.
- The small logo (48x48 px) is used in Azure Marketplace search results.

Follow these guidelines for your logos:

- Make sure the image isn't stretched.
- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The Azure portal colors are white and black. Don't use these as the background of your logo. We recommend simple primary colors that make your logo prominent.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat. Avoid gradients. Don't place text on the logo, not even your company or brand name.

Marketplace media – screenshots (optional): Add up to five images that demonstrate how your offer works. All images must be 1280x720 pixels in size and in .PNG format.

Marketplace media – videos (optional): upload up to five videos that demonstrate your offer. The videos must be hosted on YouTube or Vimeo and have a thumbnail (1280x720 PNG file).

Preview audience

A preview audience can access your offer before it's published on Azure Marketplace in order to test it. On the **Preview audience** page of Partner Center, you can define a limited preview audience.

> **NOTE**
>
> A preview audience differs from a private plan. A private plan is one you make available only to a specific audience you choose. This enables you to negotiate a custom plan with specific customers.

You can send invites to Microsoft Account (MSA) or Azure Active Directory (Azure AD) email addresses. Add up to 10 email addresses manually or import up to 20 with a .csv file. If your offer is already live, you can still define a preview audience for testing any changes or updates to your offer.

Plans and pricing

Managed Service offers require at least one plan. A plan defines the solution scope, limits, and the associated pricing, if applicable. You can create multiple plans for your offer to give your customers different technical and pricing options. For general guidance about plans, including private plans, see Plans and pricing for commercial marketplace offers.

Managed Services support only one pricing model: **Bring your own license (BYOL)**. This means that you'll bill your customers directly, and Microsoft won't charge you any fees.

Next steps

- Create a Managed Service offer
- Offer listing best practices

Create a Managed Service offer for the commercial marketplace

11/22/2021 • 3 minutes to read • Edit Online

This article explains how to create a Managed Service offer for the Microsoft commercial marketplace using Partner Center.

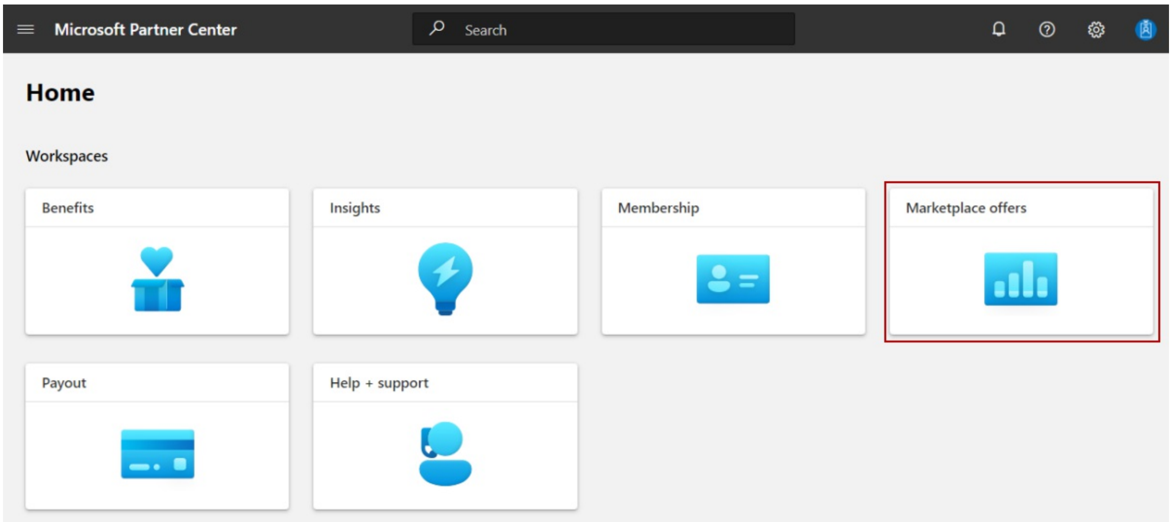
To publish a Managed Service offer, you must have earned a Gold or Silver Microsoft Competency in Cloud Platform. If you haven't already done so, read Plan a Managed Service offer for the commercial marketplace. It will help you prepare the assets you need when you create the offer in Partner Center.

Create a new offer

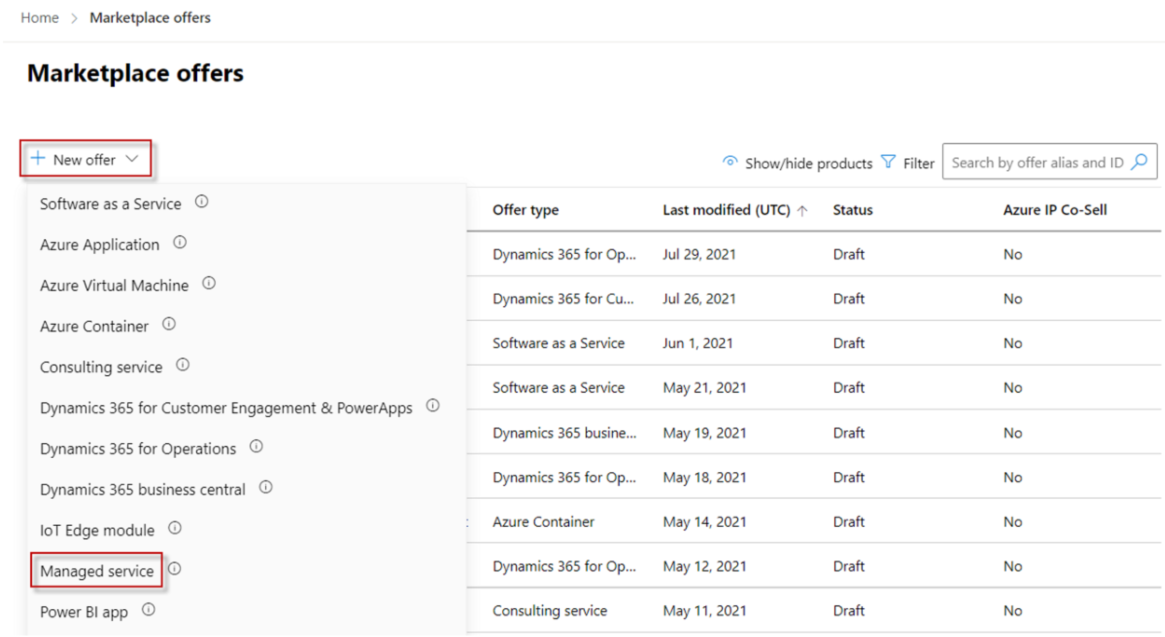
> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Managed service**.



4. In the **New Managed service** dialog box, enter an **Offer ID**. This is a unique identifier for each offer in your account. This ID is visible in the URL of the commercial marketplace listing and Azure Resource Manager templates, if applicable. For example, if you enter test-offer-1 in this box, the offer web address will be `https://azuremarketplace.microsoft.com/marketplace/../test-offer-1`.
   - Each offer in your account must have a unique offer ID.
   - Use only lowercase letters and numbers. It can include hyphens and underscores, but no spaces, and is limited to 50 characters.
   - The Offer ID can't be changed after you select **Create**.
5. Enter an **Offer alias**. This is the name used for the offer in Partner Center. It isn't visible in the online stores and is different from the offer name shown to customers.
6. To generate the offer and continue, select **Create**.

Setup details

This section does not apply for this offer type.

Customer leads

Connect your customer relationship management (CRM) system with your commercial marketplace offer so you can receive customer contact information when a customer expresses interest in your consulting service. You can modify this connection at any time during or after you create the offer. For detailed guidance, see Customer leads from your commercial marketplace offer.

To configure the lead management in Partner Center:

1. In Partner Center, go to the **Offer setup** tab.
2. Under **Customer leads**, select the **Connect** link.
3. In the **Connection details** dialog box, select a lead destination from the list.
4. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)

- Configure your offer to send leads to HTTPS endpoint
- Configure your offer to send leads to Marketo
- Configure your offer to send leads to Salesforce

5. To validate the configuration you provided, select the **Validate link**.
6. When you've configured the connection details, select **Connect**.
7. Select **Save draft**.

After you submit your offer for publication in Partner Center, we'll validate the connection and send you a test lead. While you preview the offer before it goes live, test your lead connection by trying to purchase the offer yourself in the preview environment.

> **TIP**
>
> Make sure the connection to the lead destination stays updated so you don't lose any leads.

Select **Save draft** before continuing to the next tab, **Properties**.

Next step

- Configure offer Properties

Configure Managed Service offer properties

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the categories used to group your offer on Azure Marketplace and the legal contracts that support your offer. This information ensures your Managed Service is displayed correctly on the online store and offered to the right set of customers.

Categories

Select at least one and up to five categories to place your offer in the appropriate marketplace search areas. Be sure to describe later in the offer description how your offer supports these categories.

Provide terms and conditions

Under **Legal**, provide your terms and conditions for this offer. Customers will be required to accept them before using the offer. You can also provide the URL where your terms and conditions can be found.

Select **Save draft** before continuing to the next tab, **Offer listing**.

Next step

- Configure Offer listing

Configure Managed Service offer listing details

11/22/2021 • 3 minutes to read • Edit Online

The information you provide on the **Offer listing** page of Partner Center will be displayed on Azure Marketplace. This includes your offer name, description, media, and other marketing assets.

> **NOTE**
>
> If your offer is in a language other than English, the offer listing can be in that language, but the description must begin or end with the English phrase "This service is available in <language of your offer content>". You can also provide supporting documents in a language that's different from the one used in the offer listing details.

On the **Offer listing** page in Partner Center, provide the information described below. To learn more about the listing details for your Managed Service offer, review Plan a Managed Service offer.

Marketplace details

1. The **Name** box is pre-filled with the name you entered earlier in the New offer dialog box, but you can change it at any time. This name will appear as the title of your offer listing on the online store.
2. In the **Search results summary** box, describe the purpose or goal of your offer in 100 characters or less.
3. In the **Short description** field, provide a short description of your offer (up to 256 characters). It'll be displayed on your offer listing in the Azure portal.
4. In the **Description** field, describe your Managed Service offer. You can enter up to 2,000 characters of text in this box, including HTML tags and spaces. For information about HTML formatting, see HTML tags supported in the offer descriptions.
5. In the **Privacy policy link** box, enter a link (starting with https) to your organization's privacy policy. You're responsible to ensure your offer complies with privacy laws and regulations, and for providing a valid privacy policy.

Product information links

You have the option to provide supplemental online documents about your solution:

1. Select **Add a link**.
2. Provide a name and web address (starting with https) for each document.

Contact information

Enter the name, email address, and phone number of two people in your company (you can be one of them): a support contact and an engineering contact. We'll use this information to communicate with you about your offer. This information isn't shown to customers but may be provided to Cloud Solution Provider (CSP) partners.

Support link

If you have support websites for Azure Global Customers and/or Azure Government customers, enter their URL, starting with https.

Marketplace media

> **NOTE**
>
> If you have an issue uploading files, make sure your local network does not block the `https://upload.xboxlive.com` service used by Partner Center.

Add logos

Under **Logos**, upload a **Large** logo in .PNG format between 216x216 and 350x350 pixels. Partner Center will automatically create **Medium** and **Small** logos, which you can replace later.

- The large logo (from 216x216 to 350x350 px) appears on your offer listing on Azure Marketplace.
- The medium logo (90x90 px) is shown when a new resource is created.
- The small logo (48x48 px) is used in Azure Marketplace search results.

Add screenshots (optional)

Add up to five images that demonstrate your offer. All images must be 1280x720 pixels in size and in .PNG format.

1. Under **Screenshots**, drag and drop your PNG file onto the **Screenshot** box.
2. Select **Add image caption**.
3. In the dialog box that appears, enter a caption.
4. Repeat steps 1 through 3 to add additional screenshots.

Add videos (optional)

You can add links to YouTube or Vimeo videos that demonstrate your offer. These videos are shown to customers along with your offer. You must enter a thumbnail image of the video, sized 1280x720 pixels and in .PNG format. Add a maximum of five videos per offer.

1. Under **Videos**, select the **Add video link**.
2. In the boxes that appear, enter the name and link for your video.
3. Drag and drop a PNG file (1280x720 pixels) onto the gray **Thumbnail** box.
4. To add another video, repeat steps 1 through 3.

Select **Save draft** before continuing to the next tab, **Preview audience**.

Next steps

- Add a preview audience

Add a preview audience for a Managed Service offer

11/22/2021 • 2 minutes to read • Edit Online

This article describes how to configure a preview audience for a Managed Service offer in the commercial marketplace using Partner Center. The preview audience can review your offer before it goes live.

Define a preview audience

On the **Preview audience** page, you can define a limited audience who can review your Managed Service offer before you publish it live to the broader marketplace audience. You define the preview audience using Azure subscription IDs, along with an optional description for each. Neither of these fields can be seen by customers. You can find your Azure subscription ID on the **Subscriptions** page on the Azure portal.

Add at least one Azure subscription ID, either individually (up to 10) or by uploading a CSV file (up to 100) to define who can preview your offer before it's published live. If your offer is already live, you may still define a preview audience for testing updates to your offer.

> **NOTE**
>
> A *preview* audience differs from a *private* audience. A preview audience is allowed access to your offer before it's published live in the online stores. They can see and validate all plans, including those which will be available only to a private audience after your offer is fully published in the marketplace. You can make a plan available only to a private audience. A private audience (defined in a plan's Availability tab) has exclusive access to a particular plan.

Add email addresses manually

1. On the **Preview audience** page, add a single Azure subscription ID and an optional description in the boxes provided.
2. To add another email address, select the **Add ID (Max 10)** link.
3. Select **Save draft** before continuing to the next tab.

Add email addresses using a CSV file

1. On the **Preview audience** page, select the **Export Audience (csv)** link.
2. Open the CSV file. In the **Id** column, enter the Azure subscription IDs you want to add to the preview audience.
3. In the **Description** column, you have the option to add a description for each entry.
4. In the **Type** column, add **SubscriptionId** to each row that has an ID.
5. Save the file as a CSV file.
6. On the **Preview audience** page, select the **Import Audience (csv)** link.
7. In the **Confirm** dialog box, select **Yes**, then upload the CSV file.

Select **Save draft** before continuing to the next tab, **Plan overview**.

Next steps

- Create plans

Create plans for a Managed Service offer

11/22/2021 • 8 minutes to read • Edit Online

Managed Service offers sold through the Microsoft commercial marketplace must have at least one plan. You can create a variety of plans with different options within the same offer. These plans (sometimes referred to as SKUs) can differ in terms of version, monetization, or tiers of service. For detailed guidance on plans, see Plans and pricing for commercial marketplace offers.

Create a plan

1. On the **Plan overview** tab of your offer in Partner Center, select **+ Create new plan**.
2. In the dialog box that appears, under **Plan ID**, enter a unique plan ID. Use up to 50 lowercase alphanumeric characters, dashes, or underscores. You cannot modify the plan ID after you select **Create**. This ID will be visible to your customers.
3. In the **Plan name** box, enter a unique name for this plan. Use a maximum of 50 characters. This name will be visible to your customers.
4. Select **Create**.

Define the plan listing

On the **Plan listing** tab, define the plan name and description as you want them to appear in the commercial marketplace.

1. The **Plan name** box displays the name you provided earlier for this plan. You can change it at any time. This name will appear in the commercial marketplace as the title of your offer's plan.
2. In the **Plan summary** box, provide a short description of your plan, which may be used in marketplace search results.
3. In the **Plan description** box, explain what makes this plan unique and different from other plans within your offer.
4. Select **Save draft** before continuing to the next tab.

Define pricing and availability

The only pricing model available for Managed Service offers is **Bring your own license (BYOL)**. This means that you bill your customers directly for costs related to this offer, and Microsoft doesn't charge you any fees.

You can configure each plan to be visible to everyone (public) or to only a specific audience (private).

> **NOTE**
>
> Private plans are not supported with subscriptions established through a reseller of the Cloud Solution Provider (CSP) program.

IMPORTANT

Once a plan has been published as public, you can't change it to private. To control which customers can accept your offer and delegate resources, use a private plan. With a public plan, you can't restrict availability to certain customers or even to a certain number of customers (although you can stop selling the plan completely if you choose to do so). You can remove access to a delegation after a customer accepts an offer only if you included an Authorization with the Role Definition set to Managed Services Registration Assignment Delete Role when you published the offer. You can also reach out to the customer and ask them to remove your access.

Make your plan public

1. Under **Plan visibility**, select **Public**.
2. Select **Save draft**. To return to the Plan overview tab, select **Plan overview** in the upper left.
3. To create another plan for this offer, select **+ Create new plan** in the **Plan overview** tab.

Make your plan private

You grant access to a private plan using Azure subscription IDs. You can add a maximum of 10 subscription IDs manually or up to 10,000 subscription IDs using a .CSV file.

To add up to 10 subscription IDs manually:

1. Under **Plan visibility**, select **Private**.
2. Enter the Azure subscription ID of the audience you want to grant access to.
3. Optionally, enter a description of this audience in the **Description** box.
4. To add another ID, select **Add ID (Max 10)**.
5. When you're done adding IDs, select **Save draft**.

To add up to 10,000 subscription IDs with a .CSV file:

1. Under **Plan visibility**, select **Private**.
2. Select the **Export Audience (csv)** link. This will download a .CSV file.
3. Open the .CSV file. In the **Id** column, enter the Azure subscription IDs you want to grant access to.
4. In the**Description**column, you have the option to add a description for each entry.
5. In the**Type**column, add**SubscriptionId**to each row that has an ID.
6. Save the file as a .CSV file.
7. In Partner Center, select the **Import Audience (csv)** link.
8. In the**Confirm**dialog box, select**Yes**, then upload the .CSV file.
9. Select**Save draft**.

Technical configuration

This section creates a manifest with authorization information for managing customer resources. This information is required in order to enable Azure delegated resource management.

Review Tenants, roles, and users in Azure Lighthouse scenarios to understand which roles are supported and the best practices for defining your authorizations.

NOTE

The users and roles in your Authorization entries will apply to every customer who activates the plan. If you want to limit access to a specific customer, you'll need to publish a private plan for their exclusive use.

Manifest

1. Under **Manifest**, provide a **Version** for the manifest. Use the format n.n.n (for example, 1.2.5).
2. Enter your **Tenant ID**. This is a GUID associated with the Azure Active Directory (Azure AD) tenant ID of your organization; that is, the managing tenant from which you will access your customers' resources. If you don't have this handy, you can find it by hovering over your account name on the upper right-hand side of the Azure portal, or by selecting **Switch directory**.

If you publish a new version of your offer and need to create an updated manifest, select **+ New manifest**. Be sure to increase the version number from the previous manifest version.

Authorizations

Authorizations define the entities in your managing tenant who can access resources and subscriptions for customers who purchase the plan. Each of these entities is assigned a built-in role that grants specific levels of access.

You can create up to 20 authorizations for each plan.

> **TIP**
>
> In most cases, you'll want to assign roles to an Azure AD user group or service principal, rather than to a series of individual user accounts. This lets you add or remove access for individual users without having to update and republish the plan when your access requirements change. When assigning roles to Azure AD groups, the group type should be Security and not Office 365. For additional recommendations, see Tenants, roles, and users in Azure Lighthouse scenarios.

Provide the following information for each **Authorization**. Select **+ Add authorization** as needed to add more users and role definitions.

- **Display Name**: A friendly name to help the customer understand the purpose of this authorization. The customer will see this name when delegating resources.
- **Principal ID**: The Azure AD identifier of a user, user group, or service principal that will be granted certain permissions (as defined by the **Role** you specify) to your customers' resources.
- **Access type**:
  - **Active** authorizations have the privileges assigned to the role at all times. Each plan must have at least one Active authorization.
  - **Eligible** authorizations are time-limited and require activation by the user. If you select **Eligible**, you must select a maximum duration that defines the total length of time for which the user will have the eligible role after it's activated. The minimum value is 30 minutes and the maximum is 8 hours. You can also select whether to require multifactor authentication in order to activate the role. Note that eligible authorizations are currently in public preview and have specific licensing requirements. For more information, see Create eligible authorizations.
- **Role**: Select one of the available Azure AD built-in roles from the list. This role will determine the permissions that the user in the **Principal ID** field will have on your customers' resources. For descriptions of these roles, see Built-in roles and Role support for Azure Lighthouse.

  > **NOTE**
  >
  > As applicable new built-in roles are added to Azure, they will become available here, although there may be some delay before they appear.

- **Assignable Roles**: This option will appear only if you have selected User Access Administrator in the **Role Definition** for this authorization. If so, you must add one or more assignable roles here. The user in the **Azure AD Object ID** field will be able to assign these roles to managed identities, which is required in order to deploy policies that can be remediated. No other permissions normally associated with the User Access

Administrator role will apply to this user.

- **Approvers**: This option will appear only if the **Access type** is set to **Eligible**. If so, you can optionally specify a list of up to ten users or user groups who can approve or deny requests from a user to activate the eligible role. Approvers will be notified when the approval is requested and has been granted. If none are provided, the authorization will activate automatically.

> **TIP**
>
> To ensure you can remove access to a delegation if needed, include an **Authorization** with the **Role Definition** set to Managed Services Registration Assignment Delete Role. If this role is not assigned, delegated resources can only be removed by a user in the customer's tenant.

Once you've completed all of the sections for your plan, you can select **+ Create new plan** to create additional plans. When you're done, select **Save draft**. When you're done creating plans, select **Plans** in the breadcrumb trail at the top of the window to return to the left-nav menu for the offer.

Updating an offer

After your offer is published, you can publish an updated version of your offer at any time. For example, you may want to add a new role definition to a previously published offer. When you do so, customers who have already added the offer will see an icon in the **Service providers** page in the Azure portal that lets them know an update is available. Each customer will be able to review the changes and decide whether they want to update to the new version.

Next steps

- Exit plan setup and continue with optional Co-sell with Microsoft, or
- Review and publish your offer

Plan a Power BI App offer

11/22/2021 • 6 minutes to read • Edit Online

This article highlights the content and requirements you need to have ready or completed to publish a Power BI app to Microsoft AppSource. A Power BI app packages customizable content, including datasets, reports, and dashboards. You can then use the app with other Power BI platforms using AppSource, perform the adjustments and customizations allowed by the developer, and connect it to your own data.

Before you begin, review these links, which provide templates, tips, and samples:

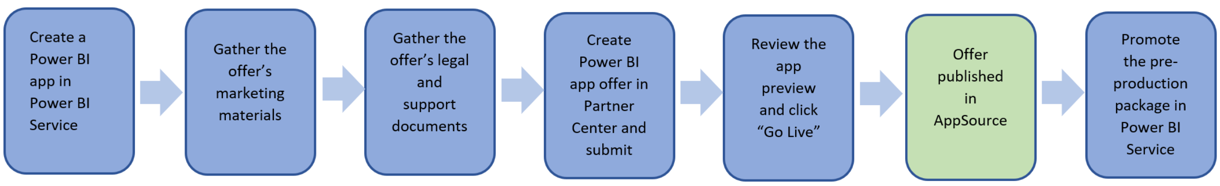
- Create a Power BI app
- Tips for authoring a Power BI app
- Samples

Publishing benefits

Benefits of publishing to the commercial marketplace:

- Promote your company by using the Microsoft brand.
- Potentially reach more than 100 million Microsoft 365 and Dynamics 365 users on AppSource and more than 200,000 organizations through Azure Marketplace.
- Receive high-quality leads from these marketplaces.
- Have your services promoted by the Microsoft field and telesales teams.

Overview



If you're ready to create your offer now, see Next steps below. Otherwise, continue reading to ensure you're properly prepared before starting the offer creation process.

These are the key publishing steps covered in the next several topics:

1. Create your application in Power BI. You'll receive a package install link, which is the main technical asset for the offer. Send the test package to pre-production before creating the offer in Partner Center. For details, see What are Power BI apps?
2. Add the marketing materials, such as official name, description, and logos.
3. Include the offer's legal and support documents, such as terms of use, privacy policy, support policy, and user help.
4. Create the offer – Use Partner Center to edit the details, including the offer description, marketing materials, legal information, support information, and asset specifications.
5. Submit it for publishing.
6. Monitor the process in Partner Center, where the AppSource onboarding team tests, validates, and certifies your app.
7. After it's certified, review the app in its test environment and release it. This will list it on AppSource (it "goes live").

8. In Power BI, send the package into production. For details, see Manage the Power BI app release.

Requirements

To be published in the commercial marketplace, your Power BI app offer must meet the following technical and business requirements.

Technical requirements

The main technical asset you'll need is a Power BI app. This is a collection of primary datasets, reports, or dashboards. It also includes optional connected services and embedded datasets, previously known as a content pack. For more information about developing this type of app, see What are Power BI apps?.

Get an installation web address

You can only build a Power BI app within the Power BI environment.

1. Sign in with a Power BI Pro license.
2. Create and test your app in Power BI.
3. When you receive the app installation web address, add it to the **Technical Configuration** page in Partner Center.

After your app is created and tested in Power BI, save the application installation web address, as you'll need it to create a Power BI app offer.

Business requirements

The business requirements include procedural, contractual, and legal obligations. You must:

- Be a registered commercial marketplace publisher. If you're not registered, follow the steps in Create a commercial marketplace account in Partner Center.
- Provide content that meets the criteria for your offering to be listed on AppSource. For more information, see Have an app to list on AppSource? Here's how.
- Agree to and follow the Microsoft Privacy Statement.

Licensing options

This is the only licensing option available for Power BI app offers:

LICENSING OPTION	TRANSACTION PROCESS
Get it now (free)	List your offer to customers for free.

* As the publisher, you support all aspects of the software license transaction, including (but not limited to) order, fulfillment, metering, billing, invoicing, payment, and collection.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, you'll want to connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive; otherwise, connecting to a CRM is optional. Partner Center supports Azure table, Dynamics 365 Customer Engagement, HTTPS endpoint, Marketo, and Salesforce.

Legal contracts

You'll need terms and conditions customers must accept before they can try your offer, or a link to where they can be found.

Offer listing details

> **NOTE**
>
> Offer listing content is not required to be in English if the offer description begins with the phrase "This application is available only in [non-English language]".

To help create your offer more easily, prepare these items ahead of time. All are required except where noted.

- **Name** – The name will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It cannot contain emojis (unless they are the trademark and copyright symbols) and is limited to 50 characters.
- **Search results summary** – The purpose or function of your offer as a single sentence with no line breaks in 100 characters or less. This is used in the commercial marketplace listing(s) search results.
- **Description** – This description displays in the commercial marketplace listing(s) overview. Consider including a value proposition, key benefits, intended user base, any category or industry associations, in-app purchase opportunities, any required disclosures, and a link to learn more. This text box has rich text editor controls to make your description more engaging. Optionally, use HTML tags for formatting.
- **Search keywords** (optional) – Up to three search keywords that customers can use to find your offer. Don't include the offer **Name** and **Description**; that text is automatically included in search.
- **Products your app works with** (optional) – The names of up to three products your offer works with.
- **Help/Privacy policy links** – The URL for your company's help and privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations.
- **Contact information**
  - **Support contact** – The name, phone, and email that Microsoft partners will use when your customers open tickets. Include the URL for your support website.
  - **Engineering contact** – The name, phone, and email for Microsoft to use directly when there are problems with your offer. This contact information isn't listed in the commercial marketplace.
  - **Supporting documents** (optional) – Up to three customer-facing documents, such as whitepapers, brochures, checklists, or PowerPoint presentations, in PDF form.
- **Media**
  - **Logos** – A PNG file for the **Large** logo. Partner Center will use this to create other required logo sizes. You can optionally replace these with different images later.
  - **Screenshots** – At least one and up to five screenshots that show how your offer works. Images must be 1280 x 720 pixels, in PNG format, and include a caption.
  - **Videos** (optional) – Up to four videos that demonstrate your offer. Include a name, URL for YouTube or Vimeo, and a 1280 x 720 pixel PNG thumbnail.

> **NOTE**
>
> Your offer must meet the general commercial marketplace certification policies to be published to the commercial marketplace.

Additional sales opportunities

You can choose to opt into Microsoft-supported marketing and sales channels. When creating your offer in Partner Center, you will see two tabs toward the end of the process:

- **Co-sell with Microsoft** – Let Microsoft sales teams consider your IP co-sell eligible solution when evaluating their customers' needs. For details about co-sell eligibility, see Requirements for co-sell status. For details on preparing your offer for evaluation, see Co-sell option in Partner Center.

Next steps

- Create a Power BI app offer

Create a Power BI app offer

11/22/2021 • 3 minutes to read • Edit Online

This article describes how to create a Power BI app offer. All offers go through our certification process, which checks your solution for standard requirements, compatibility, and proper practices.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program.

Before you begin

Review Plan a Power BI offer. It will explain the technical requirements for this offer and list the information and assets you'll need when you create it.

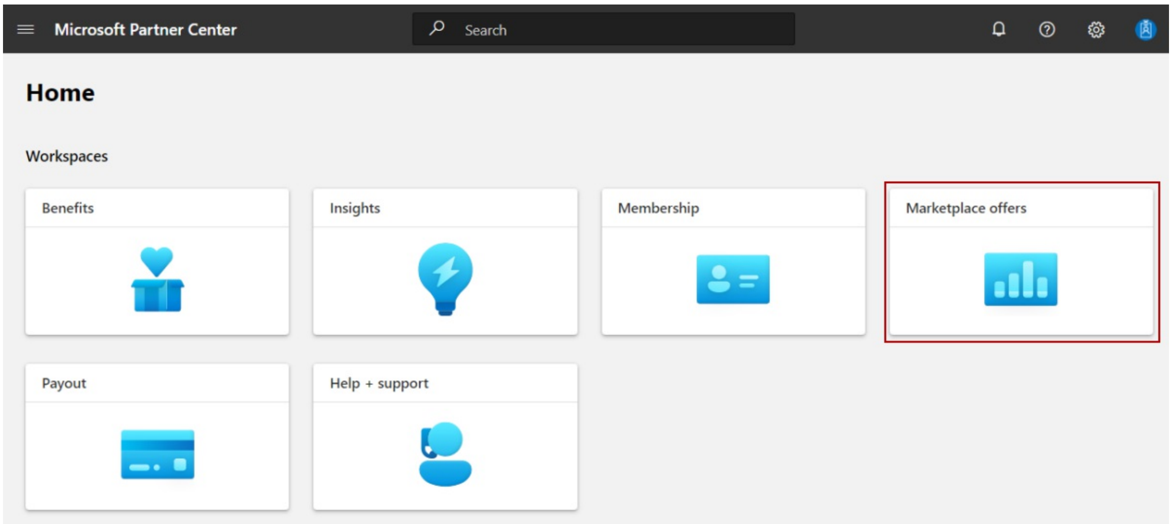
Create a new offer

NOTE

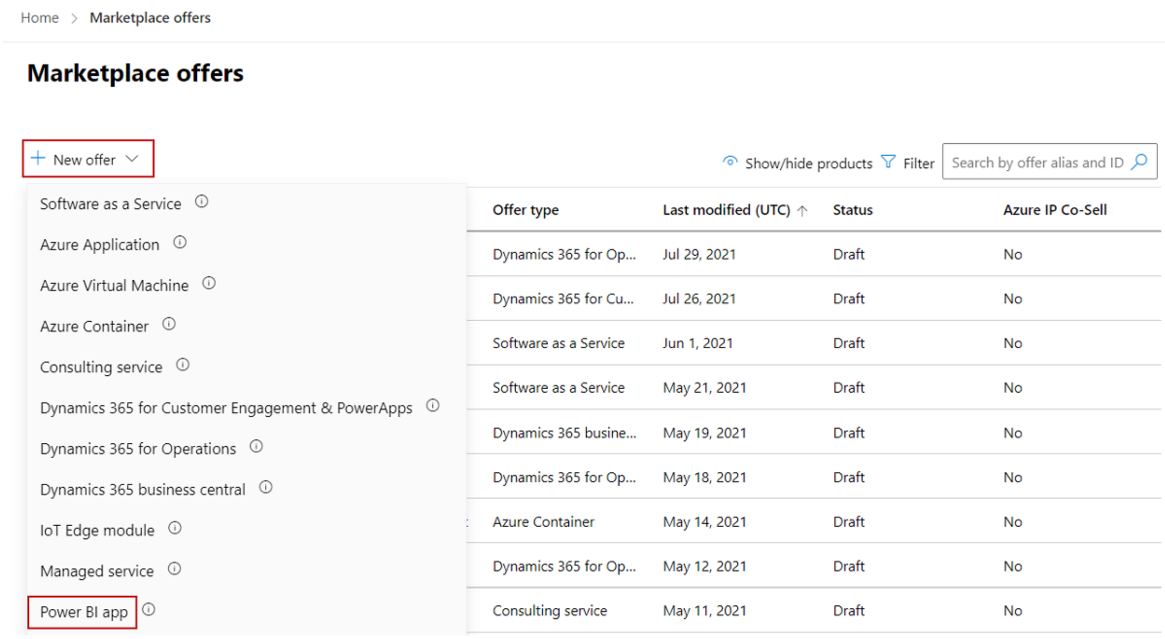
The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Power BI app**.



IMPORTANT

After an offer is published, any edits you make to it in Partner Center appear on Microsoft AppSource only after you republish the offer. Be sure to always republish an offer after changing it.

If **Power BI App** isn't shown or enabled, your account doesn't have permission to create this offer type. Please check that you've met all the requirements for this offer type, including registering for a developer account.

New offer

Enter an **Offer ID**. This is a unique identifier for each offer in your account.

- This ID is visible to customers in the web address for the offer and in Azure Resource Manager templates, if applicable.
- Use only lowercase letters and numbers. The ID can include hyphens and underscores, but no spaces, and is limited to 50 characters. For example, if your Publisher ID is `testpublisherid` and you enter **test-offer-1**, the offer web address will be `https://appsource.microsoft.com/product/dynamics-365/testpublisherid.test-offer-1`.
- The Offer ID can't be changed after you select **Create**.

Enter an **Offer alias**. This is the name used for the offer in Partner Center.

- This name isn't used on AppSource. It is different from the offer name and other values shown to customers.
- This name can't be changed after you select **Create**.

Select **Create** to generate the offer. Partner Center opens the **Offer setup** page.

Alias

Enter a descriptive name that we'll use to refer to this offer solely within Partner Center. The offer alias (pre-populated with what you entered when you created the offer) won't be used in the marketplace and is different than the offer name shown to customers. If you want to update the offer name later, see the Offer listing page.

Setup details

This section is blank and not applicable to Power BI apps.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.
3. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint
   - Configure your offer to send leads to Marketo
   - Configure your offer to send leads to Salesforce
4. To validate the configuration you provided, select the **Validate** link.
5. Select **Connect**.

For more information, see Customer leads from your commercial marketplace offer.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Properties**.

Next steps

- Configure offer properties

Configure Power BI app offer properties

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the categories used to group your offer on Microsoft AppSource, your application version, and the legal contracts that support your offer.

Categories

Select categories and subcategories to place your offer in the appropriate AppSource search areas. Be sure to describe later in the offer description how your offer supports these categories.

- Select a Primary category.
- To add a second optional category (Secondary), select the **+Categories** link.
- Select up to two subcategories for the Primary and/or Secondary category. If no subcategory is applicable to your offer, select **Not applicable**. Use Ctrl+click to select a second subcategory.

See the full list of categories and subcategories in Offer Listing Best Practices.

Industries

Optionally, select up to two industries and two verticals under each industry. These categories are used for displaying your offer when industry and verticals are used in search filters and applied in the online store. If your offer is targeting a specific industry and/or vertical, explain how your offer supports the selected industries or verticals in the offer description. Otherwise, if your offer is not industry-specific, do not make a selection and leave this section blank. See the full list of industries and verticals in Offer listing best practices.

Legal

Provide the **Terms and conditions** customers must accept before they can try your offer. You can also provide the web address where your terms and conditions can be found.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Next steps

- Configure offer listing

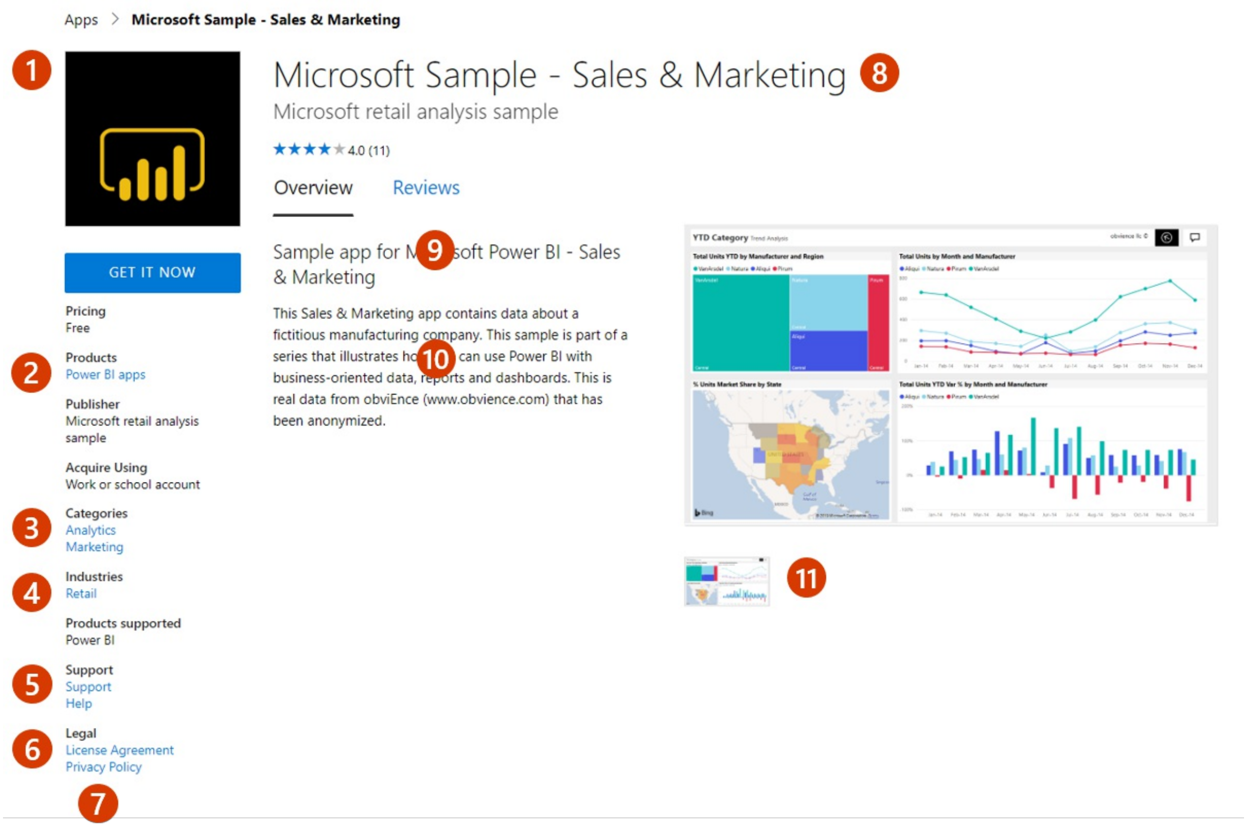
Configure Power BI app offer listing details

11/22/2021 • 4 minutes to read • Edit Online

This page lets you define the offer details such as offer name, description, links, contacts, logos, and screenshots that will appear on Microsoft AppSource.

> **NOTE**
>
> Provide offer listing details in one language only. English is not required as long as the offer description begins with the phrase, "This application is available only in [non-English language]." It is also acceptable to provide a *Useful link URL* to offer content in a language other than the one used in the Offer listing content.

Here's an example of how offer information appears in Microsoft AppSource (any listed prices are for example purposes only and not intended to reflect actual costs):



Call-out descriptions

1. Logo
2. Products
3. Categories
4. Industries
5. Support address (link)
6. Terms of use
7. Privacy policy
8. Offer name
9. Search results summary
10. Description

11. Screenshots/videos

Marketplace details

The **Name** you enter here is shown to customers as the title of the offer. This field is pre-populated with the name you entered for **Offer alias** when you created the offer, but you can change it. The name:

- Can include trademark and copyright symbols.
- Must be 50 characters or less.
- Can't include emojis.

Provide a short description of your offer for the **Search results summary** (up to 100 characters). This description may be used in marketplace search results.

Provide a thorough **Description** of your offer, up to 3,000 characters. Customers will see this in the Marketplace listing overview.

Include one or more of the following items in your description:

- The value and key benefits of your offer
- Category and/or industry associations
- In-app purchase opportunities
- Any required disclosures

Here are some tips for writing an informative and impactful description:

- Clearly describe the value of your offer in the first few sentences. Keep in mind that the first few sentences might be displayed in search results.
- Focus on the value your offer provides. Don't rely on features and functionality to sell your product.
- Use industry-specific vocabulary and language that describes the benefits of your offer.
- Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Use HTML tags to format your description so it's more engaging. For a list of allowed tags, see Supported HTML tags.

Help/Privacy URLs

Enter the **Help link for your app** (URL) where customers can learn more about your offer. Your Help URL cannot be the same as your Support URL.

Enter the **Privacy policy link** (URL) to your organization's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations, and for providing a valid privacy policy.

Contact information

Provide the name, email, and phone number for a **Support contact** and an **Engineering contact**. This information is not shown to customers, but will be available to Microsoft, and may be provided to CSP partners.

In the **Support contact** section, provide the **Support URL** where CSP partners can find support for your offer. Your Support URL cannot be the same as your Help URL.

Supporting documents

Provide up to three related PDF marketing documents here, such as white papers, brochures, checklists, or presentations (optional).

Marketplace media

Provide logos and images to use with your offer. All images must be in PNG format. Blurry images will cause your submission to be rejected.

> **NOTE**
>
> If you have an issue uploading files, ensure that your local network doesn't block the https://upload.xboxlive.com service that's used by Partner Center.

Logos

Provide a PNG file for the **Large** size logo. Partner Center will use this to create other required sizes. You can optionally replace this with a different image later.

These logos are used in different places in the listing:

- The large logo appears on your offer listing page in Microsoft AppSource.
- The small logo appears on the Microsoft AppSource main page and search results page.

Follow these guidelines for your logos:

- The Azure design has a simple color palette. Limit the number of primary and secondary colors on your logo.
- The theme colors of the portal are white and black. Don't use these colors as the background color for your logo. Use a color that makes your logo prominent in the portal. We recommend simple primary colors.
- If you use a transparent background, make sure that the logo and text aren't white, black, or blue.
- The look and feel of your logo should be flat and avoid gradients in the logo or background. Don't place text on the logo, not even your company or brand name.
- Make sure the logo isn't stretched.

Screenshots

Add at least one (and up to five) screenshots that show how your offer works. All screenshots must be 1280 x 720 pixels and in PNG format. Add a caption for each screenshot.

Videos

Add up to four optional videos that demonstrate your offer. They should be hosted on an external video service. Enter each video's name, web address, and a thumbnail PNG image of the video at 1280 x 720 pixels.

For additional marketplace listing resources, see Best practices for marketplace offer listings.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Technical configuration**.

Next steps

- Set offer technical configuration

Set up Power BI app offer technical configuration

11/22/2021 • 2 minutes to read • Edit Online

This topic discusses how to promote your Power BI app.

Promote your app

Promote your app in Power BI app to production by providing the Power BI **App installer link** that enables customers to install your app.

For more information, see Publish apps with dashboards and reports in Power BI.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Co-sell with Microsoft**. For information on setting up co-sell with Microsoft (optional), see Co-sell partner engagement. If you're not setting up co-sell or you've finished, continue with **Next steps** below.

Next steps

- Configure supplemental content

Set up Power BI app offer supplemental content

11/22/2021 • 2 minutes to read • Edit Online

This page lets you provide additional information to help us validate your offer. This information is not shown to customers or published to the marketplace.

Validation instructions

Add **validation instructions** (up to 3,000 characters) to help the Microsoft validation team configure, connect, and test your app. Include typical configuration settings, accounts, parameters, or other information that can be used to test the Connect Data option. This information is visible only to the validation team and is used only for validation purposes.

Select **Save draft**, then continue with review and publish in **Next steps** below.

Next steps

- Review and publish your offer

Plan a Power BI visual offer

11/22/2021 • 3 minutes to read • Edit Online

This article highlights the content and requirements you need to have ready or completed to publish a Power BI visual offer in Partner Center for Microsoft AppSource. Power BI visuals are packages that help users visualize the data served to them. Anyone can create a custom visual and package it as a single PBIVIZ file that can be imported into a Power BI report.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program. Also, review the publishing process and guidelines.

Publishing benefits

Benefits of publishing to AppSource:

- Promote your company by using the Microsoft brand.
- Potentially reach more than 100 million Microsoft 365 and Dynamics 365 users on AppSource and more than 200,000 organizations through Azure Marketplace.
- Have your services promoted by the Microsoft field and telesales teams.

Overview

Read the following to ensure you're properly prepared before starting the creation process.

These are the key publishing steps covered in the next several topics:

1. Package your Power BI visual.
2. Prepare the marketing details, such as the official name, description, and logos.
3. Gather links to the offer's legal and support documents, such as terms of use, privacy policy, support policy, and user help.
4. Create the visual – Use Partner Center to enter the details, including the visual description, marketing materials, legal information, support information, and asset specifications.
5. Monitor the process in Partner Center, where the AppSource onboarding team tests, validates, and certifies your visual. After it's certified, review the app in its test environment and release it. This "go live" will list it on AppSource.

Technical requirements

The technical requirements to get a Power BI visual offer published are detailed in Technical configuration of a Power BI visual offer.

Before submitting a Power BI visual to AppSource, ensure you've read the Power BI visuals guidelines and tested your visual.

Legal contracts

Provide an **End-User License Agreement (EULA)** file for your Power BI visual.

Offer listing details

> **NOTE**
>
> Offer listing content is not required to be in English if the offer description begins with the phrase "This application is available only in [non-English language]".

To help create your offer more easily, prepare these items ahead of time. All are required except where noted.

For the most effective Power BI visual offer, see these guidelines.

- **Name** – The name will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It cannot contain emojis (unless they are the trademark and copyright symbols) and is limited to 50 characters.
- **Summary** – The purpose or function of your offer as a single sentence with no line breaks in 100 characters or less. This is used in the commercial marketplace listing(s) search results.
- **Description** – This displays in the commercial marketplace listings overview. Consider including a value proposition, key benefits, intended user base, category or industry associations, in-app purchase opportunities, any required disclosures, and a link to learn more. This text box has rich text editor controls to make your description more engaging. Optionally, use HTML tags for formatting.
- **Help/Privacy policy links** – The URL for your company's help and privacy policy. You are responsible for ensuring your offer complies with privacy laws and regulations.
- **Media** –
  - **Logos** – A PNG file for the **Large** logo. Partner Center will use this to create other required logo sizes. You can optionally replace these with different images later.
  - **Screenshots** – At least one and up to five screenshots that show how your offer works. Images must be 1280 x 720 pixels, in PNG format, and include a caption.
  - **Videos** (optional) – Up to four videos that demonstrate your offer. Include a name, URL for YouTube or Vimeo, and a 1280 x 720 pixel PNG thumbnail.

> **NOTE**
>
> Review the offer listing guidelines and best practices carefully before submitting your offer.
>
> Your offer must conform to the general commercial marketplace certification policies to be published to the commercial marketplace.

Next steps

- Get started on Creating a Power BI visual offer

Create a Power BI visual offer

11/22/2021 • 3 minutes to read • Edit Online

This article describes how to use Partner Center to submit a Power BI visual offer to Microsoft AppSource for others to discover and use.

Before you start, create a commercial marketplace account in Partner Center and ensure it is enrolled in the commercial marketplace program.

Before you begin

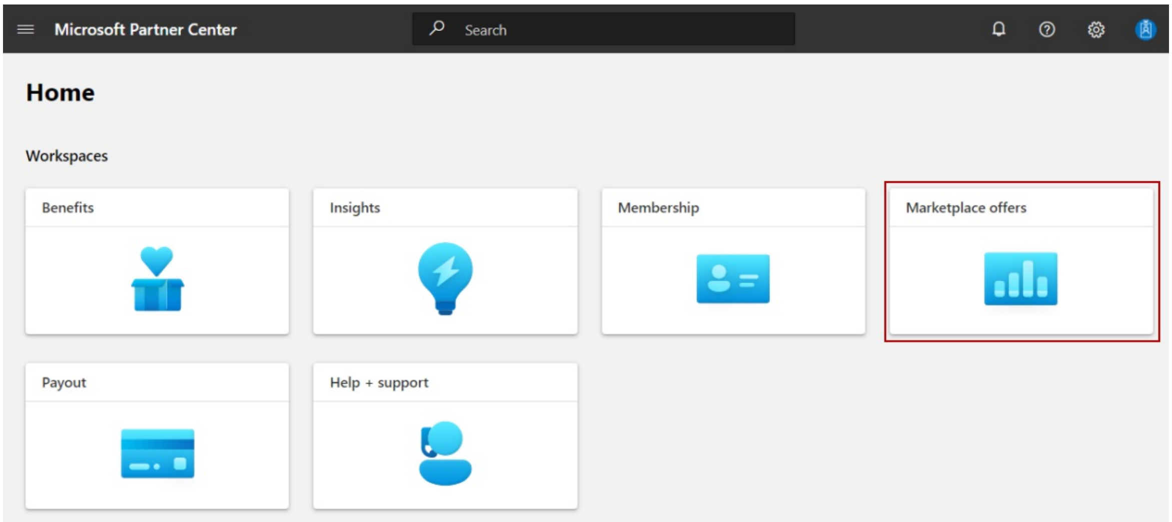
Review Plan a Power BI visual offer. It will explain the technical requirements for this offer and list the information and assets you'll need when you create it.

Create a new offer

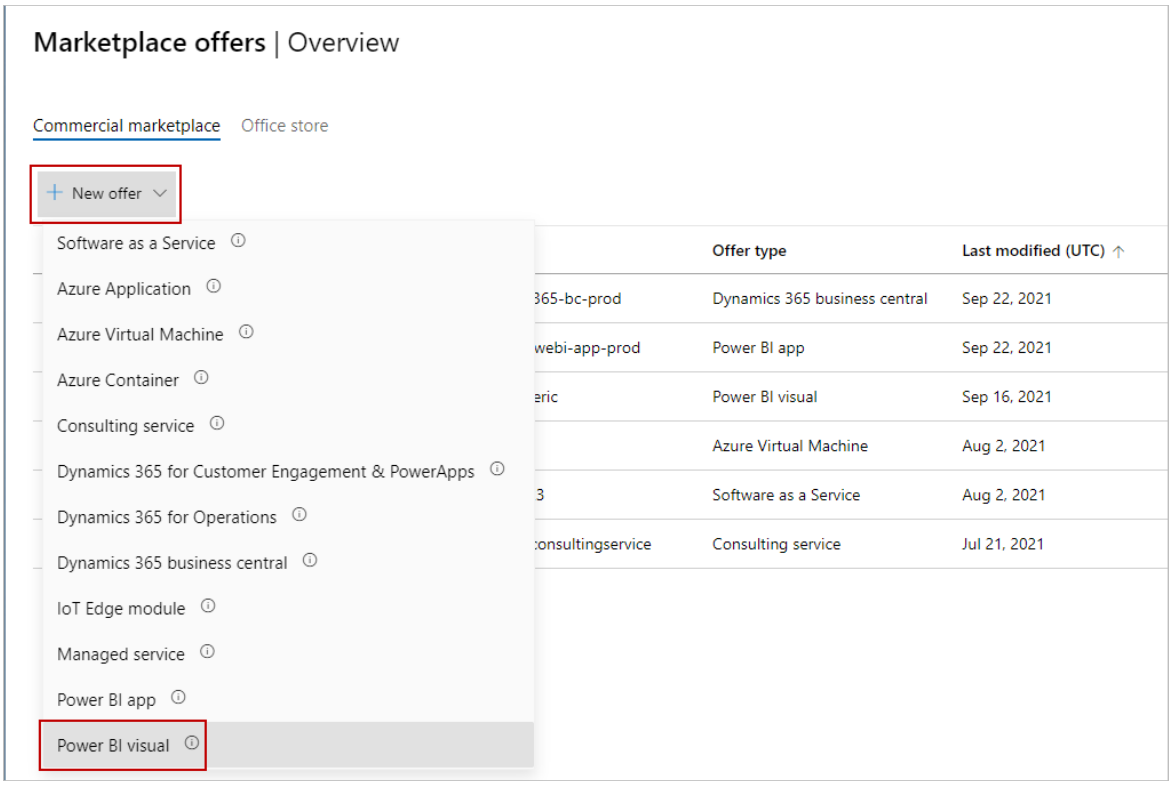
> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select + **New offer** > **Power BI visual**.



IMPORTANT

After an offer is published, any edits you make to it in Partner Center appear in AppSource only after you republish the offer. Be sure to always republish an offer after changing it.

New offer

Enter an **Offer ID**. This is a unique identifier for each offer in your account.

- This ID is visible to customers in the web address for the offer and in Azure Resource Manager templates, if applicable.
- Use only lowercase letters and numbers. The ID can include hyphens and underscores, but no spaces, and is limited to 50 characters. For example, if your Publisher ID is `testpublisherid` and you enter **test-offer-1**, the offer web address will be `https://appsource.microsoft.com/product/dynamics-365/testpublisherid.test-offer-1`.
- The Offer ID can't be changed after you select **Create**.
- The Offer ID should be unique within the list of all other Power BI visual offers in Partner Center.

Enter an **Offer alias**. This is the name used for the offer in Partner Center.

- This name isn't used in AppSource. It is different from the offer name and other values shown to customers.

Select **Create** to generate the offer. Partner Center opens the **Offer setup** page.

Setup details

For **Additional purchases**, select whether or not your offer requires purchases of a service or additional in-app purchases.

For **Power BI certification** (optional), read the description carefully and if you want to request Power BI certification, select the check box. Certified Power BI visuals meet certain specified code requirements that the Microsoft Power BI team has tested and approved. We recommend that you submit and publish your Power BI visual *before* you request certification, because the certification process takes extra time that could delay publishing of your offer.

Customer leads

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.
3. Complete the fields that appear. For detailed steps, see the following articles:
   - Configure your offer to send leads to the Azure table
   - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
   - Configure your offer to send leads to HTTPS endpoint
   - Configure your offer to send leads to Marketo
   - Configure your offer to send leads to Salesforce
4. To validate the configuration you provided, select the **Validate** link.
5. Select **Connect**.

Connecting to a CRM is optional. For more information, see Customer leads from your commercial marketplace offer.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Properties**.

Next steps

- **Offer Properties**

Configure Power BI visual offer properties

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the categories used to group your offer on Microsoft AppSource, the legal contracts that support your offer, and support documentation.

General info

- Select up to three **Categories** for grouping your offer into the appropriate marketplace search areas.
- Select up to two **Industries** industries which will be used to display your offer when customers filter their search on industries in the online store.

Legal and support info

Provide terms and conditions for your offer. You have two options:

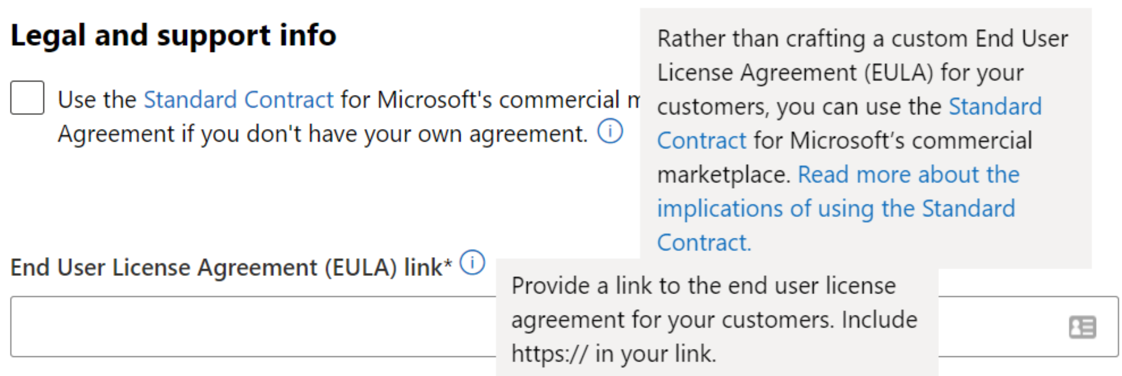
- Use the standard contract
- Use your own terms and conditions (EULA)

To learn about the standard contract, see Standard Contract for the Microsoft commercial marketplace or download the Standard Contract PDF (make sure your pop-up blocker is off).

Use the standard contract

To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions.

1. Select the **Use the Standard Contract...** check box.



2. In the **Confirmation** dialog box, select **Accept**. Depending on the size of your screen, you may have to scroll up to see it.

> **NOTE**
>
> After you publish an offer using the Standard Contract for the commercial marketplace, you can't use your own custom terms and conditions. Either offer your solution under the standard contract with optional amendments or under your own terms and conditions.

Use your own terms and conditions

You may provide your own terms and conditions instead of using the standard contract, or use our EULA specific for Power BI visual offers. Customers must accept these terms before they can try your offer.

1. Clear the **Use the Standard Contract for Microsoft's commercial marketplace** check box.
2. In the **EULA** filed (see image above), enter a single web address for your terms and conditions. Or, point to the Power BI visuals contract at `https://visuals.azureedge.net/app-store/Power%20BI%20-%20Default%20Custom%20Visual%20EULA.pdf` (PDF). Either will display as an active link in AppSource.

Privacy policy link

Enter the link (URL) to your organization's privacy policy. You are responsible for ensuring your app complies with privacy laws and regulations, and for providing a valid privacy policy.

Support document link

This link will be visible to users on AppSource. Include http:// or https:// in the URL.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Offer listing**.

Next steps

- Offer listing

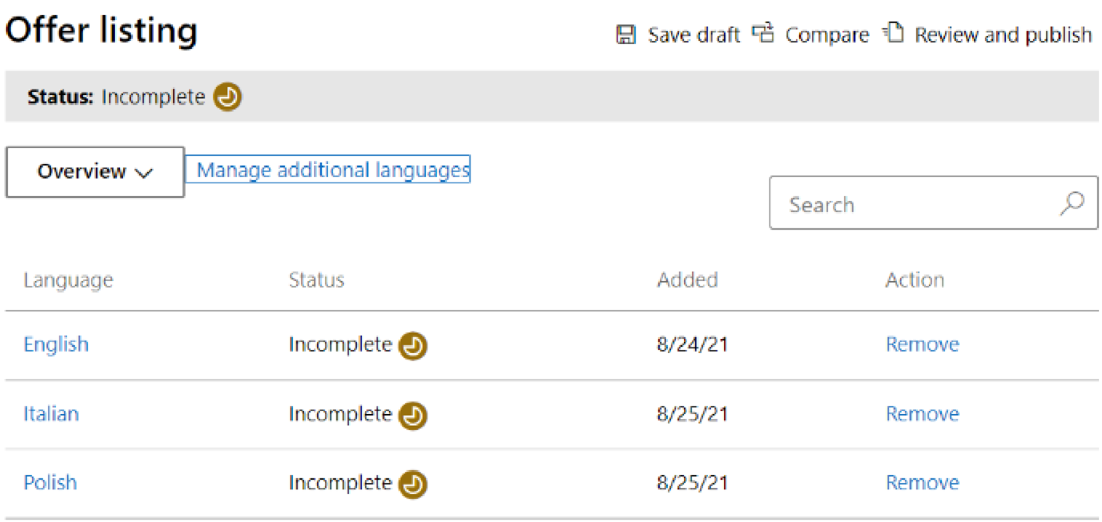
Configure Power BI visual offer listing details

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define the offer details such as offer name, description, links, contacts, logos, and screenshots that will appear on Microsoft AppSource. These details can be provided in different languages.

Languages

Provide listing details in any one or multiple supported languages. Select **Manage additional languages** to add a language. Select each language to add its listing details.



Marketplace details

- The **Name** you enter here is shown to customers as the title of the offer. This field is pre-populated with the name you entered when you created the offer, but you can change it. If you want to reserve more names (for example, in another language) select Reserve more names.
- Enter a **Summary** of your offer for the Search results summary. This description may be used in marketplace search results.
- Enter a thorough **Description** of your offer, up to 3,000 characters. Customers will see this in the Marketplace listing overview.
- Add up to three **Search keywords** to help people find your offer.

Marketplace media

Provide an icon and images to use with your offer. All images must be in PNG format. Blurry images will cause your submission to be rejected.

> **NOTE**
>
> If you have an issue uploading files, ensure your local network doesn't block the https://upload.xboxlive.com service that's used by Partner Center.

Logos

Provide the icon that will appear in the Microsoft AppSource main page and search results page. It should be in PNG format and 300 x 300 pixels.

Screenshots

Provide at least one and up to five screenshots. The format should be PNG and the dimensions must be exactly 1366 px (width) by 768 px (height). The size of the file is limited to 1024 kb. For greater usage, consider adding text bubbles in each screenshot to articulate the value proposition of key features shown.

Additional information (optional)

To increase the interest of users for your custom visual, provide a **YouTube** or **Vimeo** link to a video about your visual. The format of your URL should include https:// or https://.

For tips on making your offer listing as effective as possible, see Tips for creating effective listings.

For additional marketplace listing resources, see Best practices for marketplace offer listings.

Select **Save draft**.

If you selected additional languages, select each from the dropdown list at the top of the page and repeat the above steps for each one. When finished, continue to the next tab in the left-nav menu, **Availability**.

Next steps

- **Availability**

Define the availability of a Power BI visual offer

11/22/2021 • 2 minutes to read • Edit Online

This page lets you define where and how to make your offer available, including markets and release date.

Markets

To specify the markets in which your offer should be available, select **Edit markets**.

Your selections here apply only to new acquisitions; if someone already has your app in a market you later remove, they can continue using it, but no new customers in that market will be able to get your offer.

IMPORTANT

It is your responsibility to meet any local legal requirements, even if those requirements aren't listed here or in Partner Center. Even if you select all markets, local laws, restrictions, or other factors may prevent certain offers from being listed in some countries and regions.

Select **Save draft** before continuing to the next tab in the left-nav menu, **Technical configuration**.

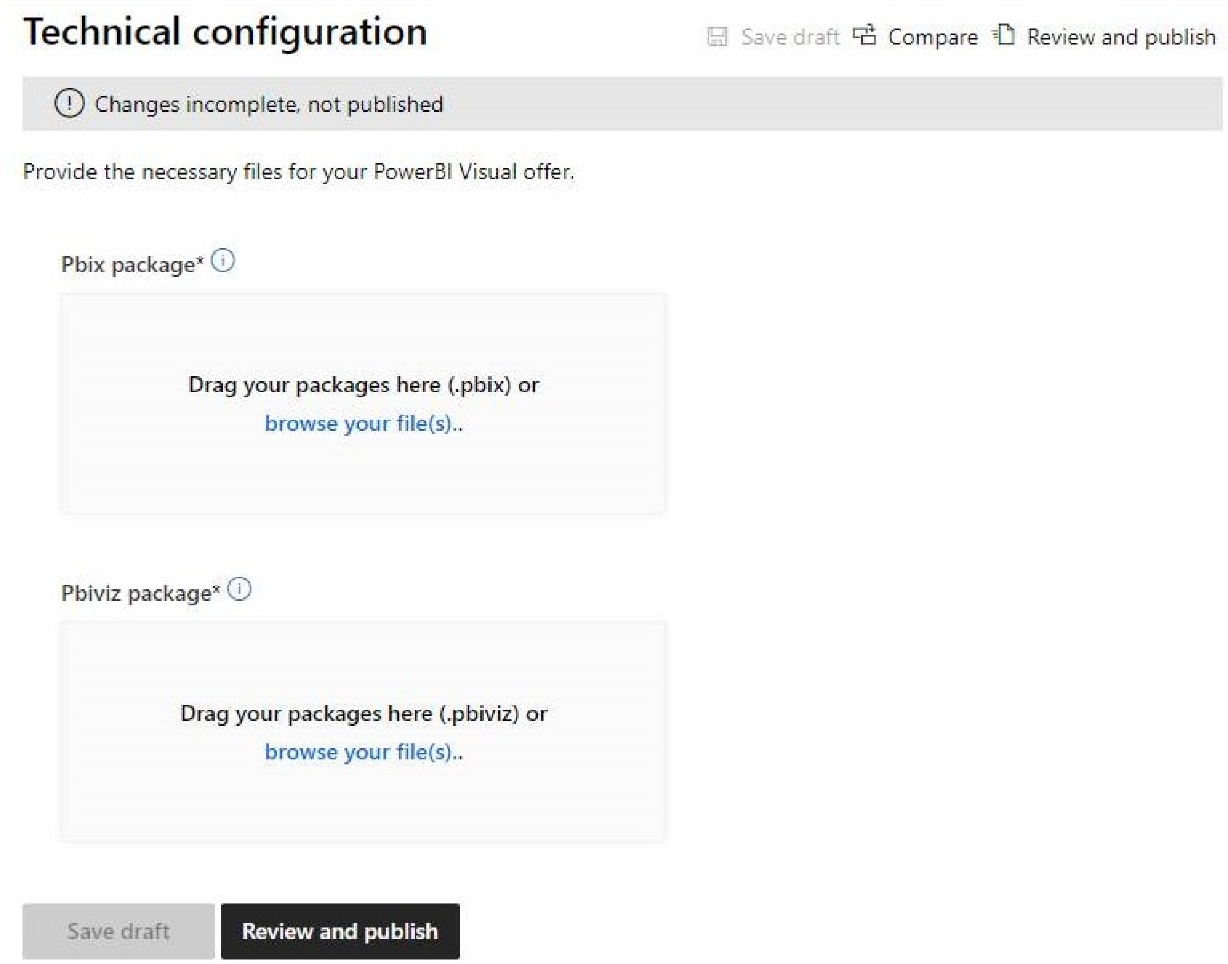
Next steps

- Technical configuration

Set up Power BI visual offer technical configuration

11/22/2021 • 2 minutes to read • Edit Online

On the **Technical configuration** tab, provide the files needed for the Power BI visual offer.



PBIVIZ package

Pack your Power BI visual into a PBIVIZ package containing all the required metadata:

- Visual name
- Display name
- GUID (see note below)
- Version (see note below)
- Description
- Author name and email

> **NOTE**
>
> If you are updating or resubmitting a visual:
>
> - The GUID must remain the same.
> - The version number should be incremented between package updates.

Sample PBIX report file

To showcase your visual offer, help users get familiar with the visual. Highlight the value the visual brings to the user and give examples of usage and formatting options. Add a "hints" page at the end with tips, tricks, and things to avoid. The sample PBIX report file must work offline, without any external connections.

> **NOTE**
>
> - The PBIX report must use the same version of the visual as the PBIVIZ.
> - The PBIX report file must work offline, without any external connections.

Select **Save draft** before skipping in the left-nav menu to the **Offer management** tab.

Next steps

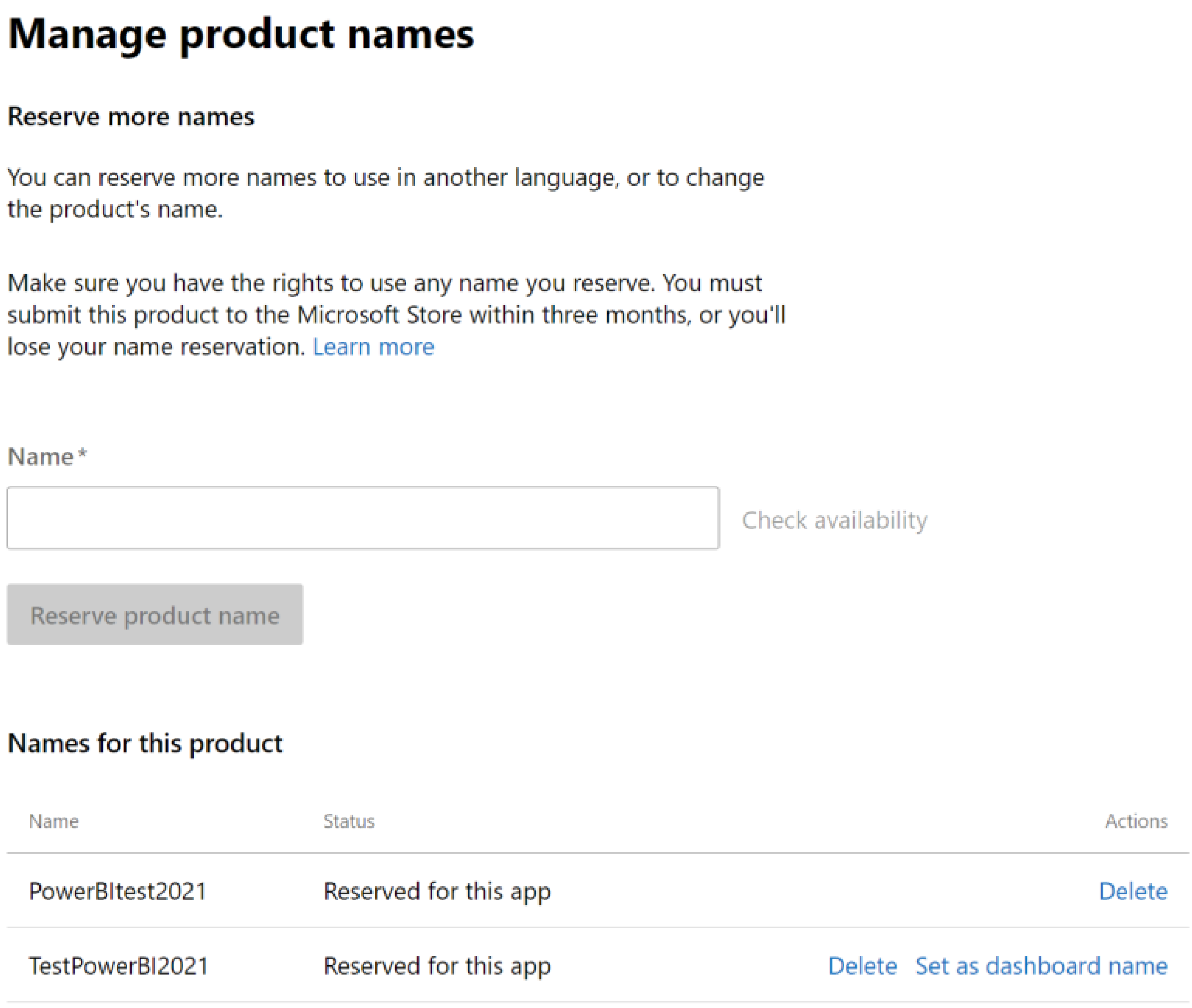
- Offer management

Manage Power BI visual offer names

11/22/2021 • 2 minutes to read • Edit Online

This page lets you reserve additional names for your offer. These names can be for use in a different language or if you decide to change the product's name.

In the left-nav menu, select **Offer Management**, then **Manage offer names**.



Reserve a name

1. Enter a **Name** and select **Check availability** to see if that name is available.
2. If the name is available, select **Reserve product name** to add it to the list of names.
3. Repeat for each name you want to reserve.

To delete a name, select **Delete**.

To finish submitting your offer, return to any prior tab (such as **Offer setup**) and select **Review and publish** at the top-right or bottom of the page.

Next steps

- Review and publish your offer

Plan a SaaS offer for the commercial marketplace

11/22/2021 • 23 minutes to read • Edit Online

This article explains the different options and requirements for publishing software as a service (SaaS) offers to the Microsoft commercial marketplace. SaaS offers to let you deliver and license software solutions to your customers via online subscriptions. As a SaaS publisher, you manage and pay for the infrastructure required to support your customers' use of your offer. This article will help you prepare your offer for publishing to the commercial marketplace with Partner Center.

> **TIP**
> To see the customer's view of purchasing a SaaS offer in the Azure portal, see Purchase a SaaS offer in the Azure portal and Purchase SaaS apps on Microsoft AppSource.

Listing options

As you prepare to publish a new SaaS offer, you need to decide which *listing* option to choose. The listing option you choose determines what additional information you'll need to provide as you create your offer in Partner Center. You will define your listing option on the **Offer setup** page as explained in How to create a SaaS offer in the commercial marketplace.

The following table shows the listing options for SaaS offers in the commercial marketplace.

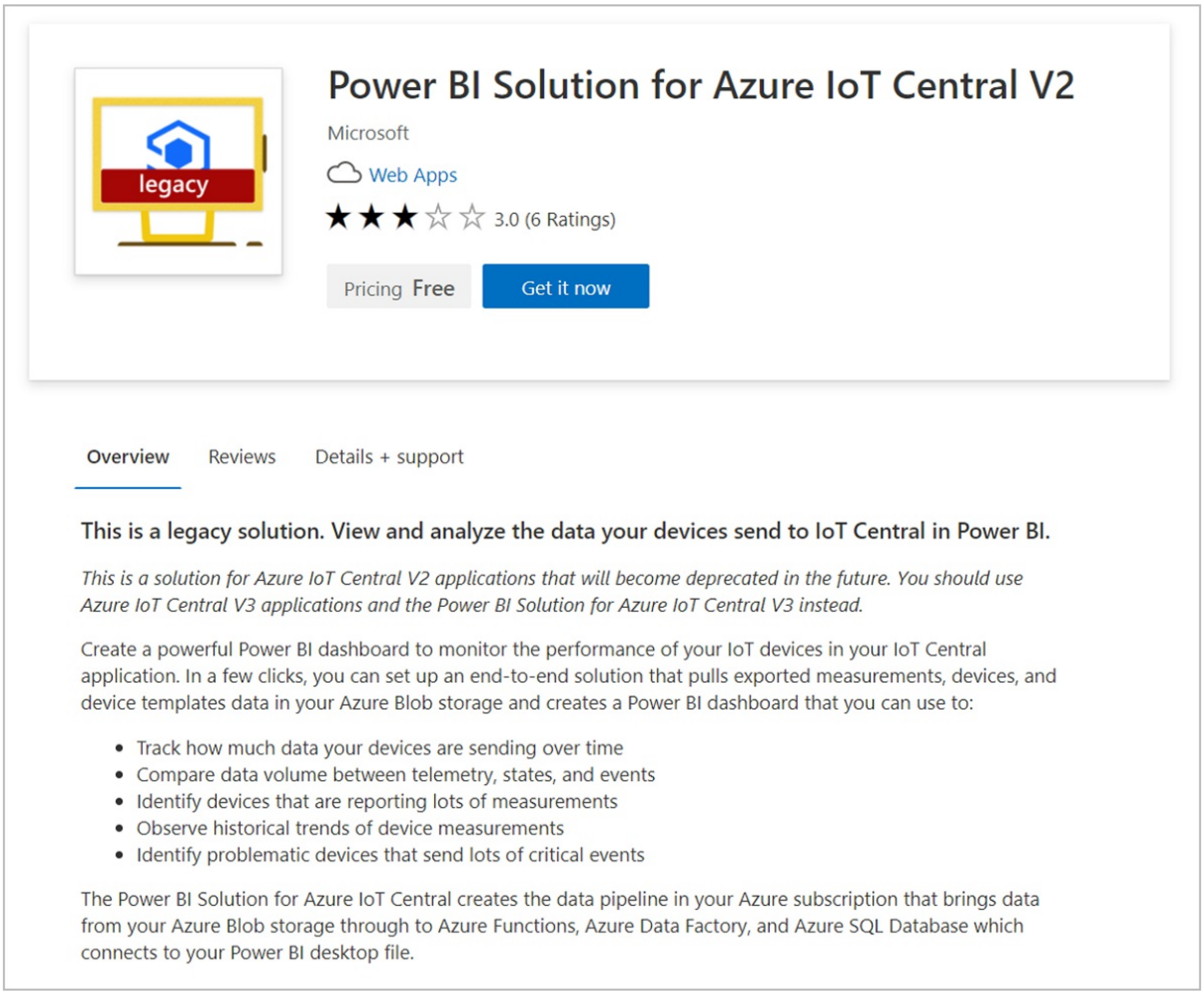
LISTING OPTION	TRANSACTION PROCESS
Contact me	The customer contacts you directly from information in your listing. `*` You can change to a different listing option after publishing the offer.
Free trial	The customer is redirected to your target URL via Azure Active Directory (Azure AD). `*` You can change to a different listing option after publishing the offer.
Get it now (Free)	The customer is redirected to your target URL via Azure AD. `*` You can change to a different listing option after publishing the offer.
Sell through Microsoft	Offers sold through Microsoft are called *transactable* offers. An offer that is transactable is one in which Microsoft facilitates the exchange of money for a software license on the publisher's behalf. We bill SaaS offers using the pricing model you choose, and manage customer transactions on your behalf. Azure infrastructure usage fees are billed to you, the partner, directly. You should account for infrastructure costs in your pricing model. This is explained in more detail in SaaS billing below. **Note**: You cannot change this option once your offer is published.

LISTING OPTION	TRANSACTION PROCESS

* Publishers are responsible for supporting all aspects of the software license transaction, including but not limited to order, fulfillment, metering, billing, invoicing, payment, and collection.

For more information about these listing options, see Commercial marketplace transact capabilities.

After your offer is published, the listing option you chose for your offer appears as a button in the upper-left corner of your offer's listing page. For example, the following screenshot shows an offer listing page in Azure Marketplace with the **Get it now** button.



Technical requirements

The technical requirements differ depending on the listing option you choose for your offer.

The *Contact me* listing option has no technical requirements. You have the option to connect a customer relationship management (CRM) system to manage customer leads. This is described in the Customer leads section, later in this article.

The *Get it now (Free)*, *Free trial*, and *Sell through Microsoft* listing options have the following technical requirements:

- You must enable both Microsoft Accounts (MSA) and Azure Active Directory (Azure AD) for authenticating buyers on your site. You must let buyers with an Azure AD account sign in to your application using Azure AD with single sign-on (SSO).
- You must create a landing page that offers a seamless sign-in and onboarding experience for a customer

who's purchased your offer. The landing page helps them complete any additional provisioning or setup that's required. For guidance on creating the landing page, see these articles:

- Build the landing page for your transactable SaaS offer in the commercial marketplace
- Build the landing page for your free or trial SaaS offer in the commercial marketplace

These additional technical requirements apply to the *Sell through Microsoft* (transactable) listing option only:

- You must use the SaaS Fulfillment APIs to integrate with Azure Marketplace and Microsoft AppSource. You must expose a service that can interact with the SaaS subscription to create, update, and delete a user account and service plan. Critical API changes must be supported within 24 hours. Non-critical API changes will be released periodically. Diagrams and detailed explanations describing the usage of the collected fields are available in documentation for the APIs.
- You must create at least one plan for your offer. Your plan is priced based on the pricing model you select before publishing: *flat rate* or *per-user*. More details about plans are provided later in this article.
- The customer can cancel your offer at any time.

Technical information

If you're creating a transactable offer, you'll need to gather the following information for the **Technical configuration** page. If you choose to process transactions independently instead of creating a transactable offer, skip this section and go to Test drives.

- **Landing page URL**: The SaaS site URL (for example: `https://contoso.com/signup`) that users will be directed to after acquiring your offer from the commercial marketplace, triggering the configuration process from the newly created SaaS subscription. This URL will receive a token that can be used to call the fulfillment APIs to get provisioning details for your interactive registration page.

  This URL will be called with the marketplace purchase identification token parameter that uniquely identifies the specific customer's SaaS purchase. You must exchange this token for the corresponding SaaS subscription details using the resolve API. Those details and any others you wish to collect as part of a customer-interactive web page can be used to kick off the customer onboarding experience, which has to eventually conclude with an activate call on the API for starting the subscription period. On this page, the user should sign up through one-click authentication by using Azure Active Directory (Azure AD).

  This URL with marketplace purchase identification token parameter will also be called when the customer launches a managed SaaS experience from the Azure portal or Microsoft 365 Admin Center. You should handle both flows: when the token is provided for the first time after a new customer purchase, and when it's provided again for an existing customer managing their SaaS solution.

  The Landing page you configure should be up and running 24/7. This is the only way you'll be notified about new purchases of your SaaS offers made in the commercial marketplace, or configuration requests for an active subscription of an offer.

- **Connection webhook**: For all asynchronous events that Microsoft needs to send to you (for example, when a SaaS subscription has been canceled), we require you to provide a connection webhook URL. We will call this URL to notify you on the event.

  The webhook you provide should be up and running 24/7. This is the only way you'll be notified about updates about your customers' SaaS subscriptions purchased via the commercial marketplace.

  > **NOTE**
  >
  > Inside the Azure portal, we require that you create a single-tenant Azure Active Directory (Azure AD) app registration. Use the app registration details to authenticate your solution when calling the marketplace APIs. To find the tenant ID, go to your Azure Active Directory and select **Properties**, then look for the Directory ID number that's listed. For example, `50c464d3-4930-494c-963c-1e951d15360e`.

- **Azure Active Directory tenant ID**: (also known as directory ID). Inside the Azure portal, we require you to register an Azure Active Directory (AD) app so we can add it to the access control list (ACL) of the API to make sure you are authorized to call it. To find the tenant ID for your Azure Active Directory (AD) app, go to the App registrations blade in Azure Active Directory. In the **Display name** column, select the app. Then look for the **Directory (tenant) ID** number listed (for example, `50c464d3-4930-494c-963c-1e951d15360e`).
- **Azure Active Directory application ID**: You also need your application ID. To get its value, go to the App registrations blade in Azure Active Directory. In the **Display name** column, select the app. Then look for the Application (client) ID number listed (for example, `50c464d3-4930-494c-963c-1e951d15360e`).

  The Azure AD application ID is associated with your publisher ID in your Partner Center account. You must use the same application ID for all offers in that account.

  > **NOTE**
  >
  > If the publisher has two or more different accounts in Partner Center, the Azure AD app registration details can be used in one account only. Using the same tenant ID, app ID pair for an offer under a different publisher account is not supported.

Test drives

You can choose to enable a test drive for your SaaS app. Test drives give customers access to a preconfigured environment for a fixed number of hours. You can enable test drives for any publishing option, however this feature has additional requirements. To learn more about test drives, see What is a test drive?. For information about configuring different kinds of test drives, see Test drive technical configuration.

> **TIP**
>
> A test drive is different from a free trial. You can offer a test drive, free trial, or both. They both provide your customers with your solution for a fixed period-of-time. But, a test drive also includes a hands-on, self-guided tour of your product's key features and benefits being demonstrated in a real-world implementation scenario.

Customer leads

You must connect your offer to your customer relationship management (CRM) system to collect customer information. The customer will be asked for permission to share their information. These customer details, along with the offer name, ID, and online store where they found your offer, will be sent to the CRM system that you've configured. The commercial marketplace supports a variety of CRM systems, along with the option to use an Azure table or configure an HTTPS endpoint using Power Automate.

You can add or modify a CRM connection at any time during or after offer creation. For detailed guidance, see Customer leads from your commercial marketplace offer.

Selecting an online store

When you publish a SaaS offer, it will be listed in Microsoft AppSource, Azure Marketplace, or both. Each online store serves unique customer requirements. AppSource is for business solutions and Azure Marketplace is for IT solutions. Your offer type, transact capabilities, and categories will determine where your offer will be published. Categories and subcategories are mapped to each online store based on the solution type.

If your SaaS offer is *both* an IT solution (Azure Marketplace) and a business solution (AppSource), select a category and a subcategory applicable to each online store. Offers published to both online stores should have a value proposition as an IT solution *and* a business solution.

> **IMPORTANT**
>
> SaaS offers with metered billing are available through Azure Marketplace and the Azure portal. SaaS offers with only private plans are available through the Azure portal and AppSource.

METERED BILLING	PUBLIC PLAN	PRIVATE PLAN	AVAILABLE IN:
Yes	Yes	No	Azure Marketplace and Azure portal
Yes	Yes	Yes	Azure Marketplace and Azure portal*
Yes	No	Yes	Azure portal only
No	No	Yes	Azure portal and AppSource

* The private plan of the offer will only be available via the Azure portal and AppSource.

For example, an offer with metered billing and a private plan only (no public plan), will be purchased by customers in the Azure portal. Learn more about Private offers in Microsoft commercial marketplace.

For detailed information about listing options supported by online stores, see Listing and pricing options by online store. For more information about categories and subcategories, see Categories and subcategories in the commercial marketplace.

Legal contracts

To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions.

If you choose to use the standard contract, you have the option to add universal amendment terms and up to 10 custom amendments to the standard contract. You can also use your own terms and conditions instead of the standard contract. You will manage these details in the **Properties** page. For detailed information, see Standard contract for Microsoft commercial marketplace.

> **NOTE**
>
> After you publish an offer using the standard contract for the commercial marketplace, you cannot use your own custom terms and conditions. It is an "or" scenario. You either offer your solution under the standard contract or your own terms and conditions. If you want to modify the terms of the standard contract you can do so through Standard Contract Amendments.

Microsoft 365 integration

Integration with Microsoft 365 allows your SaaS offer to provide connected experience across multiple Microsoft 365 App surfaces through related free add-ins like Teams apps, Office add-ins, and SharePoint Framework solutions. You can help your customers easily discover all facets of your E2E solution (web service + related add-ins) and deploy them within one process by providing the following information.

- If your SaaS offer integrates with Microsoft Graph, then provide the Azure Active Directory (AAD) App ID used by your SaaS offer for the integration. Administrators can review access permissions required for the proper functioning of your SaaS offer as set on the AAD App ID and grant access if advanced admin permission is needed at deployment time.

  If you choose to sell your offer through Microsoft, then this is the same AAD App ID that you have registered to use on your landing page to get basic user information needed to complete customer subscription activation. For detailed guidance, see Build the landing page for your transactable SaaS offer in the commercial marketplace.

- Provide a list of related add-ins that work with your SaaS offer you want to link. Customers will be able to discover your E2E solution on Microsoft AppSource and administrators can deploy both the SaaS and all the related add-ins you have linked in the same process via Microsoft 365 admin center.

  To link related add-ins, you need to provide the AppSource link of the add-in, this means the add-in must be first published to AppSource. Supported add-in types you can link are: Teams apps, Office add-ins, and SharePoint Framework (SPFx) solutions. Each linked add-in must be unique for a SaaS offer.

For linked products, search on AppSource will return with one result that includes both SaaS and all linked add-ins. Customer can navigate between the product detail pages of the SaaS offer and linked add-ins. IT admins can review and deploy both the SaaS and linked add-ins within the same process through an integrated and connected experience within the Microsoft 365 admin center. To learn more, see Test and deploy Microsoft 365 Apps - Microsoft 365 admin.

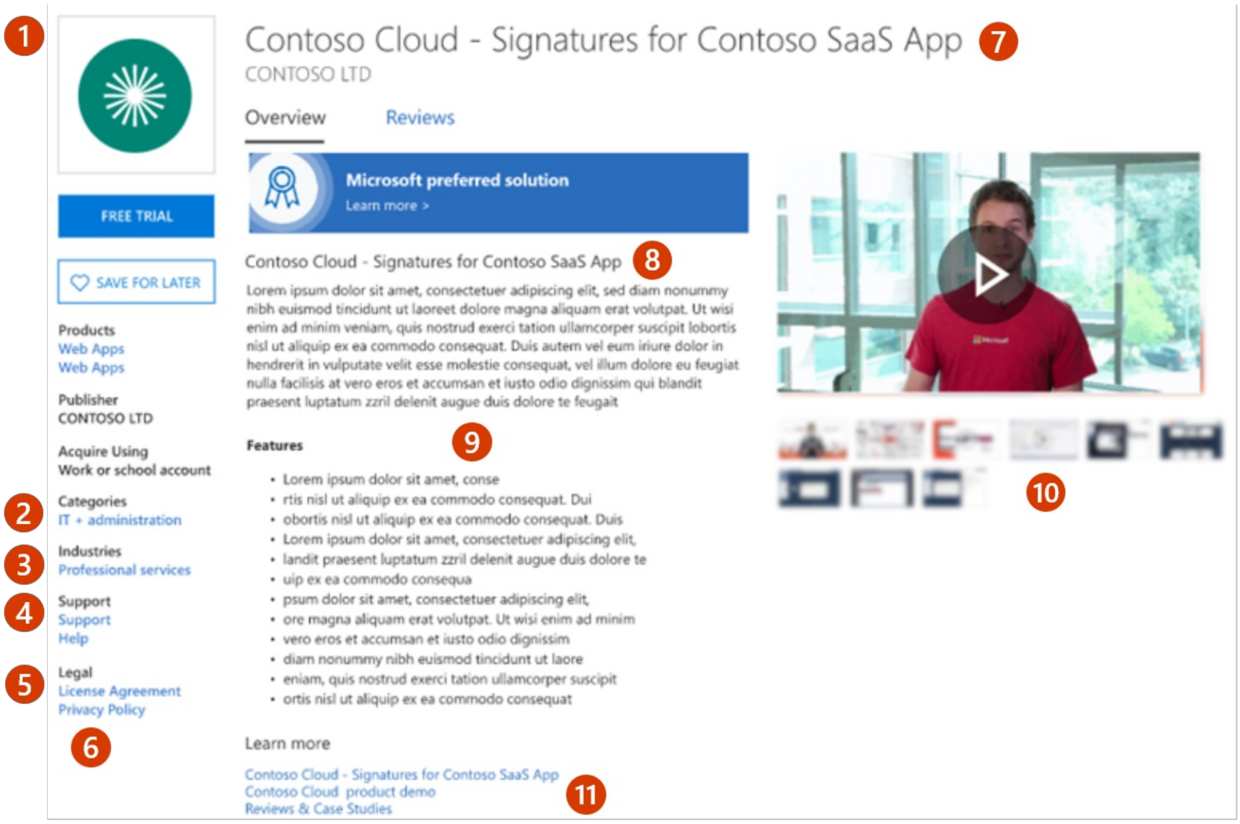
Microsoft 365 integration support limitations

Discovery as a single E2E solution is supported on AppSource for all cases, however, simplified deployment of the E2E solution as described above via the Microsoft 365 admin center is not supported for the following scenarios:

- “Contact me” list-only offers.
- The same add-in is linked to more than one SaaS offer.
- The SaaS offer is linked to add-ins, but it does not integrate with Microsoft Graph and no AAD App ID is provided.
- The SaaS offer is linked to add-ins, but AAD App ID provided for Microsoft Graph integration is shared across multiple SaaS offers.

Offer listing details

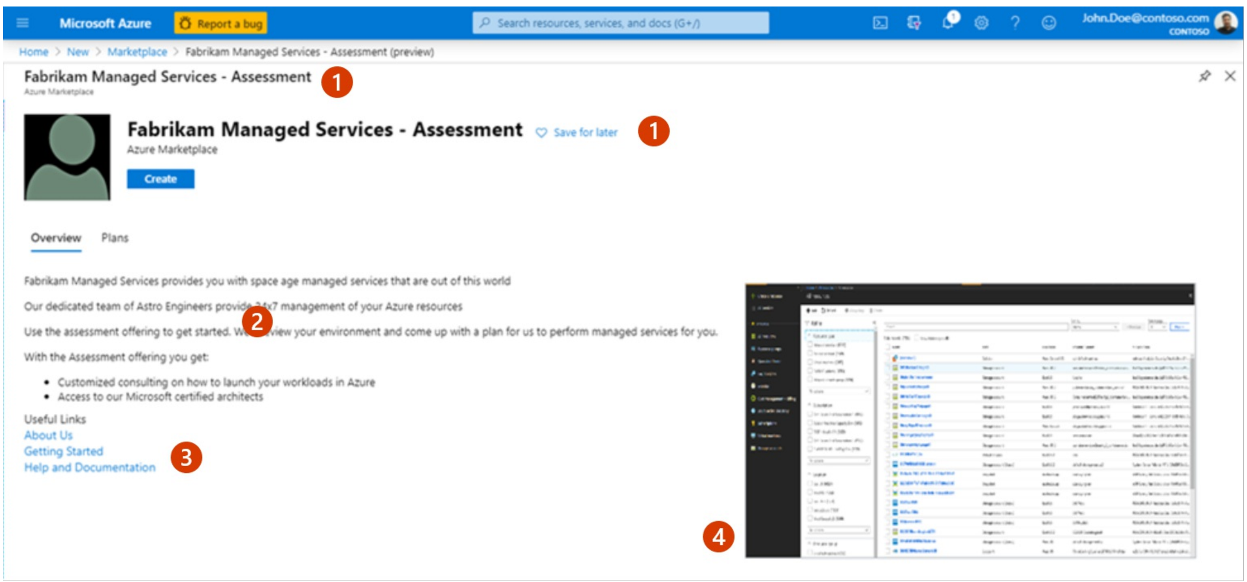
When you create a new SaaS offer in Partner Center, you will enter text, images, optional videos, and other details on the **Offer listing** page. This is the information that customers will see when they discover your offer listing in the commercial marketplace, as shown in the following example.



Call-out descriptions

1. Logo
2. Categories
3. Industries
4. Support address (link)
5. Terms of use
6. Privacy policy
7. Offer name
8. Summary
9. Description
10. Screenshots/videos
11. Documents

The following example shows an offer listing in the Azure portal.



Call out descriptions

1. Title
2. Description
3. Useful links
4. Screenshots

> **NOTE**
>
> Offer listing content is not required to be in English if the offer description begins with the phrase "This application is available only in [non-English language]".

To help create your offer more easily, prepare some of these items ahead of time. The following items are required unless otherwise noted.

- **Name**: This name will appear as the title of your offer listing in the commercial marketplace. The name may be trademarked. It cannot contain emojis (unless they are the trademark and copyright symbols) and must be limited to 50 characters.

- **Search results summary**: Describe the purpose or function of your offer as a single sentence with no line breaks in 100 characters or less. This summary is used in the commercial marketplace listing(s) search results.

- **Description**: This description will be displayed in the commercial marketplace listing(s) overview. Consider including a value proposition, key benefits, intended user base, any category or industry associations, in-app purchase opportunities, any required disclosures, and a link to learn more.

  This text box has rich text editor controls that you can use to make your description more engaging. You can also use HTML tags to format your description. You can enter up to 3,000 characters of text in this box, including HTML markup. For additional tips, see Write a great app description.

- **Getting Started instructions**: If you choose to sell your offer through Microsoft (transactable offer), this field is required. These instructions help customers connect to your SaaS offer. You can add up to 3,000 characters of text and links to more detailed online documentation.

- **Search keywords** (optional): Provide up to three search keywords that customers can use to find your offer in the online stores. You don't need to include the offer **Name** and **Description**: that text is automatically included in search.

- **Privacy policy link**: The URL for your company's privacy policy. You must provide a valid privacy policy and are responsible for ensuring your app complies with privacy laws and regulations.

- **Contact information**: You must provide the following contacts from your organization:

  - **Support contact**: Provide the name, phone, and email for Microsoft partners to use when your customers open tickets. You must also include the URL for your support website.
  - **Engineering contact**: Provide the name, phone, and email for Microsoft to use directly when there are problems with your offer. This contact information isn't listed in the commercial marketplace.
  - **CSP Program contact** (optional): Provide the name, phone, and email if you opt in to the CSP program, so those partners can contact you with any questions. You can also include a URL to your marketing materials.

- **Useful links** (optional): You can provide links to various resources for users of your offer. For example, forums, FAQs, and release notes.

- **Supporting documents**: You can provide up to three customer-facing documents, such as whitepapers, brochures, checklists, or PowerPoint presentations.

- **Media – Logos**: Provide a PNG file for the **Large** logo. Partner Center will use this to create a **Small** and a **Medium** logo. You can optionally replace these with different images later.
  - Large (from 216 x 216 to 350 x 350 px, required)
  - Medium (90 x 90 px, optional)
  - Small (48 x 48 px, optional)

  These logos are used in different places in the online stores:
  - The Small logo appears in Azure Marketplace search results and on the AppSource main page and search results page.
  - The Medium logo appears when you create a new resource in Microsoft Azure.
  - The Large logo appears on your offer listing page in Azure Marketplace and AppSource.
- **Media - Screenshots**: You must add at least one and up to five screenshots with the following requirements, that show how your offer works:
  - 1280 x 720 pixels
  - PNG file type
  - Must include a caption
- **Media - Videos** (optional): You can add up to four videos with the following requirements, that demonstrate your offer:
  - Name
  - URL: Must be hosted on YouTube or Vimeo only.
  - Thumbnail: 1280 x 720 PNG file

> **NOTE**
>
> Your offer must meet the general commercial marketplace certification policies and the software as a service policies to be published to the commercial marketplace.

> **NOTE**
>
> A preview audience differs from a private plan. A private plan is one you make available only to a specific audience you choose. This enables you to negotiate a custom plan with specific customers. For more information, see the next section: Plans.

You can send invites to Microsoft Account (MSA) or Azure Active Directory (Azure AD) email addresses. Add up to 10 email addresses manually or import up to 20 with a .csv file. If your offer is already live, you can still define a preview audience for testing any changes or updates to your offer.

Plans

Transactable offers require at least one plan. A plan defines the solution scope and limits, and the associated pricing. You can create multiple plans for your offer to give your customers different technical and pricing options. If you choose to process transactions independently instead of creating a transactable offer, the **Plans** page is not visible. If so, skip this section and go to Additional sales opportunities.

See Plans and pricing for commercial marketplace offers for general guidance about plans, including pricing models, free trials, and private plans. The following sections discuss additional information specific to SaaS offers.

SaaS pricing models

SaaS offers can use one of two pricing models with each plan: either *flat rate* or *per user*. All plans in the same offer must be associated with the same pricing model. For example, an offer cannot have one plan that's flat rate and another plan that's per user.

Flat rate – Enable access to your offer with a single monthly or annual flat rate price. This is sometimes referred to as site-based pricing. With this pricing model, you can optionally define metered plans that use the marketplace metering service API to charge customers for usage that isn't covered by the flat rate. For more information on metered billing, see Metered billing for SaaS using the commercial marketplace metering service. You should also use this option if usage behavior for your SaaS service is in bursts.

Per user – Enable access to your offer with a price based on the number of users who can access the offer or occupy seats. With this user-based model, you can set the minimum and maximum number of users supported by the plan. You can create multiple plans to configure different price points based on the number of users. These fields are optional. If left unselected, the number of users will be interpreted as not having a limit (min of 1 and max of as many as your service can support). These fields may be edited as part of an update to your plan.

> **IMPORTANT**
> After your offer is published, you cannot change the pricing model. In addition, all plans for the same offer must share the same pricing model.

SaaS billing

For SaaS apps that run in your (the publisher's) Azure subscription, infrastructure usage is billed to you directly; customers do not see actual infrastructure usage fees. You should bundle Azure infrastructure usage fees into your software license pricing to compensate for the cost of the infrastructure you deployed to run the solution.

SaaS app offers that are sold through Microsoft support monthly or annual billing based on a flat fee, per user, or consumption charges using the metered billing service. The commercial marketplace operates on an agency model, whereby publishers set prices, Microsoft bills customers, and Microsoft pays revenue to publishers while withholding an agency fee.

The following example shows a sample breakdown of costs and payouts to demonstrate the agency model. In this example, Microsoft bills $100.00 to the customer for your software license and pays out $80.00 to the publisher.

YOUR LICENSE COST	$100 PER MONTH
Azure usage cost (D1/1-Core)	Billed directly to the publisher, not the customer
Customer is billed by Microsoft	$100.00 per month (Publisher must account for any incurred or pass-through infrastructure costs in the license fee)
Microsoft bills	**$100 per month**
Microsoft charges a 3% Marketplace Service Fee and pays you 97% of your license cost	$97.00 per month

A preview audience can access your offer prior to being published live in the online stores. They can see how your offer will look in the commercial marketplace and test the end-to-end functionality before you publish it live.

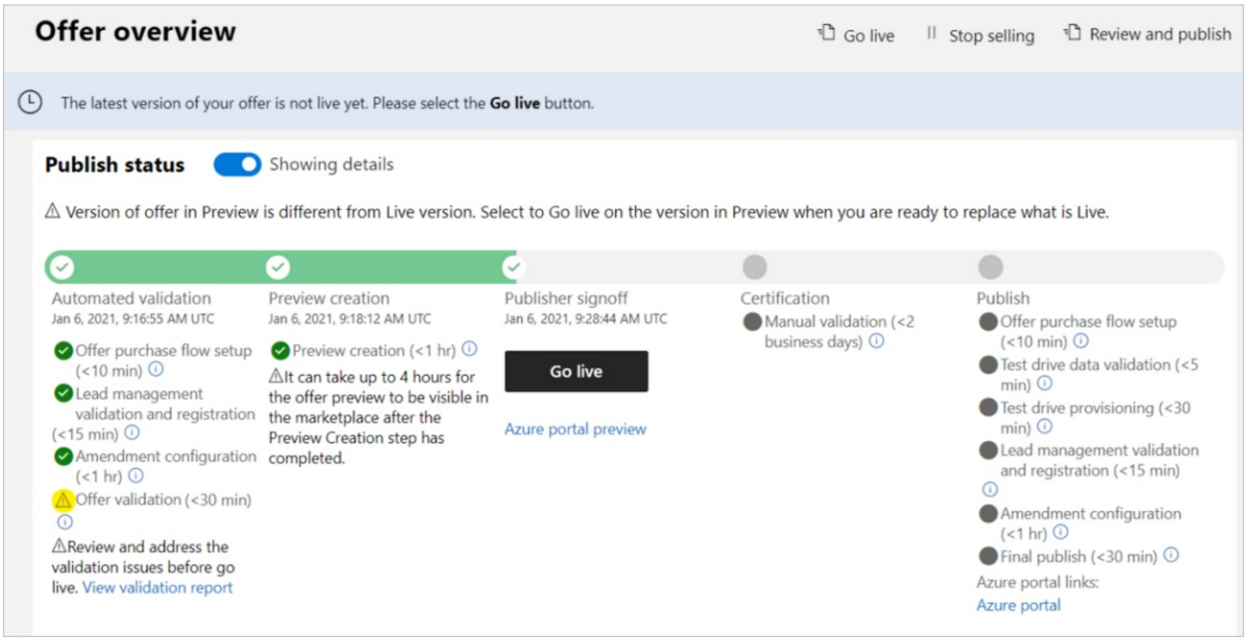
On the **Preview audience** page, you can define a limited preview audience. This setting is not available if you choose to process transactions independently instead of selling your offer through Microsoft. If so, you can skip this section and go to Additional sales opportunities.

Test offer

Before you publish your offer live, you should use the preview functionality to develop your technical implementation, test and experiment with different pricing models.

To develop and test your SaaS offer with the lowest amount of risk, we recommend that you create a test and development (DEV) offer for experimentation and testing. The DEV offer will be separate from your production (PROD) offer.

To prevent accidental purchases of the DEV offer, you'll never push the **Go live** button to publish the DEV offer live.



Here are some reasons to create a separate DEV offer for the development team to use for development and testing of the PROD offer:

- Avoid accidental customer charges
- Evaluate pricing models
- Not adding plans that do not target actual customers

Avoid accidental customer charges

By using a DEV offer instead of the PROD offer and treating them as development and production environments, you can avoid accidental charges to customers.

We recommend that you register two different Azure AD apps for calling the marketplace APIs. Developers will use one Azure AD app with the DEV offer's settings, and the operations team will use the PROD app registration. By doing this, you can isolate the development team from making inadvertent mistakes, such as calling the API to cancel a customer's subscription who pays $100K per month. You can also avoid charging a customer for metered usage they didn't consume.

Evaluate pricing models

Testing pricing models in the DEV offer reduces risk when developers experiment with different pricing models.

Publishers can create the plans they need in the DEV offer to determine which pricing model works best for their offer. Developers might want to create multiple plans in the DEV offer to test different pricing combinations. For example, you might create plans with different sets of custom metered dimensions. You might create a different plan with a mix of flat rate and custom metered dimensions.

To test multiple pricing options, you need to create a plan for each unique pricing model. To learn more, see Plans.

Not adding plans that do not target actual customers

By using a DEV offer for development and testing, you can reduce unnecessary clutter in the PROD offer. For example, you can't delete plans you create to test different pricing models or technical configurations (without filing a support ticket). So by creating plans for testing in the DEV offer, you reduce the clutter in the PROD offer.

Clutter in the PROD offer frustrates product and marketing teams, as they expect all the plans to target actual customers. Especially with large teams that are disjointed who all want different sandboxes to work with, creating two offers will provide two different environments for DEV and PROD. In some cases, you might want to create multiple DEV offers to support a larger team who have different people running different test scenarios. Letting different team members work in the DEV offer separate from the PROD offer , helps to keep production plans as close to production-ready as possible.

Testing a DEV offer helps to avoid the 30 custom metered dimensions limit per offer. Developers can try different meter combinations in the DEV offer without affecting the custom metered dimension limit in the PROD offer.

Additional sales opportunities

You can choose to opt into Microsoft-supported marketing and sales channels. When creating your offer in Partner Center, you will see two tabs toward the end of the process:

- **Resell through CSPs**: Use this option to allow Microsoft Cloud Solution Providers (CSP) partners to resell your solution as part of a bundled offer. For more information about this program, see Cloud Solution Provider program.
- **Co-sell with Microsoft**: This option lets Microsoft sales teams consider your IP co-sell eligible solution when evaluating their customers' needs. For details about co-sell eligibility, see Requirements for co-sell status. For detailed information on how to prepare your offer for evaluation, see Co-sell option in Partner Center.

Next steps

- How to create a SaaS offer in the commercial marketplace
- Offer listing best practices

Azure AD and transactable SaaS offers in the commercial marketplace

11/22/2021 • 5 minutes to read • Edit Online

The Microsoft cloud-based identity and access management service, Azure Active Directory (Azure AD) helps users sign in and access internal and external resources. In the Microsoft commercial marketplace, Azure AD makes transactable SaaS offers easier and more secure for everyone, including publishers, buyers, and users. With Azure AD, publishers can automate the provisioning of users to their software as a service (SaaS) apps, and buyers themselves can manage these provisioned users.

Further, Azure AD single sign-on (SSO) provides security and convenience when users sign in to apps in Azure AD. Faster engagement and optimized experiences also inspire buyer and user confidence from the very first interaction with a publisher's SaaS app. This gives a positive impression that builds visibility and encourages repeat business.

By following the guidance in this article, you'll help to certify your SaaS offer in the commercial marketplace. For more details about certification, read the detailed commercial marketplace certification policies, including those specific to SaaS.

Before you begin

When you create your SaaS offer in Partner Center, you choose from a set of specific listing options that will be displayed on the offer listing. Your choice determines how your offer is transacted in the commercial marketplace. Offers sold through Microsoft are called transactable offers. We bill the customer on your behalf for all transactable offers. If you choose to sell through Microsoft and have us host transactions on your behalf (the **Yes** option), then you've chosen to create a transactable offer and this article is for you. We recommend that you read it in its entirety.

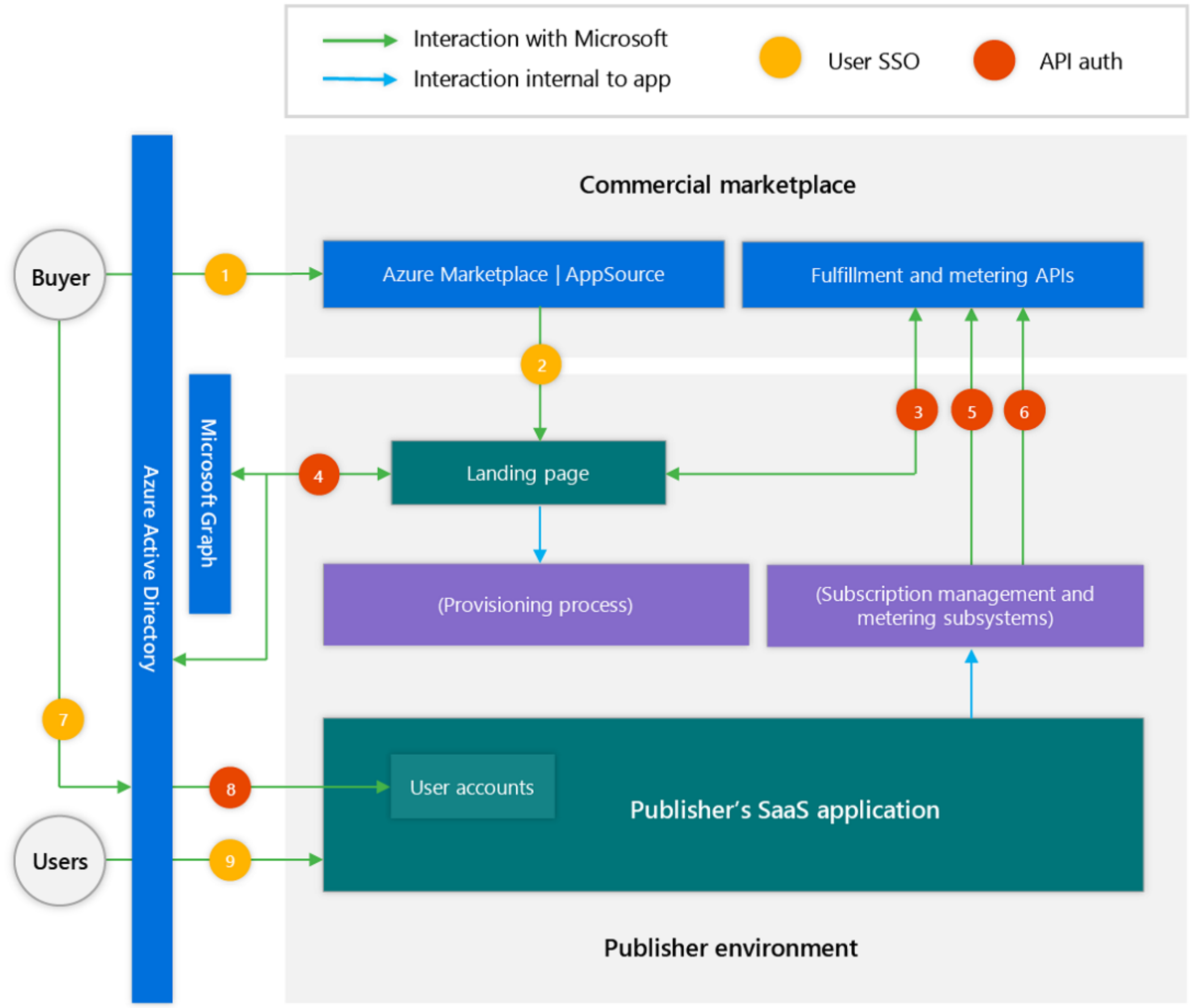
If you choose to only list your offer through the commercial marketplace and process transactions independently (the **No** option), you have three options for how potential customers will access your offer: Get it now (free), Free trial, and Contact me. If you select **Get it now (free)** or **Free trial**, this article is not for you. Instead, see Build the landing page for your free or trial SaaS offer in the commercial marketplace for more information. If you select **Contact me**, there are no direct publisher responsibilities. Continue creating your offer in the Partner Center.

How Azure AD works with the commercial marketplace for SaaS offers

Azure AD enables seamless purchasing, fulfillment, and management of commercial marketplace solutions. Figure 1 shows how the publisher, buyer, and user interact to purchase and activate a subscription. It also shows how customers use and manage SaaS applications they get from the commercial marketplace. For the purposes of this illustration, the buyer is the SaaS application user who initiates a purchase from the commercial marketplace.

As shown in Figure 1, when a buyer selects your offer, they kick off a chain of workflows that includes purchase, subscription, and user management. Within this chain, you as the publisher are responsible for certain requirements, with Microsoft providing support at key points.

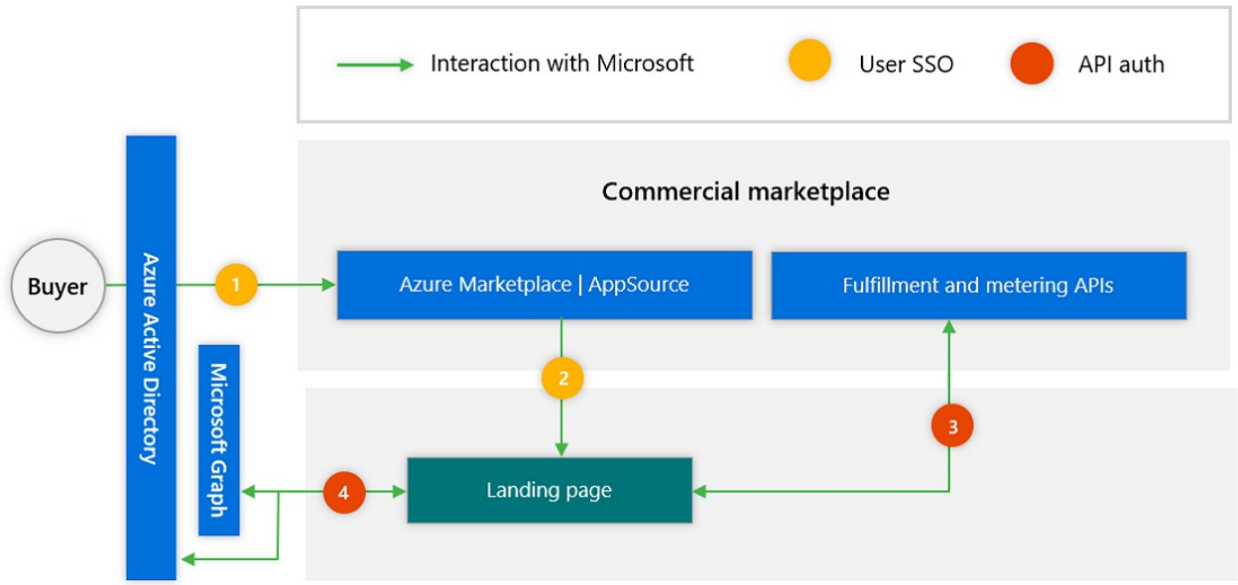
Figure 1: Using Azure AD for SaaS offers in the commercial marketplace



The following sections provide details about the requirements for each process step.

Process steps for purchase management

This figure shows the four process steps for purchase management.

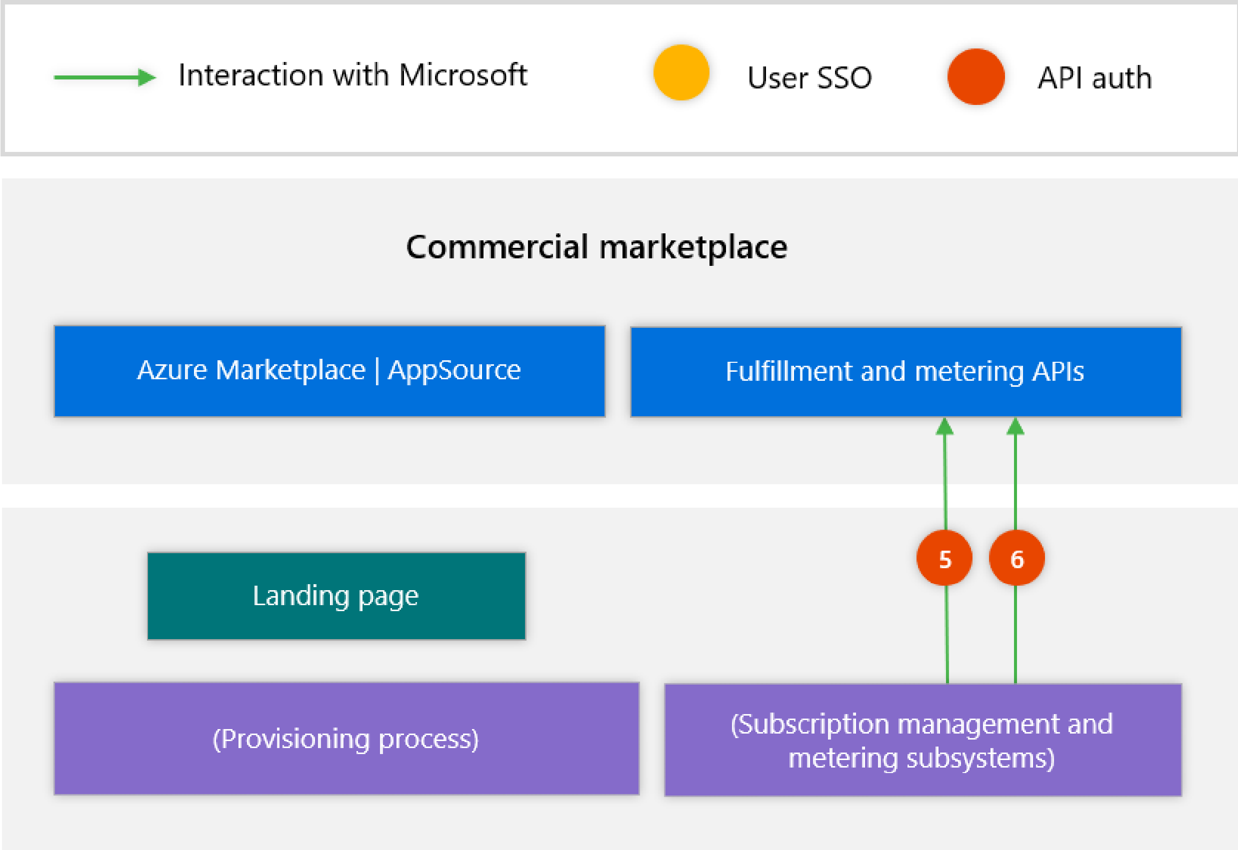


This table provides details for the purchase management process steps.

PROCESS STEP	PUBLISHER ACTION	RECOMMENDED OR REQUIRED FOR PUBLISHERS
1. The buyer signs in to the commercial marketplace with their Azure ID identity and selects a SaaS offer.	No publisher action required.	Not applicable
2. After purchasing, the buyer selects **Configure account** in Azure Marketplace or **Configure now** in AppSource, which directs the buyer to the publisher's landing page for this offer. The buyer must be able to sign in to the publisher's SaaS application with Azure AD SSO and must only be asked for minimal consent that does not require Azure AD administrator approval.	Design a landing page for the offer so that it receives a user with their Azure AD or Microsoft account (MSA) identity and facilitates any additional provisioning or setup that's required.	Required
3. The publisher requests purchase details from the SaaS fulfillment API.	Using an access token generated from the landing page's Application ID, call the resolve endpoint to retrieve specifics about the purchase.	Required
4. Through Azure AD and the Microsoft Graph API, the publisher gathers the company and user details required to provision the buyer in the publisher's SaaS application.	Decompose the Azure AD user token to find name and email, or call the Microsoft Graph API and use delegated permissions to retrieve information about the user who is logged in.	Required

Process steps for subscription management

This figure shows the two process steps for subscription management.

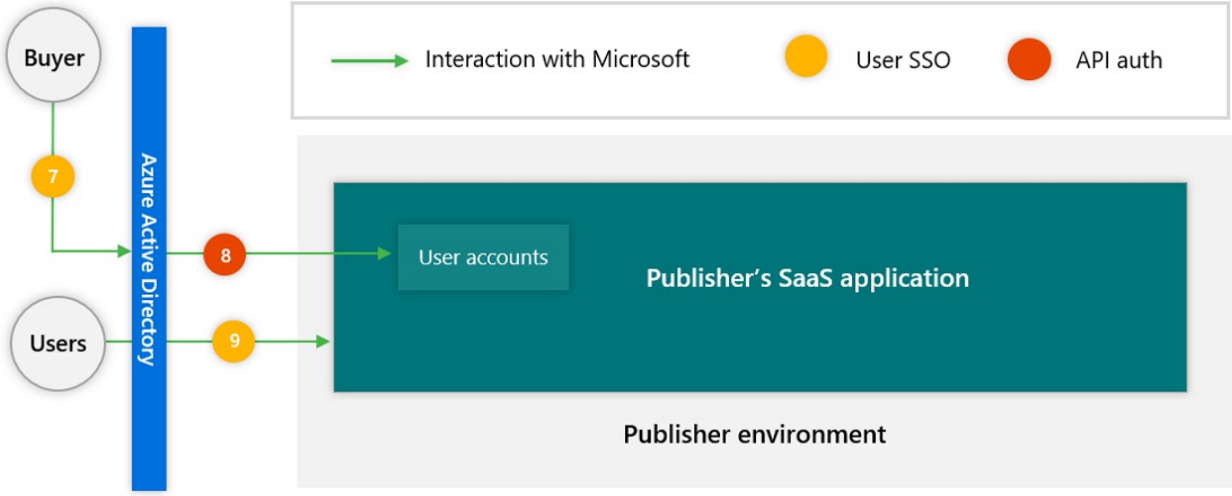


This table describes the details about the subscription management process steps.

PROCESS STEP	PUBLISHER ACTION	RECOMMENDED OR REQUIRED FOR PUBLISHERS
5. The publisher manages the subscription to the SaaS application through the SaaS fulfillment API.	Handle subscription changes and other management tasks through the SaaS fulfillment APIs. This step requires an access token as described in process step 3.	Required
6. When using metered pricing, the publisher emits usage events to the metering service API.	If your SaaS app features usage-based billing, make usage notifications through the Marketplace metering service APIs. This step requires an access token as described in Step 3.	Required for metering

Process steps for user management

This figure shows the three process steps for user management.



Process steps 7 through 9 are optional user management process steps. They provide additional benefits for publishers who support Azure AD single sign-on (SSO). This table describes the details about the user management process steps.

PROCESS STEP	PUBLISHER ACTION	RECOMMENDED OR REQUIRED FOR PUBLISHERS
7. Azure AD administrators at the buyer's company can optionally manage access for users and groups through Azure AD.	No publisher action is required to enable this if Azure AD SSO is set up for users (Step 9).	Not applicable
8. The Azure AD Provisioning Service communicates changes between Azure AD and the publisher's SaaS application.	Implement a SCIM endpoint to receive updates from Azure AD as users are added and removed.	Recommended
9. After the app is permissioned and provisioned, users from the buyer's company can use Azure AD SSO to log in to the publisher's SaaS application.	Use Azure AD SSO to enable users to sign in once with one account to the publisher's SaaS application.	Recommended

Next steps

- Build the landing page for your transactable SaaS offer in the commercial marketplace
- Build the landing page for your free or trial SaaS offer in the commercial marketplace
- How to create a SaaS offer in the commercial marketplace

Build the landing page for your transactable SaaS offer in the commercial marketplace

11/22/2021 • 8 minutes to read • Edit Online

This article guides you through the process of building a landing page for a transactable SaaS app that will be sold on the Microsoft commercial marketplace.

Overview

You can think of the landing page as the "lobby" for your software as a service (SaaS) offer. After the buyer subscribes to an offer, the commercial marketplace directs them to the landing page to activate and configure their subscription to your SaaS application. Think of this as an order confirmation step that lets the buyer see what they've purchased and confirm their account details. Using Azure Active Directory (Azure AD) and Microsoft Graph, you will enable single sign-on (SSO) for the buyer and get important details about the buyer that you can use to confirm and activate their subscription, including their name, email address, and organization.

Because the information needed to activate the subscription is limited and provided by Azure AD and Microsoft Graph, there should be no need to request information that requires more than basic consent. If you need user details that require additional consent for your application, you should request this information after subscription activation is complete. This enables frictionless subscription activation for the buyer and decreases the risk of abandonment.

The landing page typically includes the following:

- Present the name of the offer and plan purchased, as well as the billing terms.
- Present the buyer's account details, including first and last name, organization, and email.
- Prompt the buyer to confirm or substitute different account details.
- Guide the buyer on next steps after activation. For example, receive a welcome email, manage the subscription, get support, or read documentation.

> **NOTE**
> The buyer will also be directed to the landing page when managing their subscription after activation. After the buyer's subscription has been activated, you must use SSO to enable the user to sign in. It is recommended to direct the user to an account profile or configuration page.

The following sections will guide you through the process of building a landing page:

1. Create an Azure AD app registration for the landing page.
2. Use a code sample as a starting point for your app.
3. Use two Azure AD apps to improve security in production.
4. Resolve the marketplace purchase identification token added to the URL by the commercial marketplace.
5. Read information from claims encoded in the ID token, which was received from Azure AD after sign in, that was sent with the request.
6. Use the Microsoft Graph API to gather additional information, as required.

Create an Azure AD app registration

The commercial marketplace is fully integrated with Azure AD. Buyers arrive at the marketplace authenticated with an Azure AD account or Microsoft account (MSA). After purchase, the buyer goes from the commercial marketplace to your landing page URL to activate and manage their subscription of your SaaS application. You must let the buyer sign in to your application with Azure AD SSO. (The landing page URL is specified in the offer's Technical configuration page.)

> **TIP**
> Don't include the pound sign character (#) in the landing page URL. Otherwise, customers will not be able to access your landing page.

The first step to using the identity is to make sure your landing page is registered as an Azure AD application. Registering the application lets you use Azure AD to authenticate users and request access to user resources. It can be considered the application's definition, which lets the service know how to issue tokens to the app based on the app's settings.

Register a new application using the Azure portal

To get started, follow the instructions for registering a new application. To let users from other companies visit the app, you must choose one of the multitenant options when asked who can use the application.

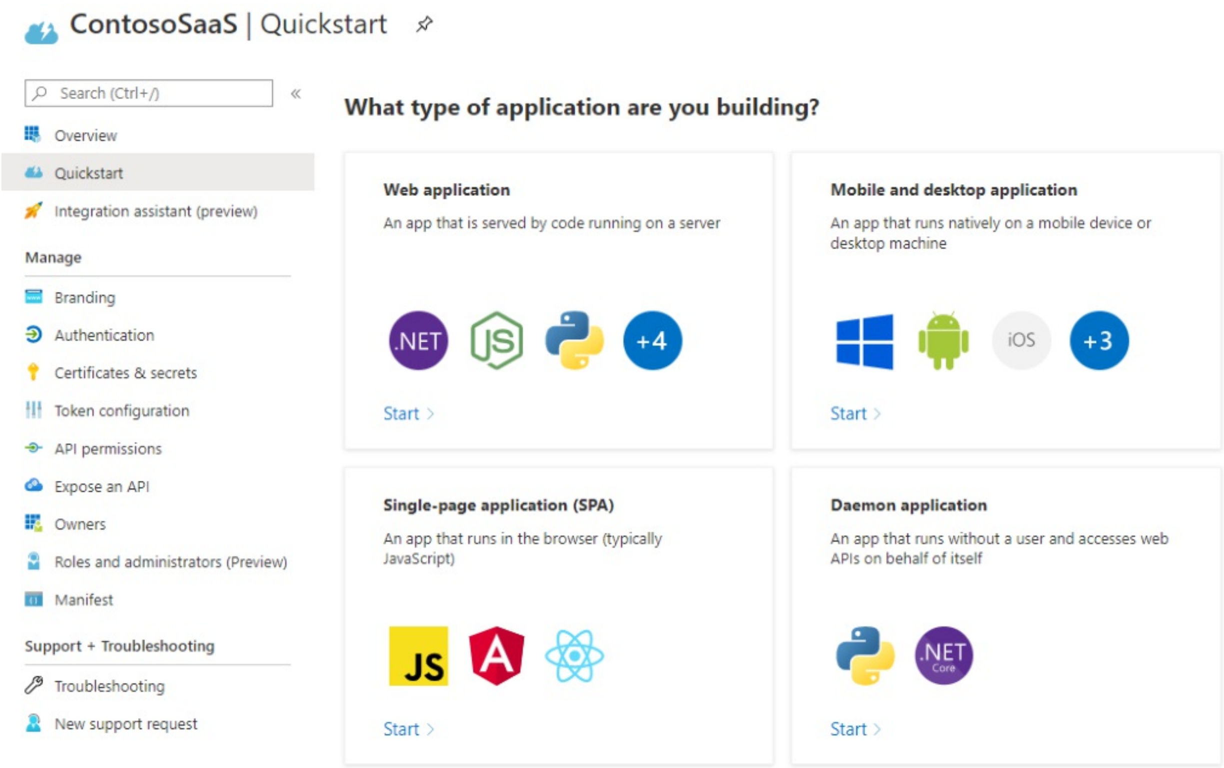
If you intend to query the Microsoft Graph API, configure your new application to access web APIs. When you select the API permissions for this application, the default of **User.Read** is enough to gather basic information about the buyer to make the onboarding process smooth and automatic. Do not request any API permissions labeled **needs admin consent**, as this will block all non-administrator users from visiting your landing page.

If you require elevated permissions as part of your onboarding or provisioning process, consider using the incremental consent functionality of Azure AD so that all buyers sent from the marketplace are able to interact initially with the landing page.

Use a code sample as a starting point

We've provided several sample apps that implement a simple website with Azure AD login enabled. After your application is registered in Azure AD, the **Quickstart** blade offers a list of common application types and development stacks as seen in Figure 1. Choose the one that matches your environment and follow the instructions for download and setup.

Figure 1: Quickstart blade in the Azure portal



After you download the code and set up your development environment, change the configuration settings in the app to reflect the Application ID, tenant ID, and client secret you recorded in the previous procedure. Note that the exact steps will differ depending on which sample you are using.

Use two Azure AD apps to improve security in production

This article presents a simplified version of the architecture for implementing a landing page for your commercial marketplace SaaS offer. When running the page in production, we recommend that you improve security by communicating to the SaaS fulfillment APIs only through a different, secured application. This requires the creation of two new applications:

- First, the multitenant landing page application described up to this point, except without the functionality to contact the SaaS fulfillment APIs. This functionality will be offloaded to another application, as described below.
- Second, an application to own the communications with the SaaS fulfillment APIs. This application should be single tenant, only to be used by your organization, and an access control list can be established to limit access to the APIs from only this app.

This enables the solution to work in scenarios that observe the separation of concerns principle. For example, the landing page uses the first registered Azure AD app to sign in the user. After the user is signed-in, the landing page uses the second Azure AD to request an access token to call the SaaS fulfillment API's and call the resolve operation.

Resolve the marketplace purchase identification token

When the buyer is sent to your landing page, a token is added to the URL parameter. This token is different from both the Azure AD-issued token and the access token used for service-to-service authentication, and is used as an input for the SaaS fulfillment APIs resolve call to get the details of the subscription. As with all calls to the SaaS fulfillment APIs, your service-to-service request will be authenticated with an access token that is based on the app's Azure AD Application ID user for service-to-service authentication.

> **NOTE**
>
> In most cases, it's preferable to make this call from a second, single-tenant application. See Use two Azure AD apps to improve security in production earlier in this article.

Request an access token

To authenticate your application with the SaaS fulfillment APIs, you need an access token, which can be generated by calling the Azure AD OAuth endpoint. See How to get the publisher's authorization token.

Call the resolve endpoint

The SaaS fulfillment APIs implement the resolve endpoint that can be called to confirm the validity of the marketplace token and to return information about the subscription.

Read information from claims encoded in the ID token

As part of the OpenID Connect flow, Azure AD adds an ID token to the request when the buyer is sent to the landing page. This token contains multiple pieces of basic information that could be useful in the activation process, including the information seen in this table.

VALUE	DESCRIPTION
aud	Intended audience for this token. In this case, it should match your Application ID and be validated.
preferred_username	Primary username of the visiting user. This could be an email address, phone number, or other identifier.
email	User's email address. Note that this field may be empty.
name	Human-readable value that identifies the subject of the token. In this case, it will be the buyer's name.
oid	Identifier in the Microsoft identity system that uniquely identifies the user across applications. Microsoft Graph will return this value as the ID property for a given user account.
tid	Identifier that represents the Azure AD tenant the buyer is from. In the case of an MSA identity, this will always be `9188040d-6c67-4c5b-b112-36a304b66dad`. For more information, see the note in the next section: Use the Microsoft Graph API.
sub	Identifier that uniquely identifies the user in this specific application.

Use the Microsoft Graph API

The ID token contains basic information to identify the buyer, but your activation process may require additional details—such as the buyer's company—to complete the onboarding process. Use the Microsoft Graph API to request this information to avoid forcing the user to input these details again. The standard **User.Read** permissions include the following information, by default.

VALUE	DESCRIPTION
displayName	Name displayed in the address book for the user.
givenName	First name of the user.
jobTitle	User's job title.
mail	SMTP address for the user.
mobilePhone	Primary cellular telephone number for the user.
preferredLanguage	ISO 639-1 code for the user's preferred language.
surname	Last name of the user.

Additional properties—such as the name of the user's company or the user's location (country)—can be selected for inclusion in the request. See properties for the user resource type for more details.

Most apps that are registered with Azure AD grant delegated permissions to read the user's information from their company's Azure AD tenant. Any request to Microsoft Graph for that information must be accompanied by an access token for authentication. Specific steps to generate the access token will depend on the technology stack you're using, but the sample code will contain an example. For more information, see Get access on behalf of a user.

> **NOTE**
> Accounts from the MSA tenant (with tenant ID `9188040d-6c67-4c5b-b112-36a304b66dad`) will not return more information than has already been collected with the ID token. So you can skip this call to the Graph API for these accounts.

Next steps

- How to create a SaaS offer in the commercial marketplace

Build the landing page for your free or trial SaaS offer in the commercial marketplace

11/22/2021 • 6 minutes to read • Edit Online

This article guides you through the process of building a landing page for a free or trial SaaS app that will be sold on the Microsoft commercial marketplace.

Overview

You can think of the landing page as the "lobby" for your software as a service (SaaS) offer. After the customer chooses to get your app, the commercial marketplace directs them to the landing page to activate and configure their subscription to your SaaS application. When you create a software as a service (SaaS) offer, in Partner Center, you can choose whether or not to sell through Microsoft. If you want to only list your offer in the Microsoft commercial marketplace and not sell through Microsoft, you can specify how potential customers can interact with the offer. When you enable the **Get it now (Free)** or **Free trial** listing option, you must specify a landing page URL to which the user can go to access the free subscription or trial.

The purpose of the landing page is simply to receive the user so they can activate the free trial or free subscription. Using Azure Active Directory (Azure AD) and Microsoft Graph, you will enable single sign-on (SSO) for the user and get important details about the user that you can use to activate their free trial or free subscription, including their name, email address, and organization.

Because the information needed to activate the subscription is limited and provided by Azure AD and Microsoft Graph, there should be no need to request information that requires more than basic consent. If you need user details that require additional consent for your application, you should request this information after subscription activation is complete. This enables frictionless subscription activation for the user and decreases the risk of abandonment.

The landing page typically includes the following information and listing options:

- Present the name and details of the free trial or free subscription. For example, specify the usage limits or duration of a trial.
- Present the user's account details, including first and last name, organization, and email.
- Prompt the user to confirm or substitute different account details.
- Guide the user on next steps after activation. For example, receive a welcome email, manage the subscription, get support, or read documentation.

The following sections in this article will guide you through the process of building a landing page:

1. Create an Azure AD app registration for the landing page.
2. Use a code sample as a starting point for your app.
3. Read information from claims encoded in the ID token, received from Azure AD after sign in, that was sent with the request.
4. Use the Microsoft Graph API to gather additional information, as required.

Create an Azure AD app registration

The commercial marketplace is fully integrated with Azure AD. Users arrive at the marketplace authenticated with an Azure AD account or Microsoft account (MSA). After acquiring a free or free trial subscription through your list-only offer, the user goes from the commercial marketplace to your landing page URL to activate and manage their subscription to your SaaS application. You must let the user sign in to your application with Azure AD SSO. (The landing page URL is specified in the offer's Technical configuration page.)

> **TIP**
>
> Don't include the pound sign character (#) in the landing page URL. Otherwise, customers will not be able to access your landing page.

The first step to using the identity is to make sure your landing page is registered as an Azure AD application. Registering the application lets you use Azure AD to authenticate users and request access to user resources. It can be considered the application's definition, which lets the service know how to issue tokens to the app based on the app's settings.

Register a new application using the Azure portal

To get started, follow the instructions for registering a new application. To let users from other companies visit the app, you must choose **Accounts in any organizational directory (any Azure AD directory—multitenant) and personal Microsoft accounts (like Skype or Xbox)** when asked who can use the application.

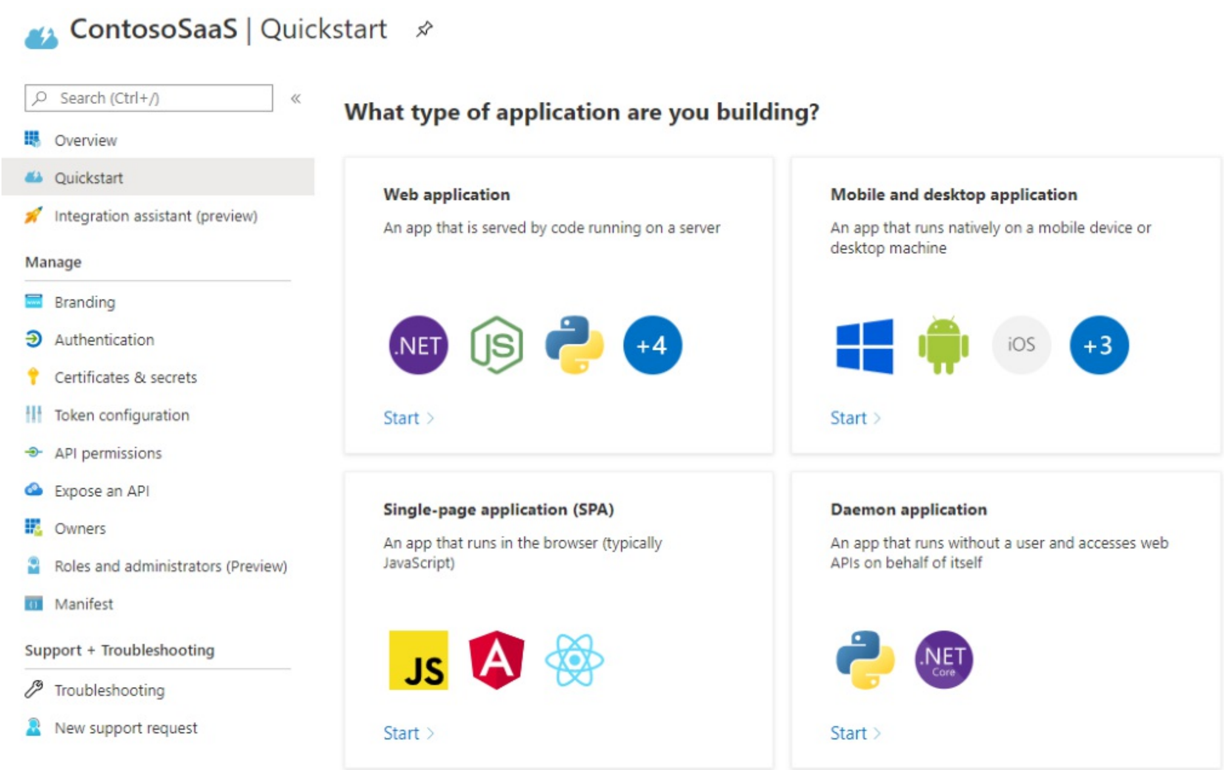
If you intend to query the Microsoft Graph API, configure your new application to access web APIs. When you select the API permissions for this application, the default of **User.Read** is enough to gather basic information about the user to make the onboarding process smooth and automatic. Do not request any API permissions labeled **needs admin consent**, as this will block all non-administrator users from visiting your landing page.

If you do require elevated permissions as part of your onboarding or provisioning process, consider using the incremental consent functionality of Azure AD so that all users sent from the marketplace are able to interact initially with the landing page.

Use a code sample as a starting point

Microsoft has provided several sample apps that implement a simple website with Azure AD login enabled. After your application is registered in Azure AD, the **Quickstart** blade offers a list of common application types and development stacks (Figure 1). Choose the one that matches your environment and follow the instructions for download and setup.

Figure 1: Quickstart blade in the Azure portal



After you download the code and set up your development environment, change the configuration settings in the app to reflect the Application ID, tenant ID, and client secret you recorded in the previous procedure. Note that the exact steps will differ depending on which sample you are using.

Read information from claims encoded in the ID token

As part of the OpenID Connect flow, Azure AD adds an ID token to the request when the user is sent to the landing page. This token contains multiple pieces of basic information that could be useful in the activation process, including the information seen in this table.

VALUE	DESCRIPTION
aud	Intended audience for this token. In this case, it should match your Application ID and be validated.
preferred_username	Primary username of the visiting user. This could be an email address, phone number, or other identifier.
email	User's email address. Note that this field may be empty.
name	Human-readable value that identifies the subject of the token. In this case, it will be the user's name.
oid	Identifier in the Microsoft identity system that uniquely identifies the user across applications. Microsoft Graph will return this value as the ID property for a given user account.
tid	Identifier that represents the Azure AD tenant the user is from. In the case of an MSA identity, this will always be `9188040d-6c67-4c5b-b112-36a304b66dad`. For more information, see the note in the next section: Use Microsoft Graph API.

VALUE	DESCRIPTION
sub	Identifier that uniquely identifies the user in this specific application.

Use the Microsoft Graph API

The ID token contains basic information to identify the user, but your activation process may require additional details—such as the user's company—to complete the onboarding process. Use the Microsoft Graph API to request this information to avoid forcing the user to input these details again. The standard **User.Read** permissions include the following information, by default:

VALUE	DESCRIPTION
displayName	Name displayed in the address book for the user.
givenName	First name of the user.
jobTitle	User's job title.
mail	SMTP address for the user.
mobilePhone	Primary cellular telephone number for the user.
preferredLanguage	ISO 639-1 code for the user's preferred language.
surname	Last name of the user.

Additional properties—such as the name of the user's company or the user's location (country)—can be selected for inclusion in the request. For more details, see Properties for the user resource type.

Most apps that are registered with Azure AD grant delegated permissions to read the user's information from their company's Azure AD tenant. Any request to Microsoft Graph for that information must be accompanied by an access token as authentication. Specific steps to generate the access token will depend on the technology stack you're using, but the sample code will contain an example. For more information, see Get access on behalf of a user.

NOTE

Accounts from the MSA tenant (with tenant ID `9188040d-6c67-4c5b-b112-36a304b66dad`) will not return more information than has already been collected with the ID token. So you can skip this call to the Graph API for these accounts.

Next steps

- How to create a SaaS offer in the commercial marketplace

Metered billing for SaaS using the commercial marketplace metering service

11/22/2021 • 8 minutes to read • Edit Online

With the commercial marketplace metering service, you can create software as a service (SaaS) offers that are charged according to non-standard units. Before publishing a SaaS offer to the commercial marketplace, you define the billing dimensions such as bandwidth, tickets, or emails processed. Customers then pay according to their consumption of these dimensions, with your system informing Microsoft via the commercial marketplace metering service API of billable events as they occur.

Prerequisites for metered billing

For a SaaS offer to use metered billing, it must first:

- Meet all of the offer requirements for a sell through Microsoft offer as outlined in Create a SaaS offer in the commercial marketplace.
- Integrate with the SaaS Fulfillment APIs for customers to provision and connect to your offer.
- Be configured for the **flat rate** pricing model when charging customers for your service. Dimensions are an optional extension to the flat rate pricing model.

Then the SaaS offer can integrate with the commercial marketplace metering service APIs to inform Microsoft of billable events.

> **NOTE**
>
> Marketplace metering service is available only to the flat rate billing model, and does not apply to the per user billing model.

How metered billing fits in with pricing

Understanding the offer hierarchy is important, when it comes to defining the offer along with its pricing models.

- Each SaaS offer is configured to sell either through Microsoft or not. Once an offer is published, this option cannot be changed.
- Each SaaS offer, configured to sell through Microsoft, can have one or more plans. A user subscribes to the SaaS offer, but it is purchased through Microsoft within the context of a plan.
- Each plan has a pricing model associated with it: **flat rate** or **per user**. All plans in an offer must be associated with the same pricing model. For example, there cannot be an offer having plans for a flat-rate pricing model, and another being per-user pricing model.
- Within each plan configured for a flat rate billing model, at least one recurring fee (which can be $0) is included:
  - Recurring **monthly** fee: flat monthly fee that is pre-paid on a monthly recurrence when the user purchases the plan.
  - Recurring **annual** fee: flat annual fee that is pre-paid on an annual recurrence when the user purchases the plan.
- In addition to the recurring fees, a flat rate plan can also include optional custom dimensions used to charge customers for the overage usage not included in the flat rate. Each dimension represents a billable unit that

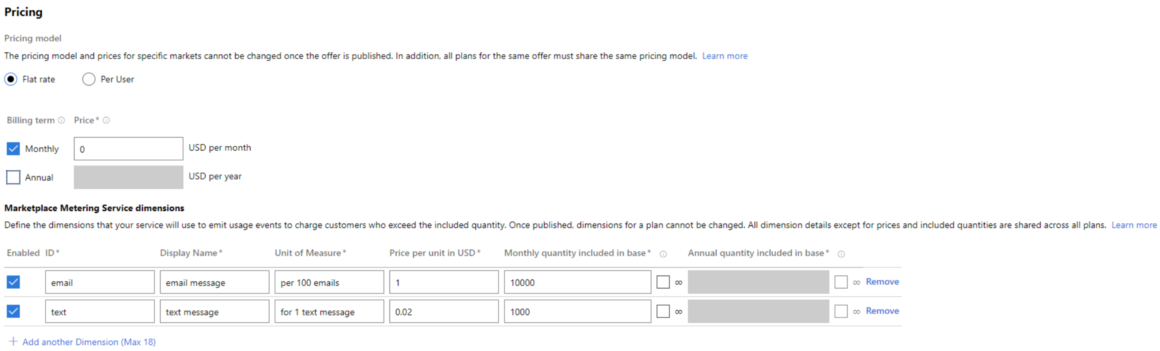
your service will communicate to Microsoft using the commercial marketplace metering service API.

> **IMPORTANT**
>
> You must keep track of the usage in your code and only send usage events to Microsoft for the usage that is above the base fee.

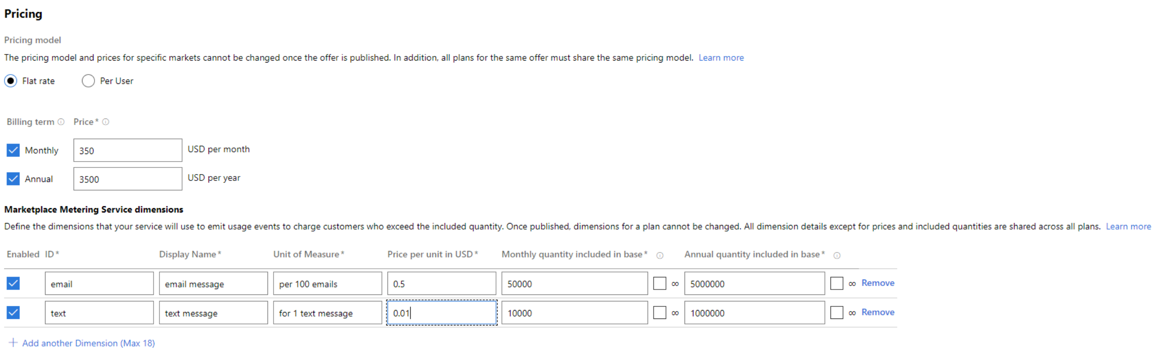
Sample offer

As an example, Contoso is a publisher with a SaaS service called Contoso Notification Services (CNS). CNS lets its customers send notifications either via email or text. Contoso is registered as a publisher in Partner Center for the commercial marketplace program to publish SaaS offers to Azure customers. There are three plans associated with CNS, outlined below:

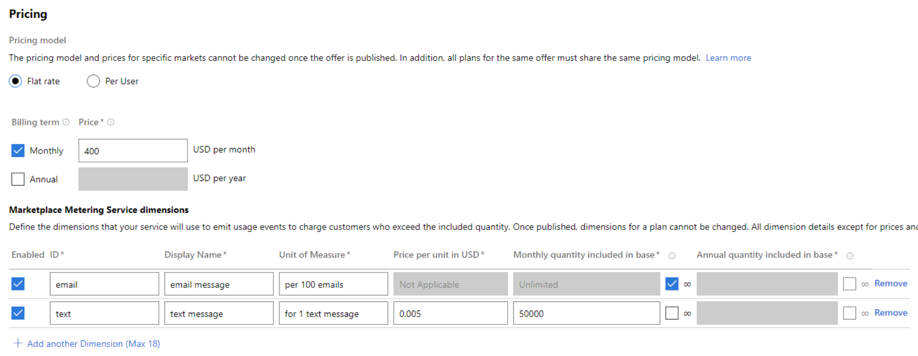
- Basic plan
  - Send 10000 emails and 1000 texts for $0/month (flat monthly fee)
  - Beyond the 10000 emails, pay $1 for every 100 emails
  - Beyond the 1000 texts, pay $0.02 for every text



- Premium plan
  - Send 50000 emails and 10000 texts for $350/month or 5M emails and 1M texts for $3500 per year
  - Beyond the 50000 emails, pay $0.5 for every 100 emails
  - Beyond the 10000 texts, pay $0.01 for every text



- Enterprise plan
  - Send unlimited number of emails and 50000 texts for $400/month
  - Beyond the 50000 texts pay $0.005 for every txt



Based on the plan selected, an Azure customer purchasing subscription to CNS SaaS offer will be able to send the included quantity of text and emails per subscription term (month or year as appears in subscription details - startDate and endDate). Contoso counts the usage up to the included quantity in base without sending any usage events to Microsoft. When customers consume more than the included quantity, they do not have to change plans or do anything different. Contoso will measure the overage beyond the included quantity and start emitting usage events to Microsoft for charging the overage usage using the commercial marketplace metering service API. Microsoft in turn will charge the customer for the overage usage as specified by the publisher in the custom dimensions. The overage billing is done on the next billing cycle (monthly, but can be quarterly or early for some customers). For a monthly flat rate plan, the overage billing will be made for every month where overage has occurred. For a yearly flat rate plan, once the quantity included in base per year is consumed, all additional usage emitted by the custom meter will be billed as overage during each billing cycle (monthly) until the end of the subscription's year term.

Billing dimensions

Each billing dimension defines a custom unit by which the ISV can emit usage events. Billing dimensions are also used to communicate to the customer about how they will be billed for using the software. They are defined as follows:

- **ID**: the immutable dimension identifier referenced while emitting usage events.
- **Display Name**: the display name associated with the dimension, for example "text messages sent".
- **Unit of Measure**: the description of the billing unit, for example "per text message" or "per 100 emails".
- **Price per unit in USD**: the price for one unit of the dimension. It can be 0.
- **Monthly quantity included in base**: quantity of dimension included per month for customers paying the recurring monthly fee, must be an integer. It can be 0 or unlimited.
- **Annual quantity included in base**: quantity of dimension included per each year for customers paying the recurring annual fee, must be an integer. Can be 0 or unlimited.

> **IMPORTANT**
>
> You must keep track of the usage in your code and only send usage events to Microsoft for the usage that is above the base fee.

Billing dimensions are shared across all plans for an offer. Some attributes apply to the dimension across all plans, and other attributes are plan-specific.

The attributes, which define the dimension itself, are shared across all plans for an offer. Before you publish the offer, a change made to these attributes from the context of any plan will affect the dimension definition across all plans. Once you publish the offer, these attributes will no longer be editable. These attributes are:

- ID
- Display Name
- Unit of Measure

The other attributes of a dimension are specific to each plan and can have different values from plan to plan. Before you publish the plan, you can edit these values and only this plan will be affected. Once you publish the plan, these attributes will no longer be editable. These attributes are:

- Price per unit in USD
- Monthly quantity included in base
- Annual quantity included in base

Dimensions also have two special concepts, "enabled" and "infinite":

- **Enabled** indicates that this plan participates in this dimension. If you are creating a new plan that does not send usage events based on this dimension, you might want to leave this option unchecked. Also, any new dimensions added after a plan was first published will show up as "not enabled" on the already published plan. A disabled dimension will not show up in any lists of dimensions for a plan seen by customers.
- **Infinite** represented by the infinity symbol "°", indicates that this plan participates in this dimension, but does not emit usage against this dimension. If you want to indicate to your customers that the functionality represented by this dimension is included in the plan, but with no limit on usage. A dimension with infinite usage will show up in lists of dimensions for a plan seen by customers, with an indication that it will never incur a charge for this plan.

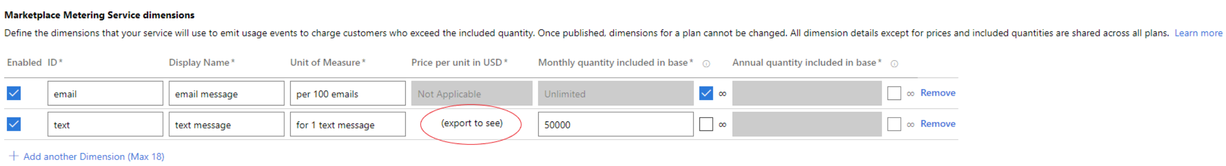
> **NOTE**
>
> The following scenarios are explicitly supported:
> - You can add a new dimension to a new plan. The new dimension will not be enabled for any already published plans.
> - You can publish a **flat-rate** plan without any dimensions, then add a new plan and configure a new dimension for that plan. The new dimension will not be enabled for already published plans.

Setting dimension price per unit per supported market

Like flat rate pricing, billing dimension prices can be set per supported country or region. You need to use the pricing data import and export feature in Partner Center, as follows.

1. Define the desired dimensions and mark which markets are supported.
2. Export this data into a file.
3. Add the correct prices per country/region and import the file in Partner Center.

The user interface of the meter will change to reflect that the prices of the dimension can only be seen in the file.



Private plan

Like flat rate plans, a plan with dimensions can be set as private plan, accessible only by the plan's defined audience.

Constraints

Trial behavior

Metered billing using the commercial marketplace metering service is not compatible with offering a free trial. It is not possible to configure a plan to use both metered billing and a free trial.

Locking behavior

Because a dimension used with the commercial marketplace metering service represents an understanding of how a customer will be paying for the service, all the details for a dimension are no longer editable after you publish it. It's important that you have your dimensions fully defined for a plan before you publish.

Once an offer is published with a dimension, the offer-level details for that dimension can no longer be changed:

- ID
- Display Name
- Unit of Measure

Once a plan is published, the plan-level details can no longer be changed:

- Price per unit in USD
- Monthly quantity included in base
- Annual quantity included in base
- Whether the dimension is enabled for the plan or not

Upper limits

The maximum number of dimensions that can be configured for a single offer is 30 unique dimensions.

Get support

If you have one of the following issues, you can open a support ticket.

- Technical issues with marketplace metering service API.
- An issue that needs to be escalated because of an error or bug on your side (ex. wrong usage event).
- Any other issues related to metered billing.

To understand publisher support options and open a support ticket with Microsoft, follow the instructions in Support for the commercial marketplace program in Partner Center.

Next steps

- Marketplace metered billing APIs

Create a SaaS offer

11/22/2021 • 7 minutes to read • Edit Online

As a commercial marketplace publisher, you can create a software as a service (SaaS) offer so potential customers can buy your SaaS-based technical solution. This article explains the process to create a SaaS offer for the Microsoft commercial marketplace.

Before you begin

If you haven't already done so, read Plan a SaaS offer. It will explain the technical requirements for your SaaS app, and the information and assets you'll need when you create your offer. Unless you plan to publish a simple listing (**Contact me** listing option) in the commercial marketplace, your SaaS application must meet technical requirements around authentication.

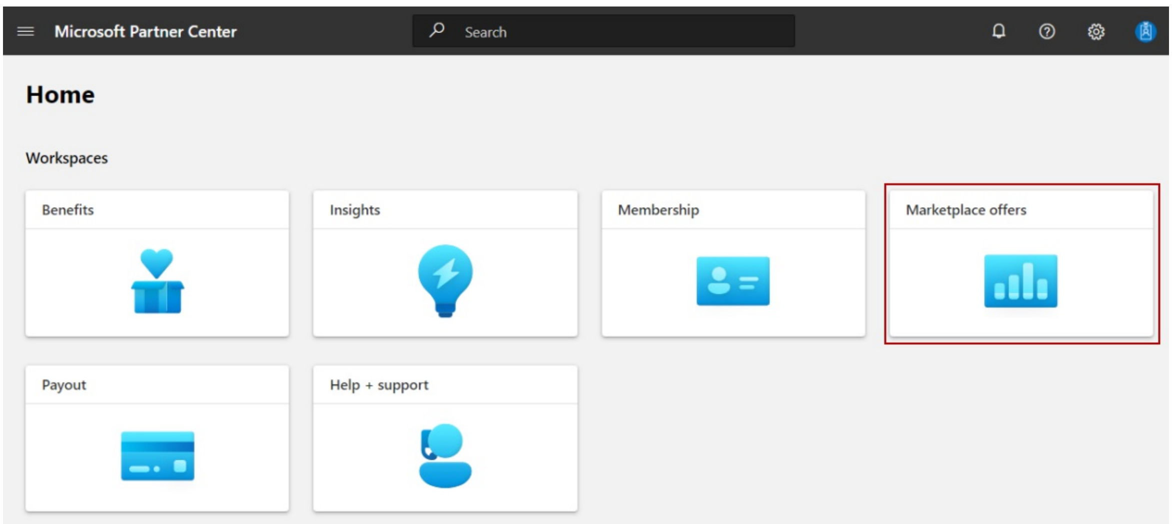
> **IMPORTANT**
>
> We recommend that you create a separate development/test (DEV) offer and a separate production (PROD) offer. This article describes how to create a PROD offer. For details about creating a DEV offer, see Create a test SaaS offer.

Create a SaaS offer

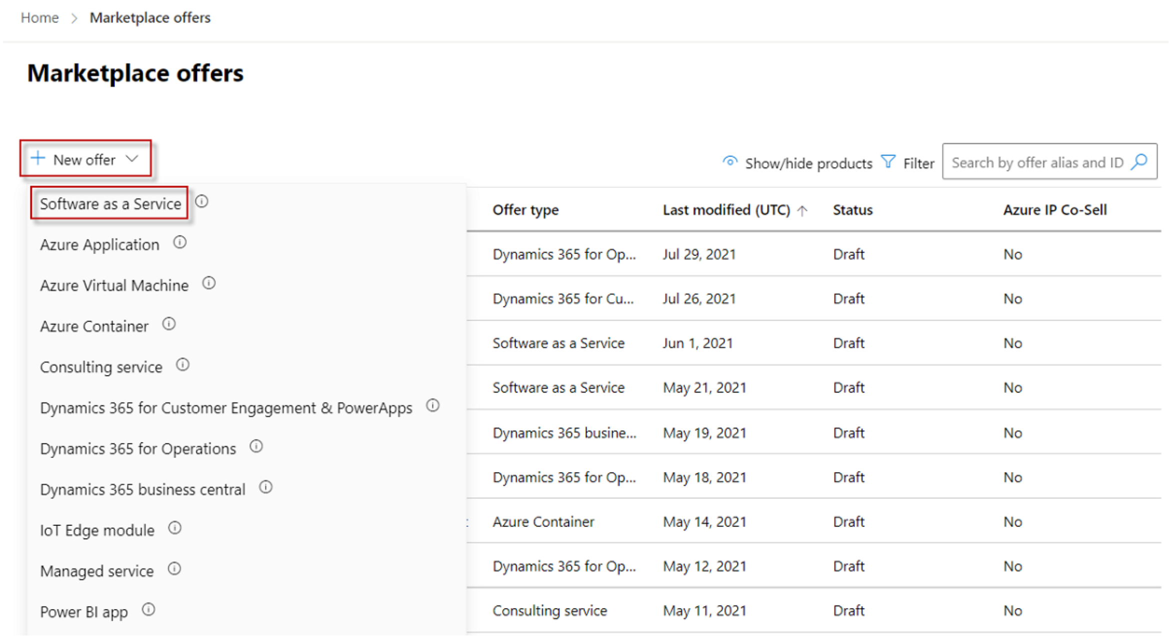
> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select **+ New offer** > **Software as a Service**.



4. In the **New Software as a Service** dialog box, enter an **Offer ID**. This ID is visible in the URL of the commercial marketplace listing and Azure Resource Manager templates, if applicable. For example, if you enter **test-offer-1** in this box, the offer web address will be `https://azuremarketplace.microsoft.com/marketplace/../test-offer-1`.
   - Each offer in your account must have a unique offer ID.
   - Use only lowercase letters and numbers. It can include hyphens and underscores, but no spaces, and is limited to 50 characters.
   - The offer ID can't be changed after you select **Create**.
5. Enter an **Offer alias**. This is the name used for the offer in Partner Center.
   - This name isn't visible in the commercial marketplace and it's different from the offer name and other values shown to customers.
   - The offer alias can't be changed after you select **Create**.
6. To generate the offer and continue, select **Create**.

Configure your SaaS offer setup details

On the **Offer setup** tab, under **Setup details**, you'll choose whether to sell your offer through Microsoft or manage your transactions independently. Offers sold through Microsoft are referred to as *transactable offers*, which means that Microsoft facilitates the exchange of money for a software license on the publisher's behalf. For more information on these options, see Listing options and Determine your publishing option.

1. To sell through Microsoft and have us facilitate transactions for you, select **Yes**. Continue to Enable a test drive.

2. To list your offer through the commercial marketplace and process transactions independently, select **No**, and then do one of the following:

   - To provide a free subscription for your offer, select **Get it now (Free)**. Then in the **Offer URL** box that appears, enter the URL (beginning with *http* or *https*) where customers can get a trial through one-click authentication by using Azure Active Directory (Azure AD). For example, `https://contoso.com/saas-app`.
   - To provide a 30-day free trial, select **Free trial**, and then in the **Trial URL** box that appears, enter the URL (beginning with *http* or *https*) where customers can access your free trial through one-click authentication by using Azure Active Directory (Azure AD). For example,

`https://contoso.com/trial/saas-app`.

- To have potential customers contact you to purchase your offer, select **Contact me**.

> **NOTE**
>
> You can convert a published listing-only offer to a sell through the commercial marketplace offer if your circumstances change, but you cannot convert a published transactable offer to a listing-only offer. Instead, you must create a new listing-only offer and stop distribution of the published transactable offer.

Enable a test drive (optional)

A test drive is a great way to showcase your offer to potential customers by giving them access to a preconfigured environment for a fixed number of hours. Offering a test drive results in an increased conversion rate and generates highly qualified leads. To Learn more about test drives, see What is a test drive?.

> **TIP**
>
> A test drive is different from a free trial. You can offer either a test drive, free trial, or both. They both provide customers with your solution for a fixed period-of-time. But, a test drive also includes a hands-on, self-guided tour of your product's key features and benefits being demonstrated in a real-world implementation scenario.

To enable a test drive

1. Under **Test drive**, select the **Enable a test drive** check box.
2. Select the test drive type from the list that appears.

Configure lead management

Connect your customer relationship management (CRM) system with your commercial marketplace offer so you can receive customer contact information when a customer expresses interest or deploys your product. You can modify this connection at any time during or after you create the offer.

> **NOTE**
>
> You must configure lead management if you're selling your offer through Microsoft or you selected the **Contact Me** listing option. For detailed guidance, see Customer leads from your commercial marketplace offer.

Configure the connection details in Partner Center

When you're publishing an offer to the commercial marketplace with Partner Center, connect it to your Customer Relationship Management (CRM) system. This lets you receive customer contact information as soon as someone expresses interest in or uses your product. Connecting to a CRM is required if you want to enable a test drive (see the preceding section). Otherwise, connecting to a CRM is optional.

1. Under **Customer leads**, select the **Connect** link.
2. In the **Connection details** dialog box, select a lead destination.
3. Complete the fields that appear. For detailed steps, see the following articles:
    - Configure your offer to send leads to the Azure table
    - Configure your offer to send leads to Dynamics 365 Customer Engagement (formerly Dynamics CRM Online)
    - Configure your offer to send leads to HTTPS endpoint
    - Configure your offer to send leads to Marketo

- Configure your offer to send leads to Salesforce

4. To validate the configuration you provided, select the **Validate** link.
5. Select **Connect**.

Configure Microsoft 365 App integration

You can light up unified discovery and delivery of your SaaS offer and any related Microsoft 365 App consumption by linking them.

Integrate with Microsoft API

1. If your SaaS offer does not integrate with Microsoft Graph API, select **No**. Continue to Link published Microsoft 365 App consumption clients.
2. If your SaaS offer integrates with Microsoft Graph API, select **Yes**, and then provide the Azure Active Directory App ID you have created and registered to integrate with Microsoft Graph API.

Link published Microsoft 365 App consumption clients

1. If you do not have published Office add-in, Teams app, or SharePoint Framework solutions that works with your SaaS offer, select **No**.
2. If you have published Office add-in, Teams app, or SharePoint Framework solutions that works with your SaaS offer, select **Yes**, then select **+Add another AppSource link** to add new links.
3. Provide a valid AppSource link.
4. Continue adding all the links by select **+Add another AppSource link** and provide valid AppSource links.
5. The order the linked products are shown on the listing page of the SaaS offer is indicated by the Rank value, you can change it by select, hold, and move the = icon up and down the list.
6. You can delete a linked product by select **Delete** in the product row.

> **IMPORTANT**
>
> If you stop-sell a linked product, it won't be automatically unlinked on the SaaS offer, you must delete it from the list of linked products and resubmit the SaaS offer.

Next steps

- Configure SaaS offer properties

Configure SaaS offer properties

11/22/2021 • 4 minutes to read • Edit Online

This article describes how to configure the properties for a software as a service (SaaS) offer in the Microsoft commercial marketplace.

On the **Properties** tab, you'll define the categories and industries applicable to your offer, your app version, and legal contracts. Be sure to provide complete and accurate details about your offer on this page, so that it's displayed appropriately and offered to the right set of customers.

Select a category for your offer

Under **Category**, select at least one and up to two categories for grouping your offer into the appropriate marketplace search areas. Based on the categories you choose, we determine which online stores to list your offer on: either Azure Marketplace, Microsoft AppSource, or both.

Select Industries (optional)

Under **Industries**, you can select up to two industries and up to two sub-industries (also called verticals) for each industry. These industries are used to display your offer when customers filter their search on industries and sub-industries in the online store.

> **NOTE**
>
> If your offer isn't industry-specific, leave this section blank.

1. Under **Industries**, select the **+ Industries** link.
2. Select an industry from the **Industry** list.
3. Select at least one and a maximum of two verticals from the **Sub-industries** list. Use the Ctrl key to select multiple sub-industries.
4. To add another industry and vertical, select **+ Industries** and then repeat Steps 1 through 3.

Specify an app version (optional)

In the **App version** box, enter a version number. The app version is used in the AppSource marketplace to identify the version number of your offer.

Provide terms and conditions

Under **Legal**, provide terms and conditions for your offer. You have two options:

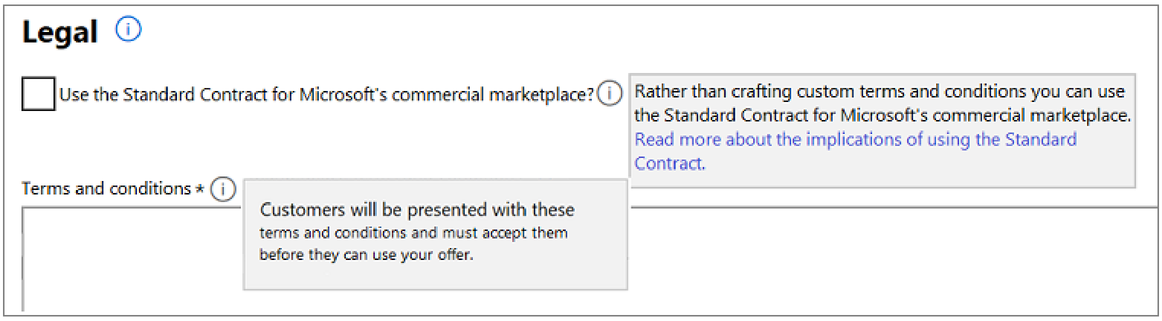
- Use the standard contract with optional amendments
- Use your own terms and conditions

To learn about the standard contract and optional amendments, see Standard Contract for the Microsoft commercial marketplace. You can download the Standard Contract PDF (make sure your pop-up blocker is off).

Use the standard contract

To simplify the procurement process for customers and reduce legal complexity for software vendors, Microsoft offers a standard contract you can use for your offers in the commercial marketplace. When you offer your software under the standard contract, customers only need to read and accept it one time, and you don't have to create custom terms and conditions.

1. Select the **Use the Standard Contract for Microsoft's commercial marketplace** checkbox.



2. In the **Confirmation** dialog box, select **Accept**. You may have to scroll up to see it.
3. Select **Save draft** before continuing.

> **NOTE**
>
> After you publish an offer using the Standard Contract for the commercial marketplace, you can't use your own custom terms and conditions. Either offer your solution under the standard contract with optional amendments or under your own terms and conditions.

Add amendments to the standard contract (optional)

There are two kinds of amendments available: *universal* and *custom*.

Add universal amendment terms

In the **Universal amendment terms to the standard contract for Microsoft's commercial marketplace** box, enter your universal amendment terms. You can enter an unlimited number of characters in this box. These terms are displayed to customers in AppSource, Azure Marketplace, and/or Azure portal during the discovery and purchase flow.

Add one or more custom amendments

1. Under **Custom amendments terms to the Standard Contract for Microsoft's commercial marketplace**, select the **Add custom amendment term (Max 10)** link.
2. In the **Custom amendment terms** box, enter your amendment terms.
3. In the **Tenant ID** box, enter a tenant ID. Only customers associated with the tenant IDs you specify for these custom terms will see them in the offer's purchase flow in the Azure portal.

> **TIP**
>
> A tenant ID identifies your customer in Azure. You can ask your customer for this ID and they can find it by going to **https://portal.azure.com** > **Azure Active Directory** > **Properties**. The directory ID value is the tenant ID (for example, `50c464d3-4930-494c-963c-1e951d15360e`). You can also look up the organization's tenant ID of your customer by using their domain name URL at What is my Microsoft Azure and Office 365 tenant ID?.

4. In the **Description** box, optionally enter a friendly description for the tenant ID. This description helps you identify the customer you're targeting with the amendment.
5. To add another tenant ID, select the **Add a customer's tenant ID** link and repeat steps 3 and 4. You can add up to 20 tenant IDs.
6. To add another amendment term, repeat steps 1 through 5. You can provide up to ten custom amendment terms per offer.
7. Select **Save draft** before continuing.

Use your own terms and conditions

You can choose to provide your own terms and conditions, instead of the standard contract. Customers must accept these terms before they can try your offer.

1. Under **Legal**, make sure the **Use the Standard Contract for Microsoft's commercial marketplace** check box is cleared.
2. In the **Terms and conditions** box, enter up to 10,000 characters of text.
3. Select **Save draft** before continuing to the next tab, **Offer listing**.

Next steps

- Configure SaaS offer listing details

Configure SaaS offer listing details

11/22/2021 • 5 minutes to read • Edit Online

The information you provide on the **Offer listing** page for your software as a service (SaaS) offer will be displayed in the Microsoft commercial marketplace online stores. This includes the descriptions of your offer, screenshots, and your marketing assets.

> **NOTE**
>
> Offer listing content is not required to be in English if the offer description begins with the phrase, "This application is available only in [non-English language]." It is also acceptable to provide a *Useful Link URL* to offer content in a language other than the one used in the offer listing content.

Marketplace details

On the **Offer listing** page, under **Marketplace details**, complete the following steps. To learn more about these required details, see Offer listing details.

1. The **Name** box is prefilled with the name you entered earlier in the **New offer** dialog box. You can change the name at any time.
2. In the **Search results summary** box, enter up to 50 characters of text. This summary is used in the marketplace listing search results.
3. In the **Description** box, enter a description for your offer. This text box has rich text editor controls that you can use to make your description more engaging. You can also use HTML tags to format your description. You can enter up to 3,000 characters of text in this box, which includes HTML markup and spaces. For information about HTML formatting, see HTML tags supported in the commercial marketplace offer descriptions.
4. In the **Getting started instructions** box, provide instructions to help customers connect to your SaaS offer. You can add up to 3,000 characters of text and links to more detailed online documentation.
5. (Optional) In the **Search keywords** boxes, enter up to three search keywords that customers can use to find your offer in the commercial marketplace. You don't need to include the offer **Name** and **Description**: that text is automatically included in search.
6. In the **Privacy policy link** box, enter a link (starting with https) to your organization's privacy policy. You're responsible to ensure your app complies with privacy laws and regulations, and for providing a valid privacy policy.

Add supplemental links (optional)

Complete these steps to add links to supplemental online documentation.

1. To add optional supplemental online documents about your app or related services, under **Useful links**, select **Add a link**.
2. In the fields that appear, enter a title (up to 255 characters) and the link (starting with https) to the online document.
3. To enter another link, repeat steps 1 through 2.

Enter your contact information

Under **Contact information**, provide information for the following contacts:

- **Support contact** (required) – For general support questions.
- **Engineering contact** (required) – For technical questions. We will use this information to contact you when there are issues with your offer, including certification issues.
- **CSP Program contact** (optional) – For support and business issues. This information is only shown to CSP partners.

For each contact, you'll provide a name, phone number, and email address (these won't be displayed publicly). A **Support URL** is required for the **Support Contact** (this will be displayed publicly).

1. In the **Support contact** boxes, enter a name, email address, phone number, and the URL to your support page.
2. In the **Engineering contact** boxes, enter a name, email address, and phone number.
3. (Optional) In the **CSP Program Contact** boxes, enter a name, email address, and phone number.
4. To extend your offer to the Cloud Solution Provider (CSP) program, in the **CSP Program Marketing Materials** box, provide a link to your marketing materials.

> **NOTE**
> The CSP program extends your offer to a broader range of qualified customers by enabling CSP partners to bundle, market, and resell your offer. These resellers will need access to materials for marketing your offer. For more information, see Go-to-market with Microsoft.

Add marketing documents

You must add at least one and a maximum of three marketing documents for your offer. These documents must be in .PDF format.

1. Under **Supporting documents**, drag and drop your PDF file onto the gray box.
2. In the **Name** box that appears, enter a name for this document. Customers will see this name on your offer's details tab.
3. Repeat these steps to add an additional supporting document.

Add marketplace media

Add logos

Under **Logos**, upload a **Large** logo in PNG format between 216 x 216 and 350 x 350 pixels. Partner Center will automatically create **Small** (48 x 48) and **Medium** (90 x 90) logos, which you can replace later if you want.

All three logo sizes are used in different places in the online stores.

- The **Medium** logo appears when you create a new resource in Microsoft Azure.
- The **Large** logo appears on your offer listing page in Azure Marketplace and Microsoft AppSource.
- The **Small** logo appears in Azure Marketplace search results and on the Microsoft AppSource main page and search results pages.

Add screenshots

You must add a minimum of one and a maximum of five screenshots that demonstrate your offer. All images must be 1280 x 720 pixels in size and in .PNG format.

1. Under **Screenshots**, drag and drop your .PNG file onto the **Screenshot** box.
2. Next to **Add image caption**, click the Edit icon.
3. In the dialog box that appears, enter a caption.

4. Repeat steps 1 through 3 to add additional screenshots.

Add videos (optional)

You can add links to YouTube or Vimeo videos that demonstrate your offer. These videos are shown to customers along with your offer. You must enter a thumbnail image of the video, sized to 1280 x 720 pixels in size and in .PNG format. You can add a maximum of four videos per offer.

1. Under **Videos** , select the **Add video** link.
2. In the boxes that appear, enter the name and link for your video.
3. Drag and drop a .PNG file (1280 x 720 pixels) onto the gray **Thumbnail** box.
4. To add another video, repeat steps 1 through 3.

> **TIP**
> If you have an issue uploading files, make sure your local network does not block the **https://upload.xboxlive.com** service used by Partner Center.

Select **Save draft** before continuing to the next tab: Preview audience.

Next steps

- If you're selling your offer through Microsoft, go to Add a preview audience.
- Otherwise, go to Sell a SaaS offer.

Add a preview audience for a SaaS offer

11/22/2021 • 2 minutes to read • Edit Online

As you create your software as a service (SaaS) offer in Partner Center, you need to define a preview audience who can review your offer listing before it goes live. This article explains how to configure a preview audience.

> **NOTE**
>
> If you choose to process transactions independently, you will not see this option. Instead, skip to How to sell your SaaS offer.

Define a preview audience

On the **Preview audience** tab, you can define a limited audience who can review your SaaS offer before you publish it live to the broader marketplace audience. You can send invites to Microsoft Account (MSA) or Azure Active Directory (Azure AD) email addresses. Add a minimum of one and up to 10 email addresses manually or import up to 20 with a .csv file. You can update the preview audience list at any time.

> **NOTE**
>
> A preview audience differs from a private audience. A preview audience is allowed access to your offer before it's published live in the online stores. You may also choose to create a plan and make it available only to a private audience. Private plans are explained in How to create plans for your SaaS offer.

Add email addresses manually

1. On the **Preview Audience** page, add a single Azure AD or MSA email address and an optional description in the boxes provided.
2. To add another email address, select the **Add another email** link.
3. Select **Save draft** before continuing to the next tab: **Technical configuration**.
4. Continue to How to add technical details for your SaaS offer.

Add email addresses using the CSV file

1. On the **Preview Audience** page, select the **Export Audience (csv)** link.
2. Open the .CSV file in an application, such as Microsoft Excel.
3. In the .CSV file, in the **ID** column, enter the email addresses you want to add to the preview audience.
4. In the **Description** column, you can optionally add a description for each email address.
5. In the **Type** column, add **MixedAadMsaId** to each row that has an email address.
6. Save the file as a .CSV file.
7. On the **Preview Audience** page, select the **Import Audience (csv)** link.
8. In the **Confirm** dialog box, select **Yes**.
9. Select the .CSV file and then select **Open**.
10. Select **Save draft** before continuing to the next tab: **Technical configuration**.

Next steps

- Add technical details for a SaaS offer

Add technical details for a SaaS offer

11/22/2021 • 2 minutes to read • Edit Online

This article describes how to enter technical details that help the Microsoft commercial marketplace connect to your solution. This connection enables us to provision your offer for the customer if they choose to acquire and manage it. For more details about these settings, see Technical information.

> **NOTE**
>
> If you choose to process transactions independently, you will not see this option. Instead, skip to How to sell your SaaS offer.

Technical configuration

On the **Technical configuration** tab, you'll define the technical details that the commercial marketplace uses to communicate to your SaaS application or solution.

- **Landing page URL** (required) – Define the SaaS website URL (for example: `https://contoso.com/signup`) that customers will land on after acquiring your offer from the commercial marketplace and triggering the configuration process from the newly created SaaS subscription.

  > **IMPORTANT**
  >
  > Your landing page should be up and running 24/7. This is the only way you will be notified about new purchases of your SaaS offers made in the commercial marketplace, or configuration requests of an active subscription of an offer. Don't include the pound sign character (#) in the landing page URL. Otherwise, customers will not be able to access your landing page.

- **Connection webhook** (required) – For all asynchronous events that Microsoft needs to send to you (for example, SaaS subscription has been canceled), we require you to provide a connection webhook URL. We will call this URL to notify you of the event.

  > **IMPORTANT**
  >
  > Your webhook should be up and running 24/7 as this is the only way you will be notified about updates about your customers' SaaS subscriptions that are purchased via the commercial marketplace.

- **Azure Active Directory tenant ID** (required) – To find the tenant ID for your Azure Active Directory (Azure AD) app, go to the App registrations blade in Azure Active Directory. In the **Display name** column, select the app. Then look for the **Directory (tenant) ID** number listed (for example, `50c464d3-4930-494c-963c-1e951d15360e`).
- **Azure Active Directory application ID** (required) – To find your application ID, go to the App registrations blade in Azure Active Directory. In the **Display name** column, select the app. Then look for the Application (client) ID number listed (for example, `50c464d3-4930-494c-963c-1e951d15360e`).

Select **Save draft** before continuing to the next tab: Plan overview.

Next steps

- Create plans for a SaaS offer.

Create plans for a SaaS offer

11/22/2021 • 8 minutes to read • Edit Online

Offers sold through the Microsoft commercial marketplace must have at least one plan. You can create a variety of plans with different options within the same offer. These plans (sometimes referred to as SKUs) can differ in terms of version, monetization, or tiers of service. For detailed guidance on plans, see Plans and pricing for commercial marketplace offers.

> **NOTE**
>
> If you choose to process transactions independently, you will not see this option. Instead, skip to Sell a SaaS offer.

Create a plan

1. Near the top of the **Plan overview** tab, select **+ Create new plan**.
2. In the dialog box that appears, in the **Plan ID** box, enter a unique plan ID. Use up to 50 lowercase alphanumeric characters, dashes, or underscores. You cannot modify the plan ID after you select **Create**.
3. In the **Plan name** box, enter a unique name for this plan. Use a maximum of 50 characters.
4. Select **Create**.

Define the plan listing

On the **Plan listing** tab, you can define the plan name and description as you want them to appear in the commercial marketplace.

1. In the **Plan name** box, the name you provided earlier for this plan appears here. You can change it at any time. This name will appear in the commercial marketplace as the title of your offer's software plan.
2. In the **Plan description** box, explain what makes this software plan unique and any differences from other plans within your offer. This description may contain up to 500 characters.
3. Select **Save draft** before continuing to the next tab: **Pricing and availability**.

Define markets, pricing, and availability

Every plan must be available in at least one market. On the **Pricing and availability** tab, you can configure the markets this plan will be available in, the desired monetization model, price, and billing terms. In addition, you can indicate whether to make the plan visible to everyone or only to specific customers (also called a private plan).

1. Under **Markets**, select the **Edit markets** link.
2. In the dialog box that appears, select the market locations where you want to make your plan available. You must select a minimum of one and maximum of 141 markets.

   > **NOTE**
   >
   > This dialog box includes a search box and an option to filter on only "Tax Remitted" countries, in which Microsoft remits sales and use tax on your behalf.

3. Select **Save**, to close the dialog box.

Define a pricing model

You must associate a pricing model with each plan: either *flat rate* or *per user*. All plans in the same offer must use the same pricing model. For example, an offer cannot have one plan that's flat rate and another plan that's per user. For more information, see SaaS pricing models.

> **IMPORTANT**
>
> After your offer is published, you cannot change the pricing model. In addition, all plans for the same offer must share the same pricing model.

Configure flat rate pricing

1. On the **Pricing and availability** tab, under **Pricing**, select **Flat rate**.
2. Select either the **Monthly** or **Annual** check box, or both and then enter the price.

Add a custom meter dimension

This option is available only if you selected flat rate pricing. For more information, see Metered billing for SaaS using the commercial marketplace metering service.

1. Under **Marketplace Metering Service dimensions**, select the **Add a Custom Meter Dimension (Max 30)** link.
2. In the **ID** box, enter the immutable identifier reference while emitting usage events.
3. In the **Display Name** box, enter the display name associated with the dimension. For example, "text messages sent".
4. In the **Unit of Measure** box, enter the description of the billing unit. For example, "per text message" or "per 100 emails".
5. In the **Price per unit in USD** box, enter the price for one unit of the dimension.
6. In the **Monthly quantity included in base** box, enter the quantity (as an integer) of the dimension that's included each month for customers who pay the recurring monthly fee. To set an unlimited quantity, select the check box instead.
7. In the **Annual quantity included in base** box, enter the quantity of the dimension (as an integer) that's included each month for customers who pay the recurring annual fee. To set an unlimited quantity, select the check box instead.
8. To add another custom meter dimension, select the **Add another Dimension** link, and then repeat steps 1 through 7.

> **IMPORTANT**
>
> You must keep track of the usage in your code and only send usage events to Microsoft for the usage that is above the base fee.

Configure per user pricing

1. On the **Pricing and availability** tab, under **Pricing**, select **Per User**.
2. If applicable, under **User limits**, specify the minimum and maximum number of users for this plan.
3. Under **Billing term**, specify a monthly price, annual price, or both.

Validate custom prices

To set custom prices in an individual market, export, modify, and then import the pricing spreadsheet. You're responsible for validating this pricing and owning these settings. For detailed information, see Custom prices.

1. You must first save your pricing changes to enable export of pricing data. Near the bottom of the **Pricing and availability** tab, select **Save draft**.

2. Under **Pricing**, select the **Export pricing data** link.
3. Open the exportedPrice.xlsx file in Microsoft Excel.
4. In the spreadsheet, make the updates you want to your pricing information and then save the .CSV file. You may need to enable editing in Excel before you can update the file.
5. On the **Pricing and availability** tab, under **Pricing**, select the **Import pricing data** link.
6. In the dialog box that appears, click **Yes**.
7. Select the exportedPrice.xlsx file you updated, and then click **Open**.

Enable a free trial

You can configure a free trial for each plan in your offer. Select the check box to allow a one-month free trial. This check box isn't available for plans that use the marketplace metering service. For more information, see Free trials.

> **IMPORTANT**
>
> After your transactable offer has been published with a free trial, it cannot be disabled for that plan. Make sure this setting is correct before you publish the offer to avoid having to re-create the plan.

- Under **Free Trial**, select the **Allow a one-month free trial** check box.

Choose who can see your plan

You can configure each plan to be visible to everyone or to only a specific audience. You grant access to a private plan using tenant IDs with the option to include a description of each tenant ID you assign. You can add a maximum of 10 tenant IDs manually or up to 20,000 tenant IDs using a .CSV file.

> **NOTE**
>
> If you publish a private plan, you can change its visibility to public later. However, once you publish a public plan, you cannot change its visibility to private.

Make your plan public

1. Under **Plan visibility**, select the **Public** box.
2. Select **Save draft**, and then in the upper left of the tab, select **Plan overview** to return to the **Plan overview** tab.
3. To create another plan for this offer, near the top of the **Plan overview** tab, select **+ Create new plan**. Then repeat the steps in the Create a plan section. Otherwise, go to View your plans.

Manually add tenant IDs for a private plan

1. Under **Plan visibility**, select the **This is a private plan** box.
2. In the **Tenant ID** box that appears, enter the Azure AD tenant ID of the audience you want to grant access to this private plan. A minimum of one tenant ID is required.
3. (Optional) Enter a description of this audience in the **Description** box.
4. To add another tenant ID, repeat steps 2 and 3.
5. When you're done adding tenant IDs, select **Save draft**, and then in the upper left of the tab, select **Plan overview** to return to the **Plan overview** tab.
6. To create another plan for this offer, near the top of the **Plan overview** tab, select **+ Create new plan**. Then repeat the steps in the Create a plan section. Otherwise, go to View your plans.

Use a .CSV file for a private plan

1. Under **Plan visibility**, select the **This is a private plan** box.

2. Select the **Export Audience (csv)** link.
3. Open the .CSV file and add the Azure IDs you want to grant access to the private offer to the **ID** column.
4. Optionally, enter a description for each audience in the **Description** column.
5. Add "TenantID" in the **Type** column, for each row with an Azure ID.
6. Save the .CSV file.
7. On the **Pricing and availability** tab, under **Plan visibility**, select the **Import Audience (csv)** link.
8. In the dialog box that appears, select **Yes**.
9. Select the .CSV file and then select **Open**.
10. Select **Save draft**, and then in the upper left of the tab, select **Plan overview** to return to the **Plan overview** tab.
11. To create another plan for this offer, at the top of the **Plan overview** tab, select **+ Create new plan**. Then repeat the steps in the Create a plan section. Otherwise, if you're done creating plans, go to the next section: **View your plans**.

View your plans

After you create one or more plans, you'll see your plan name, plan ID, pricing model, availability (Public or Private), current publishing status, and any available actions on the **Plan overview** tab.

The actions that are available in the **Action** column of the **Plan overview** tab vary depending on the status of your plan, and may include the following:

- If the plan status is **Draft**, the link in the **Action** column will say **Delete draft**.
- If the plan status is **Live**, the link in the **Action** column will be either **Stop distribution of a plan** or **Sync private audience**. The **Sync private audience** link will publish only the changes to your private audiences, without publishing any other updates you might have made to the offer.

Before you publish your offer

If you haven't already done so, create a development and test (DEV) offer to test your offer before publishing your production offer live. To learn more, see Create a test SaaS offer.

Next steps

- Sell your SaaS offer through the **Co-sell with Microsoft** and **Resell through CSPs** programs.
- Test and publish a SaaS offer.

Create a test SaaS offer

11/22/2021 • 4 minutes to read • Edit Online

To develop in a separate environment from your production offer, you'll create a separate test and development (DEV) offer and a separate production (PROD) offer. For information about the benefits of using a separate DEV offer, see Plan a SaaS offer.

You'll configure most settings the same in the DEV and PROD offers. For example, the official marketing language and assets, such as screenshots and logos should be the same. In the cases where the configuration is the same, you can copy-and-paste fields from the plans in the DEV offer to the plans in the PROD offer.

The following sections describe the configuration differences between the DEV and PROD offers.

Offer setup page

We recommend that you use the same alias in the **Alias** box of both offers but append "_test" to the alias of the DEV offer. For example, if the alias of your PROD offer is "contososolution" then the alias of the DEV offer should be "contososolution_test". This way, you can easily identify which your DEV offer from your PROD offer.

In the **Customer leads** section, use an Azure table or a test CRM environment for the DEV offer. Use the intended lead management system for the PROD offer.

Properties page

Configure this page the same in both the DEV and PROD offers.

Offer listing page

Configure this page the same in both the DEV and PROD offers.

Preview audience

In the DEV offer, include the Azure Active Directory (AAD) user principal names or Microsoft account (MSA) email addresses of developers and testers, including yourself. The user principal name of a user on AAD can be different than the email of that user. For example, jane.doe@contoso.com will not work but janedoe@contoso.com will. The users you designate will have access to the DEV offer when you share the **Preview** link during the development and testing phase.

In the PROD offer, include the Azure AD user principal name or Microsoft Account email of the users who will validate the offer before selecting the **Go Live button** to publish the offer live.

Technical configuration page

This table describes the differences between the settings for DEV offers and PROD offers.

Table 1: Technical configuration differences

SETTING	DEV OFFER	PROD OFFER
Landing page URL	Enter your dev/test endpoint.	Enter your production endpoint.

SETTING	DEV OFFER	PROD OFFER
Connection webhook	Enter your dev/test endpoint.	Enter your production endpoint.
Azure Active Directory tenant ID	Enter your test app registration tenant ID (AAD directory ID).	Enter your production app registration tenant ID.
Azure Active Directory application ID	Enter your test app registration application ID (client ID).	Enter your production app registration application ID.

Plan overview page

When you create your plans, we recommend that you use the same *Plan ID* and *Plan name* in both the DEV and PROD offers except append the plan ID in the DEV offer with **_test**. For example, if the Plan ID in the PROD offer is “enterprise”, then the plan ID in the DEV offer should be “enterprise_test”. This way, you can easily identify which your DEV offer from your PROD offer. You’ll create plans in the PROD offer with the pricing models and prices that you decide are best for your offer.

Plan listing

On the **Plan overview** > **Plan listing** tab, enter the same plan description in both the DEV and PROD plans.

Pricing and availability page

This section provides guidance for completing the **Plan overview** > **Pricing and availability** page.

Markets

Select the same markets for the DEV and PROD offers.

Pricing

Use the DEV offer to experiment with pricing models. After you verify which pricing model or models work best, you’ll create the plans in the PROD offer with the pricing models and prices you want.

The DEV offer should have plans with zero or low prices in the plans. The PROD offer will have the prices you want to charge to customers.

> **IMPORTANT**
>
> Purchases made in Preview will be processed for both DEV and PROD offers. If an offer has a $100/mo price, your company will be charged $100. If this happens, you can open a support ticket and we will issue a payout for the full amount (and take no store service fee).

Pricing model

Use the same Pricing model in the plans of the DEV and PROD offers. For example, if the plan in the PROD offer is Flat rate, with a monthly billing term, then configure the plan in the DEV offer using the same model.

To reduce your cost for testing the pricing models, including Marketplace custom meter dimensions, we recommend that you configure the **Pricing** section of the **Pricing and availability** tab, in the DEV offer with lower prices than the PROD offer. Here are some guidelines you can follow when setting prices for plans in the DEV offer.

Table 2: Pricing guidelines

PRICE	COMMENT
$0.00	Set a total transaction cost of zero to have no financial impact. Use this price when making calls to the metering APIs, or to test purchasing plans in your offer while developing your solution.
$0.01 - $49.99	Use this price range to test analytics, reporting, and the purchase process.
$50.00 - $100.00	Use this price range to test payout. For information about our payment schedule, see Payout schedules and processes.

> **IMPORTANT**
> To avoid being charged a store service fee on your test, open a support ticket within 7 days of the test purchase.

Free trial

Don't enable a free trial for the DEV offer.

Co-sell with Microsoft page

Don't configure the **Co-sell with Microsoft** tab of the DEV offer.

Resell through CSPs

Don't configure the **Resell through CSPs** tab of the DEV offer.

Next steps

- Test and publish a SaaS offer

How to test and publish a SaaS offer to the commercial marketplace

11/22/2021 • 5 minutes to read • Edit Online

This article explains how to use Partner Center to submit your SaaS offer for publishing, preview your offer, test it, and then publish it live to the commercial marketplace. You must have already created an offer that you want to publish.

NOTE

We recommend that you create a separate test and development (DEV) offer as a low-risk way to test before you publish your production (PROD) offer. Follow these steps to create and test the DEV offer before you publish your (PROD) offer.

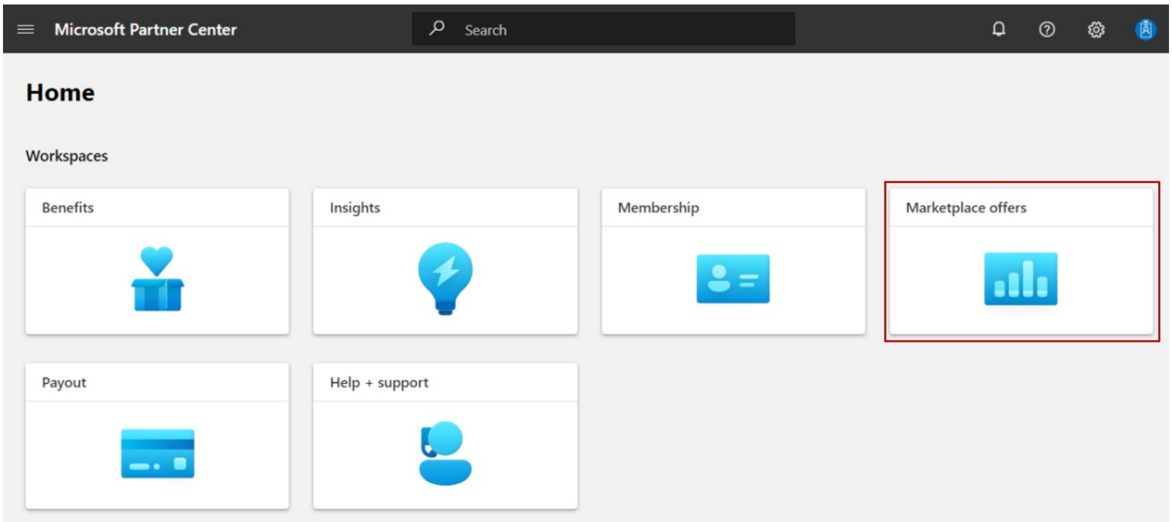
Submit your offer for publishing

NOTE

The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select the offer you want to publish.
4. In the upper-right corner of the portal, select **Review and publish**.
5. Make sure that the **Status** column for each page says **Complete**. The three possible statuses are as follows:
   - **Not started** – The page is incomplete.

- **Incomplete** – The page is missing required information or has errors that need to be fixed. You'll need to go back to the page and update it.
- **Complete** – The page is complete. All required data has been provided and there are no errors.

6. If any of the pages have a status other than **Complete**, select the page name, correct the issue, save the page, and then select **Review and publish** again to return to this page.

7. After all the pages are complete, in the **Notes for certification** box, provide testing instructions to the certification team to ensure that your app is tested correctly. Provide any supplementary notes helpful for understanding your app.

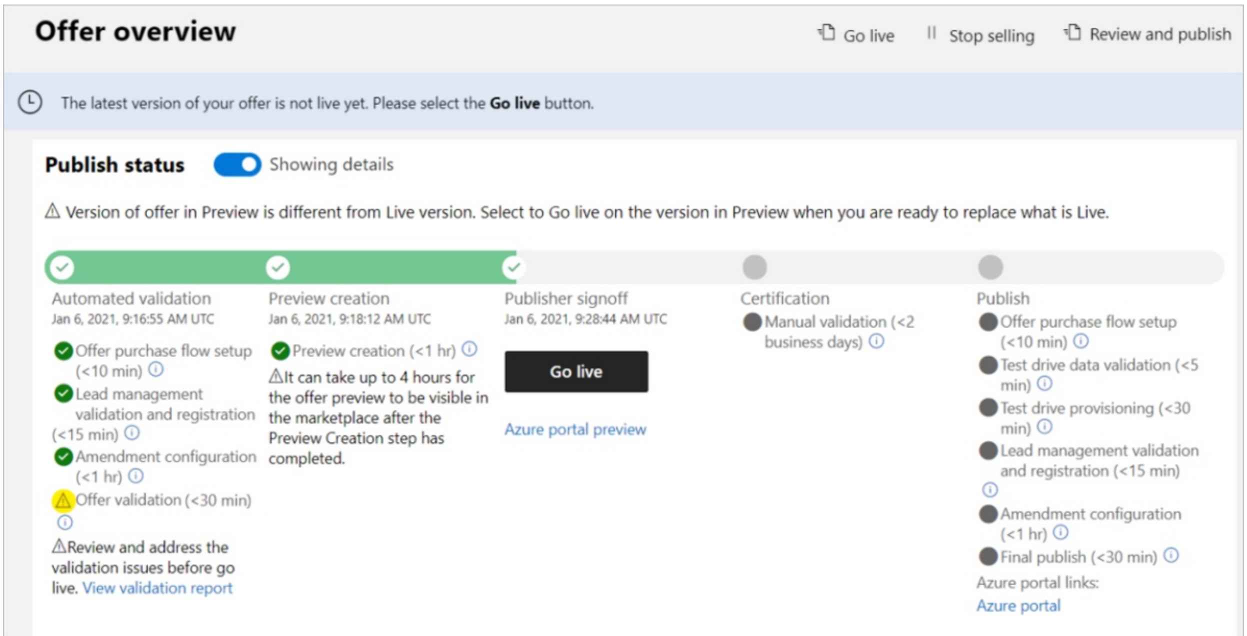
8. To start the publishing process for your offer, select **Publish**. The **Offer overview** page appears and shows the offer's **Publish status**.

Your offer's publish status will change as it moves through the publication process. For detailed information on this process, see Validation and publishing steps.

Preview and test your offer

When the offer is ready for your sign off, we'll send you an email to request that you review and approve your offer preview. You can also refresh the **Offer overview** page in your browser to see if your offer has reached the Publisher sign-off phase. If it has, the **Go live** button and preview links will be available. There will be a link for either Microsoft AppSource preview, Azure Marketplace preview, or both depending on the options you chose when creating your offer. If you chose to sell your offer through Microsoft, anyone who has been added to the preview audience can test the acquisition and deployment of your offer to ensure it meets your requirements during this stage.

The following screenshot shows the **Offer overview** page for a SaaS offer, with two preview links under the **Go live** button. The validation steps you'll see on this page vary depending on the selections you made when you created the offer.



Use the following steps to preview your offer.

1. On the **Offer overview** page, select a preview link under the **Go live** button.

2. To validate the end-to-end purchase and setup flow, purchase the plans in your offer while it's in preview. First, notify Microsoft with a support ticket to ensure we don't process a charge.

3. If your SaaS offer supports metered billing using the commercial marketplace metering service, review and follow the testing best practices detailed in Marketplace metered billing APIs.

4. Review and follow the testing instructions in SaaS fulfillment APIs version 2 in the Microsoft commercial marketplace to ensure your offer is successfully integrated with the APIs before you publish your offer live.

5. If the Offer validation step resulted in warnings, a **View validation report** link appears on the **Offer overview** page. Be sure to review the report and address the issues before you select the **Go live** button. Otherwise certification will most likely fail and delay your offer from going Live.

6. If you need to make changes after previewing and testing the offer, you can edit and resubmit to publish a new preview. For more information, see Update an existing offer in the commercial marketplace.

Publish your offer live

After completing all tests on your preview, select **Go live** to publish your offer live to the commercial marketplace. If your offer is already live in the commercial marketplace, any updates you make won't go live until you select **Go live**.

> **IMPORTANT**
>
> Don't ever select **Go live** for a development/test offer.

Now that you've chosen to make your offer available in the commercial marketplace, we perform a series of final validation checks to ensure the live offer is configured just like the preview version of the offer. For details about these validation checks, see Publish phase.

After these validation checks are complete, your offer will be live in the marketplace.

Next steps

- Access analytic reports for the commercial marketplace in Partner Center

Sell a SaaS offer through Microsoft

11/22/2021 • 2 minutes to read • Edit Online

This article describes additional options you can choose if you're selling your software as a service (SaaS) offer through Microsoft. You can co-sell your offer with Microsoft, resell it through the Cloud Solution Providers (CSP) program, or both.

Co-sell with Microsoft

Providing information on the **Co-sell with Microsoft** page is entirely optional. But it's required to achieve *Co-sell Ready* and *IP Co-sell Ready* status. The Microsoft sales teams use this information to learn more about your solution when evaluating its fit for customer needs. The information you provide on this tab isn't available directly to customers.

For details and instructions to configure the **Co-sell with Microsoft** tab, see Co-sell option in the commercial marketplace.

Resell through CSPs

If you elect to make your offer available in the Cloud Solution Provider (CSP) program, CSPs can sell your product as part of a bundled solution to their customers. For more information about reselling your offer through the CSP program and step-by-step instructions to configure the **Resell through CSPs** tab, see Cloud Solution Provider program.

Next steps

- Test and publish a SaaS offer
- Active marketplace rewards

Review and publish an offer to the commercial marketplace

11/22/2021 • 16 minutes to read • Edit Online

This article shows you how to use Partner Center to submit your offer for publishing, preview your offer, and then publish it to the commercial marketplace. It also covers how to check your publishing status as it proceeds through the publishing steps. You must have already created an offer you want to publish.

Offer status

You can review your offer status on the **Overview** tab of the commercial marketplace dashboard in Partner Center. One of the following status indicators is displayed in the **Status** column for each offer.

STATUS	DESCRIPTION
Draft	Offer has been created but it isn't being published.
Publish in progress	Offer is working its way through the publishing process.
Attention needed	We discovered a critical issue during certification or during another publishing phase.
Preview	We certified the offer, which now awaits a final verification by the publisher. Select **Go live** to publish the offer live.
Live	Offer is live in the marketplace and can be seen and acquired by customers.
Pending Stop distribution	Publisher selected "Stop distribution" on an offer or plan, but the action has not yet been completed.
Not available in the marketplace	A previously published offer in the marketplace has been removed.

Validation and publishing steps

When you are ready to submit an offer for publishing, select **Review and publish** at the upper-right corner of the portal. The **Review and publish** page shows the status of each page for your offer, which can be one of the following:

- **Not started** – The page is incomplete.
- **Incomplete** – The page is missing required information or has errors that need to be fixed. You'll need to go back to the page and update it.
- **Complete** – The page is complete. All required data has been provided and there are no errors.

If any of the pages have a status other than **Complete**, you need to correct the issue on that page and then return to the **Review and publish** page to confirm the status now shows as **Complete**. Some offer types require testing. If so, you will see a **Notes for certification** field where you need to provide testing instructions to the certification team and any supplementary notes helpful for understanding your app.

After all pages are complete and you have entered applicable testing notes, select **Publish** to begin the validation and publishing processes. The phases and overall sequence can vary depending on the type of offer you are publishing. The following table shows one possible publishing flow. Each phase is explained in more detail in the following sections.

PHASE	WHAT HAPPENS
Automated validation	We process a set of automated validations.
Certification	We conduct manual validations.
Preview creation	The listing page for your offer preview is available to anyone who has the preview link. If your offer will be sold through Microsoft (transactable), only the audience you specified on the **Preview audience** page of your offer can purchase and access the offer for testing.
Publisher sign-off	We send you an email with a request for you to preview and approve your offer.
Publish	We run a series of steps to verify that the preview offer is published live to the commercial marketplace.

For more information about validation in Azure Marketplace, see Azure Marketplace listing guidelines.

For more information about testing instructions and completing a first publish in Microsoft AppSource, see Dynamics 365 Operations functional validation.

Automated validation phase

The first step in the publishing process is a set of automated validations. Each validation step corresponds to a feature you chose when you created the offer. Each validation check must be complete before the offer can advance to the next step in the publishing process.

- **Offer purchase flow setup** (<10 min)

  We ensure your offer can be fulfilled when purchased by customers through the Azure portal. This step is only applicable for offers being sold through Microsoft.

- **Test drive data validation** (~5 min)

  We validate the data you provided on the Technical configuration page of the offer. We test and approve test drive functionality. This step is only applicable for offers with a test drive enabled.

- **Test drive provisioning** (~30 min)

  After validating the data and functionality of your test drive in the previous step, we deploy and replicate instances of your test drive so they are ready for customer use. This step is only applicable for offers with a test drive enabled.

- **Lead management validation and registration** (<15 min)

  We confirm that your lead management system can receive customer leads based on the details you provided on the **Offer setup** page. This step is only applicable for offers with lead management enabled.

- **Offer validation** (<30 min)

  For SaaS offers only, we perform quick validations for content and technical configurations. Preview creation will not be blocked on any validation issues detected in this step. If we find any issues that can fail certification, a **View validation report** link appears on the **Offer overview** page. The report will contain descriptions of any policy violations.

  > **IMPORTANT**
  >
  > Be sure to review and address all warnings from the Offer validation step before selecting the **Go live** button. Otherwise, you risk failing certification that will delay your offer from going live.

Certification phase

Offers submitted to the commercial marketplace must be certified before being published. Offers undergo rigorous testing, some automated and others manual. To learn more, see commercial marketplace certification policies.

Types of validation that take place during certification

There are three levels of validation included in the certification process for each submitted offer.

- Publisher business eligibility
- Content validation
- Technical validation

Publisher business eligibility

Each offer type checks a set of required base eligibility criteria. This criteria may include publisher MPN status, competencies held, competency levels, and so on.

Content validation

The information entered when you created your offer is checked for quality and relevance. These checks will review your entries for the marketplace listing details, pricing, availability, associated plans, and so on. To meet the listing criteria of Microsoft AppSource and Azure Marketplace, we will validate that your offer includes:

- A title that accurately describes the offer
- Well-written descriptions that provide a thorough overview and value proposition
- Quality screenshots and videos
- An explanation of how the offer utilizes Microsoft platforms and tools.

Learn more regarding the content validation criteria by reading the general listing policies.

Technical validation

During technical validation, the offer (package or binary) undergoes the following checks.

- Scanned for malware
- Network calls monitored
- Package analyzed
- Thorough scanning of the offer's functionality

The offer is tested across various platforms and versions to ensure it’s robust.

Certification failure report

If your offer fails any of the listing, technical, or policy checks, or if you are not eligible to submit an offer of that type, we email a certification failure report to you.

This report contains descriptions of any policies that failed, along with review notes. Review this email report, address any issues, make updates to your offer where needed, and resubmit the offer using the commercial marketplace portal in Partner Center. You can resubmit the offer as many times as needed until passing certification.

Preview creation phase

During the preview creation phase, we create a version of your offer that will be accessible to only the audience you specified on the **Preview audience** page of your offer, if any. The preview version of your offer won't be available to anyone outside the preview audience until you publish the offer live.

> **NOTE**
>
> Do not use the preview audience to give people outside your organization visibility into an offer. Use the Private Offer option instead. At this point, your offering has not been fully tested and validated, and is not ready for outside distribution.

Cancel publishing

To cancel an offer with the **Publish in progress** status:

1. Select the offer name to open the **Offer overview** page.
2. Select **Cancel publish** from the top-right corner of the page.
3. Confirm that you want to stop the offer from being published.

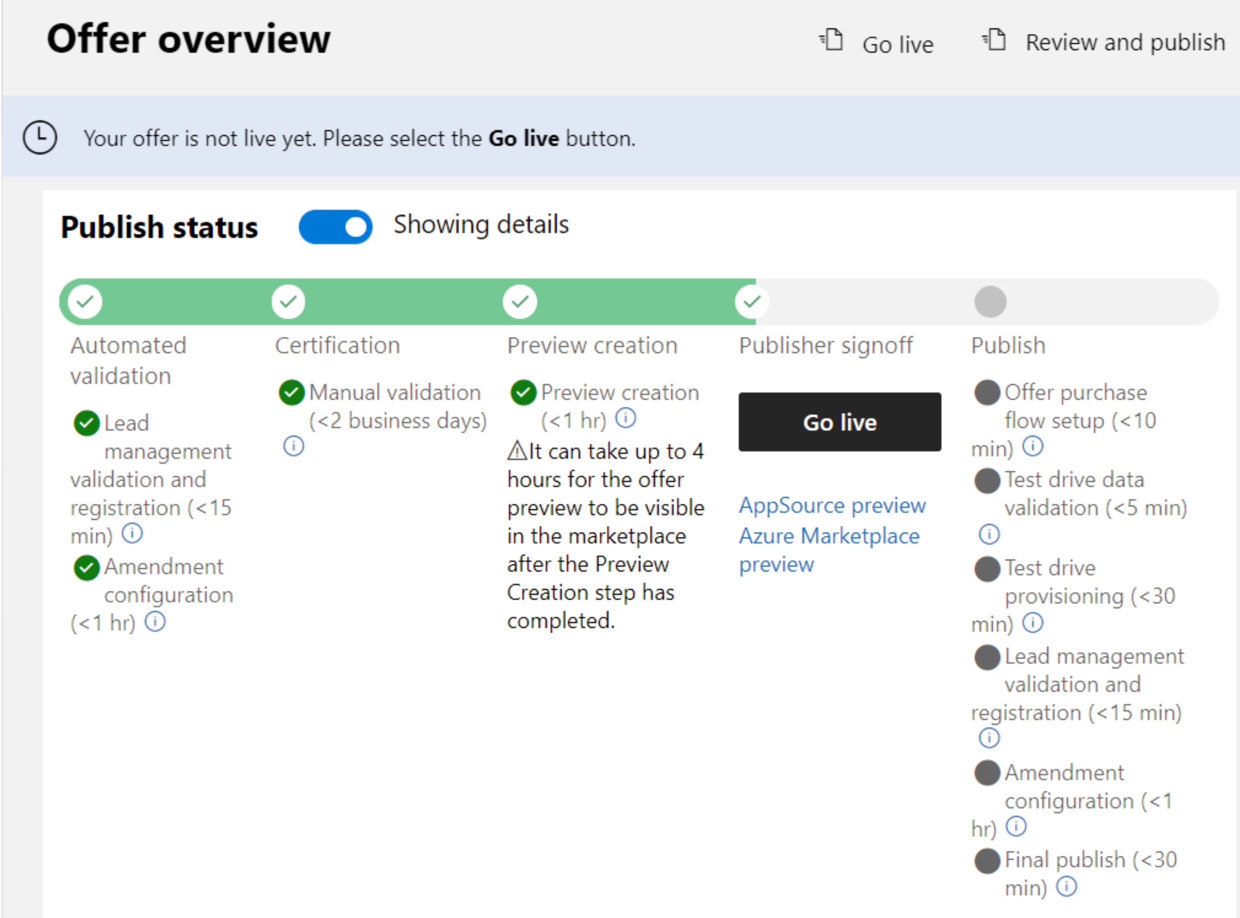
If you want to publish the offer at a later time, you'll need to start the publishing process over.

> **NOTE**
>
> You can stop an offer from being published only if the offer hasn't yet progressed to the publisher sign off step. After you select **Go live**, you will not have the option to cancel publish any longer.

Publisher sign-off phase

When the offer is ready for you to review and be signed off, we'll send you an email to request that you review and approve your offer preview. You can also refresh the **Offer overview** page in your browser to see if your offer has reached the Publisher sign-off phase. If it has, the **Go live** button and preview links will be available.

The following screenshot shows the **Offer overview** page in the commercial marketplace program in Partner Center. The validation steps you'll see on this page vary depending on the offer type and the selections you made when you created the offer. The certification phase can happen during submission to preview or submission to live, depending on the offer type.



Previewing and approving your offer

> **IMPORTANT**
>
> To validate the end-to-end purchase and setup flow, purchase your offer while it is in Preview. First notify Microsoft with a support ticket to ensure we don't process a charge. If your offer is a *Contact Me* listing, test that a lead is created as expected by providing the Contact Me details during preview.

On the **Offer overview** page, you will see preview links under the **Go live** button. There will be a link for either AppSource preview, Azure Marketplace preview, or both depending on the options you chose when creating your offer. If you chose to sell your offer through Microsoft, anyone who has been added to the preview audience can test the acquisition and deployment of your offer to ensure it meets your requirements during this stage.

> **IMPORTANT**
>
> Be sure to review and address all warnings from the *Offer validation* step before selecting the **Go live** button. Otherwise, you risk failing certification that will delay your offer from going live.

After you approve your preview, select **Go live** to publish your offer live to the commercial marketplace.

If you want to make changes after previewing the offer, you can edit and resubmit your publication request. If your offer is already live and available to the public in the marketplace, any updates you make won't go live until you select **Go live*. For more information, see Update an existing offer in the commercial marketplace

Publish phase

Now that you've chosen to go live with your offer, which makes it available in the commercial marketplace, we perform a series of final validation checks to ensure the live offer is configured just like the preview version of the offer.

- **Offer purchase flow setup** (>10 min)

  We ensure your offer can be fulfilled when purchased by customers through the Azure portal. This step is only applicable for offers being sold through Microsoft.

- **Test drive data validation** (~5 min)

  We validate the data you provided on the Technical configuration page of the offer. We test and approve test drive functionality. This step is only applicable for offers with a test drive enabled.

- **Test drive provisioning** (~30 min)

  We deploy and replicate instances of your test drive so they are ready for customer use. This step is only applicable for offers with a test drive enabled.

- **Lead management validation and registration** (>15 min)

  We confirm that your lead management system can receive customer leads based on the details provided on your **Offer setup** page. This step is only applicable for offers with lead management enabled.

- **Final publish (>30 minutes)**

  We ensure your offer becomes publicly available in the marketplace.

After these validation checks are complete, your offer will be live in the marketplace.

Publishing history

> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

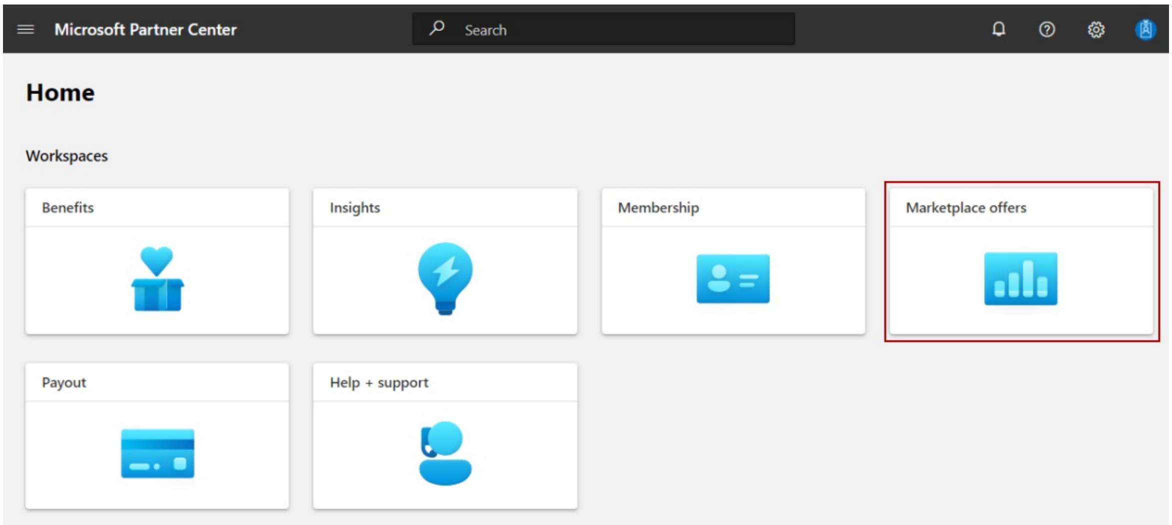
- Workspaces view
- Current view

The **History** page in Partner Center shows the publishing events for your commercial marketplace offers. For each event, the page displays the user who initiated the action, the event type, and the event date and time. The validation and publishing steps are listed with the date and time of completion.

To view the history of your offer:

1. Sign in to Partner Center.

2. On the Home page, select the **Marketplace offers** tile.



3. On the Marketplace offers page, select your offer.

4. Select the **History** tab in the navigation menu on the left. The page provides details for the following events, as applicable to your offer:

EVENT	DESCRIPTION
Created offer	The offer was created in Partner Center. A user selected the offer type, offer ID, and offer alias from the commercial marketplace **Overview** page.
Created plan: *plan name*	A user created a new plan by entering the plan ID and plan name in the **Plan overview** tab. *This event applies only to offer types that support plans.*
Deleted plan	A user deleted a draft plan that had not been published by selecting **Delete draft** from the **Plan overview** page. *This event applies only to offer types that support plans.*
Initiated plan Stop distribution: *plan name*	A user initiated a plan Stop distribution by selecting **Stop distribution** from the **Plan overview** page. *This event applies only to offer types that support plans.*
Resume distribution: *plan name*	A user canceled a plan stop distribution by selecting **Resume distribution** from the **Plan overview** page. *This event applies only to offer types that support plans.*
Submitted offer to preview	A user submitted the offer to preview by selecting **Publish** from the **Review and publish** page.
Initiated submit to preview cancellation	A user requested to cancel the offer publication to preview by selecting **Cancel publish** from the **Offer overview** page after the submission to preview. *This event is displayed as the cancellation request is being processed.*
Canceled submission to preview	A user canceled the offer publication to preview by selecting **Cancel publish** from the **Offer overview** page after the submission to preview. *This event is displayed after the cancellation request is successfully processed.*

EVENT	DESCRIPTION
Sign-off to go live	A user published the offer to the commercial marketplace by selecting **Go live** from the **Offer overview** page.
Initiated publish to marketplace cancellation	A user requested to cancel the offer publication by selecting **Cancel publish** from the **Offer overview** page after the sign-off to go live. *This event is displayed as the cancellation request is being processed.*
Canceled publishing to the commercial marketplace	A user canceled the offer publication by selecting **Cancel publish** from the **Offer overview** page after the sign-off to go live. *This event is displayed after the cancellation request is successfully processed.*
Sync private audience	A user updated and synced the private audience by selecting **Sync private audience** from the **Plan overview** page or the **Plan pricing & availability** page. *This event applies only to offer types that support private plans.*
Stop distribution offer	A user stopped selling the offer by selecting **Stop distribution** from the **Offer overview** page.

> **NOTE**
> The History page doesn't say when an offer draft was saved.

Filter options

You can use filters to narrow down the full history of your offer to specific publishing events:

1. Select the filter button on the upper-right corner of the page.
2. Choose a filter, then select **Apply** to see which history events correspond to the criteria you selected.
3. Select **Clear filters** to return to the full history of your offer.

There are four filters:

- Events
- Users
- Date
- Pages

When you choose the **Pages** filter, you can select any of the Partner Center pages that are applicable to your offer type. When applied, the **Pages** filter shows all the **Submitted offer to preview** events with changes to the page you selected.

- For all offers, the **Offer setup** page is included by default for each submission event.
- For offers that support plans, the **Plan overview** page is included for each submission event.
- For offers that support test drive, the **Test drive** page is included for each submission event.

Users

If an event was initiated by a user, the History page will show the user according to the following scenarios:

The event was initiated by the publisher

Users with publishing permissions for an offer will have their name displayed for the publishing events they initiate.

Initiated by	Event	Date and time
BD Barbara Dias	Submitted offer to preview	08/05/2020, 08:09 PM UTC

The event was initiated by Microsoft

You may give permissions to Microsoft administrators to initiate actions on your behalf or take corrective actions after an unexpected system error. The Microsoft name and logo are displayed for publishing events initiated by Microsoft on behalf of your account.

Initiated by	Event	Date and time
Microsoft	Submitted offer to preview	08/05/2020, 08:09 PM UTC

The event was initiated by an unidentified user

Users who are no longer associated with an account will have their name removed from the **Initiated by** column after their publishing permissions are withdrawn.

Initiated by	Event	Date and time
Unidentified user	Submitted offer to preview	08/05/2020, 08:09 PM UTC

Validation and publishing steps

No user is shown for system processes that correspond to validation and publishing steps. These events are color-coded according to the completion status of the event.

Initiated by	Event	Date and time
Preview creation 08/05/2020, 08:44 PM UTC		

Next steps

- Access analytic reports for the commercial marketplace in Partner Center

Update existing offers in the commercial marketplace

11/22/2021 • 9 minutes to read • Edit Online

This article explains how to make updates to existing offers and plans, and also how to remove an offer from the commercial marketplace. You can view your offers in the Commercial Marketplace portal in Partner Center.

Update a published offer

Use these steps to update an offer that's been successfully published to Preview or Live state.

1. Select the name of the offer you would like to update. The status of the offer may be listed as **Preview**, **Live**, **Publish in progress**, **Draft**, **Attention needed**, or **Not available** (if you've previously chosen to stop distribution of the offer). Once selected, the **Offer overview** page for that offer will open.
2. Select the offer page you want to update, such as **Properties**, **Offer listing**, or **Preview** (or select **Update** from the applicable card on the **Offer overview** page).
3. Make your changes and select **Save draft**. Repeat this process until all your changes are complete.
4. Review your changes on the **Compare** page.
5. When you're ready to publish your updated offer, select **Review and publish** from any page. The **Review and publish** page will open. On this page you'll see the completion status for the sections of the offer that you updated:
   - **Unpublished changes**: The section has been updated and is complete. All required data has been provided and there were no errors introduced in the updates.
   - **Incomplete**: The updates made to the section introduced errors that need to be fixed or requires more information to be provided.
6. Select **Publish** to submit the updated offer for publishing. Your offer will then go through the standard validation and publishing steps.

> **IMPORTANT**
> You must review your offer preview once it's available and select **Go-live** to publish your updated offer to your intended audience (public or private).

Changing offer type

Changing your offer type may require a simple edit and republish, or it may require you to create a new offer, as listed here.

TO CHANGE FROM	TO	DO THIS
Contact Me	Trial	Republish the offer.
Contact Me	Transact	For SaaS offers, update the listing option and republish. For all other offer types, create a new offer.

TO CHANGE FROM	TO	DO THIS
Trial	Transact	For SaaS offers, update the listing option and republish. For all other offer types, create a new offer.

To add a Test Drive to any offer, republish the offer.

Add a plan to an existing offer

Complete these steps to add a new plan to an offer that you've already published.

1. With the **Offer overview** page for your existing offer open, go to the **Plan overview** page, and then select **Create new plan**.
2. Create a new plan according to the guidelines by using the **existing plans Pricing model**.
3. Select **Save draft** after you change the plan name.
4. Select **Publish** when you're ready to publish your updates. The **Review and publish** page opens and provides a completion status for your updates.

Update a plan for an existing offer

Complete these steps to make changes to a plan for an offer that you've already published.

1. With the **Offer overview** page for your existing offer open, choose the plan that you want to change. If the plan isn't accessible from the **Plan overview** list, select **See all plans**.
2. Select the plan **Name**, **Pricing model**, or **Availability**. *Currently, plans are available only in English (United States).*
3. Select **Save draft** after making any changes to the plan name, description, or audience availability.
4. Select **Review and publish** when you're ready to publish your updates. The **Review and publish** page opens and provides a completion status for your updates.
5. Select **Publish** to submit the updated plan for publishing. We'll email you when a preview version of the updated offer is available for you to review and approve.

> **NOTE**
> If you publish a private plan, you can change its visibility to public later. However, once you publish a public plan, you cannot change its visibility to private.

Update image versions for an existing VM offer

Complete these steps to update available images in a plan for an offer that you've already published.

1. With the **Offer overview** page for your existing offer open, choose the plan you want to change. If the plan isn't accessible from the **Plan overview** list, select **See all plans**.
2. In the focus nav, select **Technical Configuration**.
3. To add a new version, select **+ Add VM image**.
4. To remove a version, select **Deprecate**. Note that you can't deprecate the last VM from the plan.
5. Select **Save draft** after making your changes.
6. Select **Review and publish** when you're ready to publish your updates. The Review and publish page appears and provides a completion status for your updates.
7. Select **Publish** to submit the updated plan for publishing. We'll email you when a preview version of the

updated offer is available for you to review and approve.

> **NOTE**
>
> At least one image version is required for a plan. If you want to stop offering the plan, deprecate the plan.

Offer a virtual machine plan at a new price

After a virtual machine plan is published, its price can't be changed. To offer the same plan at a different price, you must hide the plan and create a new one with the updated price. First, hide the plan with the price you want to change:

1. With the **Offer overview** page for your existing offer open, choose the plan that you want to change. If the plan isn't accessible from the **Plan overview** list, select **See all plans**.
2. Select the **Hide plan** checkbox. Save the draft before you continue.

Now that you have hidden the plan with the old price, create a copy of that plan with the updated price:

1. In Partner Center, go back to **Plan overview**.
2. Select **Create new plan**. Enter a **Plan ID** and a **Plan name**, then select **Create**.
3. To reuse the technical configuration from the plan you've hidden, select the **Reuse technical configuration** checkbox. Read Create plans for a VM offer to learn more.

   > **IMPORTANT**
   >
   > If you select **This plan reuses technical configuration from another plan**, you won't be able to stop distribution of the parent plan later. Don't use this option if you want to stop distribution of the parent plan.

4. Complete all the required sections for the new plan, including the new price.
5. Select **Save draft**.
6. After you've completed all the required sections for the new plan, select **Review and publish**. This will submit your offer for review and publication. Read Review and publish an offer to the commercial marketplace for more details.

Sync private plan audiences

If your offer includes one or more plans that are configured to only be available to a private restricted audience, it's possible to update only the audience who can access that private plan without publishing other changes to the offer.

To update and sync the private audience for your plan(s):

- Modify the audience in one or more private plans using the + **Add ID** or **Import customers (csv)** button and then save the changes.
- Select **Sync private audience** from the **Plan overview** page.

Sync private audience will publish only the changes to your private audiences, without publishing any other updates you might have made to the draft offer.

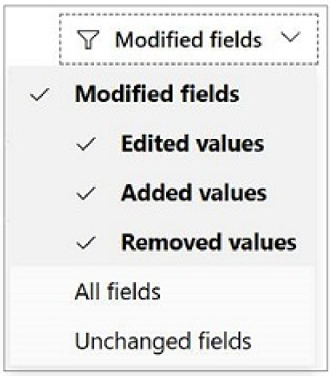
Compare changes to your offer

Before you publish updates to your live or preview offer, you can audit the saved changes in the **Compare** page. You can access the **Compare** page in the upper-right corner of any offer page, such as the **Properties** or **Offer listing** page. The **Compare** page shows side-by-side versions of the saved changes of this offer and the published marketplace offer.

- You can use **Compare** at any point during the editing process.
- Select a field on the **Compare** page to navigate to the value you want to modify.
- To see the values for all fields, even fields not updated, select the **All fields** filter. You can modify filters within these fields by selecting **Modified fields**, then selecting one of the filters below:
  - **Removed values** filter displays fields that you published and you're now completely removing.
  - **Added values** filter displays fields that you did not originally publish and are now adding.
  - **Edited values** filter displays fields that had been published but you've now updated the contents.

    > **NOTE**
    >
    > If one of these filters isn't available, it indicates that you didn't make an update of that type.

- To see only values that haven't been updated, select the **Unchanged fields** filter. The field values shown for the published and draft version will be the same.



> **NOTE**
>
> The following pages don't currently support **Compare**:
>
> - CSP Reseller Audience
> - Test Drive Technical Configuration
> - Test Drive Marketplace Listing
> - Co-sell
> - Supplemental files

Remember to republish your offer after making updates for the changes to take effect.

Compare changes to a preview offer

If you have changes in preview that aren't live, you can compare new changes with the preview marketplace offer.

1. Select **Compare** in the command bar of the page.
2. Select the **With** dropdown and change it from **Live offer** to **Preview offer**. If your offer hasn't gone live yet, you won't see the **Live offer** option.
3. The **Compare** page provides side-by-side versions that show the changes.

Remember to republish your offer after making updates for the changes to take effect.

Stop distribution of an offer or plan

You can remove offer listings and plans from the Microsoft commercial marketplace, which will prevent new customers from finding and purchasing them. Any customers who previously acquired the offer or plan can still use it, and they can download it again if needed. However, they won't get updates if you decide to republish the offer or plan at a later time.

- To stop distribution of an offer after you've published it, select **Stop distribution** from the **Offer overview** page. Within a few hours of your confirmation, the offer will no longer be visible in the commercial marketplace.
- To stop distribution of a plan, select **Stop distribution** from the **Plan overview** page. The option to stop distribution of a plan is only available if you have more than one plan in the offer. You can choose to stop distribution of one plan without impacting other plans within your offer.

> **NOTE**
>
> Once you confirm you want to stop distribution of the plan, you must republish the offer for the change to take effect.

After you stop distribution of an offer or plan, you'll still see it in Partner Center with a **Not available** status. If you decide to list or sell this offer or plan again, follow the instructions to update a published offer. Don't forget that you will need to **publish** the offer or plan again after making any changes.

Remove offers from existing customers

To remove offers from existing customers, log a support request. In the support topic list, select **Commercial Marketplace** > **Offer or App Delisting, Removal, or Termination** and submit the request. The support team will guide you through the offer removal process.

When the offer removal is initiated by the publisher, the publisher owns communication of the removal to the customer.

Next steps

- Check the publishing status of your commercial marketplace offer

Marketing best practices

11/22/2021 • 2 minutes to read • Edit Online

Keep marketing best practices in mind as you create and list offers to the commercial marketplace, provide customer trials, and connect with Microsoft customers and the partner community. If you optimize your offer listings and go-to-market campaigns, you can accelerate your customer acquisition. Download the Azure Marketplace & AppSource best practice guide to learn how to get the most out of your online marketing efforts.

To learn more about how the Microsoft Partner Network can help you grow your business, see Go to market with Microsoft. Sign in to Partner Center to create and configure your offer.

Offer listing best practices

11/22/2021 • 3 minutes to read • Edit Online

This article offers suggestions for creating and engaging Microsoft commercial marketplace offers. The following tables outline best practices for completing offer information in Partner Center.

For a complete list of marketing best practices including best practices to drive traffic to and improve customer engagement with your listing please see the Commercial Marketplace Marketing Best Practices Guide.

For an analysis of how your offers are performing, go to the Marketplace Insights dashboard in Partner Center.

Online store offer details

SETTING	BEST PRACTICE
Offer name	For apps, provide a clear title that includes search keywords to help customers discover your offer. For Consulting Services, follow this format: [Offer Name: [Duration] [Offer Type] (for example, Contoso: 2-Week Implementation)
Offer description	Provide a clear description that describes your offer's value proposition in the first few sentences. These sentences may be used in search engine results. Core components of your value proposition should include: • Description of the product or solution. • User persona that benefits from the product or solution. • Customer need or pain the product or solution addresses. Use industry standard vocabulary or benefit-based wording when possible. Do not rely on features and functionality to sell your product. Instead, focus on the value your offer delivers. For Consulting Service listings, clearly state the professional service you provide.
Offer logo (PNG format, from 216×216 to 350x350 px): app details page	Design and optimize your logo for a digital medium: Upload the logo in PNG format to the app details listing page of your offer. Partner Center will resize it to the required logo sizes.
Offer logo (PNG format, 48×48 px): search page	Partner Center will generate this logo from the Large logo you uploaded. You can optionally replace this with a different image later.

SETTING	BEST PRACTICE
Learn more documents	Include supporting sales and marketing assets under **Learn more**; examples include: • white papers • brochures • checklists • PowerPoint presentations Save all files in PDF format. Your goal here should be to educate customers, not sell to them. Add a link to your app landing page to all your documents and add URL parameters to help you track visitors and trials.
Videos (AppSource, consulting services, and SaaS offers only)	The strongest videos communicate the value of your offer in narrative form: • Make your customer, not your company, the hero of the story. • Your video should address the principal challenges and goals of your target customer. • Recommended length: 60-90 seconds. • Incorporate key search words that use the name of the videos. Consider adding additional videos, such as a how-to, getting started, or customer testimonials.
Screenshots (1280×720 px)	Add up to five screenshots. Incorporate key search words in the file names.

IMPORTANT

Make sure your offer name and offer description adhere to **Microsoft Trademark and Brand Guidelines** and other relevant, product-specific guidelines when referring to Microsoft trademarks and the names of Microsoft software, products, and services.

Link to your offer page from your website

To easily direct users to your offer in the commercial marketplace, leverage our **Get It Now** badges on your website or in your digital marketing collateral. Find these badges in our Marketplace Marketing Toolkit.

When you link from the AppSource or Azure Marketplace badge on your site to your listing in the commercial marketplace, support strong analytics and reporting by including the following query parameters at the end of the URL:

- **src**: Include the source from which the traffic is routed to AppSource (for example, website, LinkedIn, or Facebook).
- **mktcmpid**: Your marketing campaign ID, which can contain up to 16 characters in any combination of letters, numbers, underscores, and hyphens (for example, *blogpost_12*).

The following example URL contains both of the preceding query parameters:

```
https://appsource.microsoft.com/product/dynamics-365/mscrm.04931187-431c-415d-8777-f7f482ba8095?
src=website&mktcmpid=blogpost_12
```

After adding these parameters to your AppSource URL, review the effectiveness of your campaign in the analytics dashboard in Partner Center.

Listing creation technical best practices

Navigating Markdown can be tricky. To help, we've compiled some best practices for revising and reviewing offer listings for the commercial marketplace in Partner Center. The commercial marketplace listing technical best practices guide shows how to edit your listing and preview your Markdown code.

Next steps

- Learn more about your commercial marketplace benefits.
- Sign in to Partner Center to create and configure your offer. If you haven't yet enrolled in Partner Center, create an account.

How to get featured in Microsoft AppSource and Azure Marketplace

11/22/2021 • 2 minutes to read • Edit Online

Azure Marketplace and AppSource have **featured apps** sections, where you can get your app featured:

- First, if you have a CONSULTING or TRANSACTION offer, you may be eligible for the **Commercial marketplace featured category placement benefit** through commercial marketplace benefits. Once eligible, your commercial marketplace listing will automatically be featured in one of the categories found on the left-hand side of your listing. The category and timing of your featured placement will be based on availability. In order to make your marketplace listing even more robust, check out this video on Best practices for optimizing your listing (microsoft.com).
- Second, review the list of best practices and criteria below to earn a spot.

The featured apps selection algorithm generates a score to an app by Microsoft, just like a person's credit score in the US. The weekly selection of featured apps will be based on a calculation of app and service performance.

Steps to improve your score

You can take the following action items to improve your score:

1. *Ensure that your app or service is appropriately categorized*: choose three categories that represent your app or service's capabilities.
2. *Azure Marketplace Apps: grow your Azure consumption month-over-month.* If you are able to achieve 1,000 hours of Azure usage a month, you will greatly increase your chances of being featured.
3. *AppSource Apps: increase the acquisitions coming to your offer.* If you are able to achieve 10 acquisitions per month, you will greatly increase your chances of being featured.
4. *Achieve co-sell ready status*: complete the requirements for co-sell ready.
5. *Improve the quality of your offer*: see content listing guidelines for information on how to modify your offer
6. Publish multiple offers in Marketplace: are all your core apps and services listed? Do you have a trial experience?
7. Encourage your customers to write reviews.

Featured Apps promotions operate separately from the search algorithm.

> **NOTE**
>
> If your solution is not appearing correctly in search results, file a **support ticket** in Partner Center.

Your GTM support also includes a full library of self-help templates, web content, training, and tools to help you further promote your listings and your business.

Next steps

Learn more about your commercial marketplace benefits.

Sign in to Partner Center to create and configure your offer. If you haven't yet enrolled in Partner Center, create an account.

Use Azure Blob storage to manage commercial marketplace leads

11/22/2021 • 3 minutes to read • Edit Online

Caution

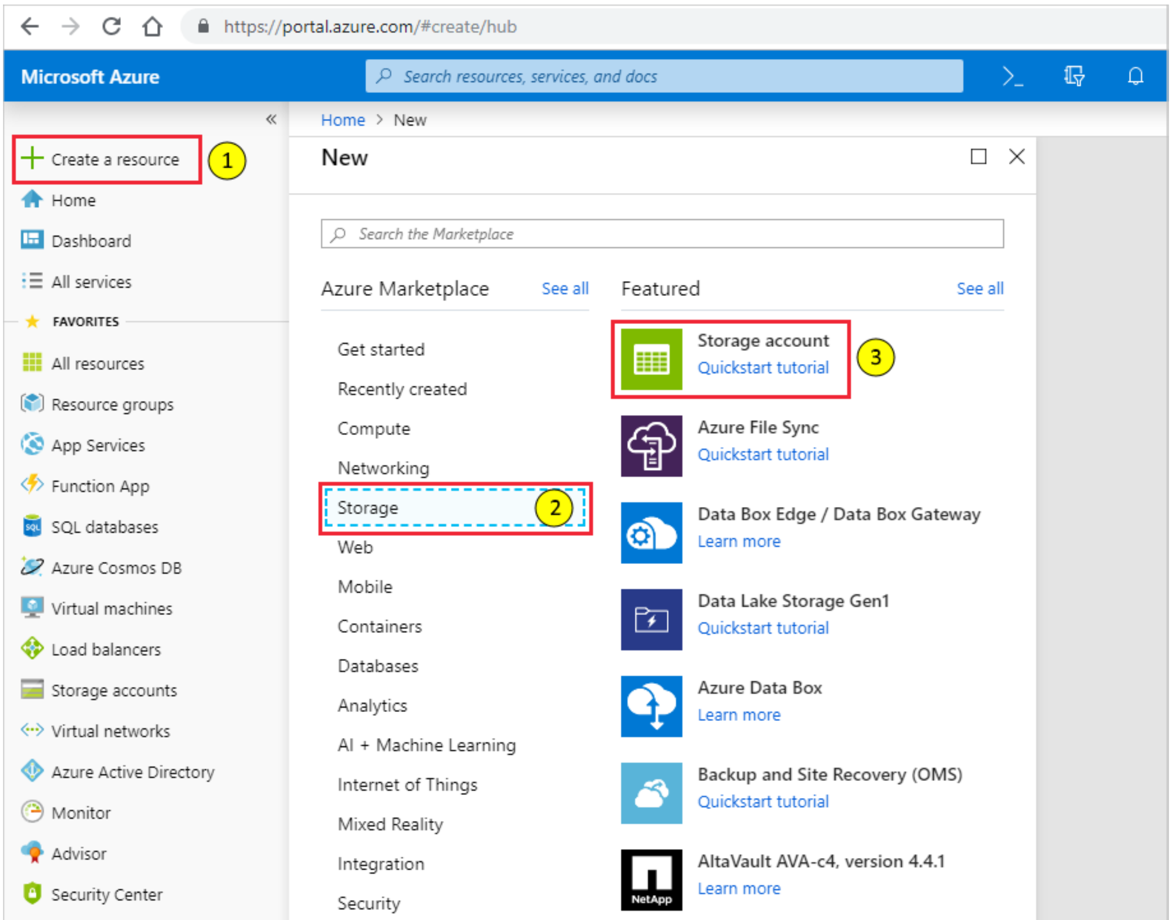
Commercial marketplace support for Azure Blob storage has been deprecated and is no longer an option to process leads from your offer. If you currently have a commercial marketplace offer with lead management configured for Azure Blob, you will no longer receive customer leads. Please update your lead management configuration to any of the other lead management options. Learn about the other options on the lead management landing page."

If your Customer Relationship Management (CRM) system is not explicitly supported in Partner Center for receiving Microsoft AppSource and Azure Marketplace leads, you can use Azure Blob storage. You can then choose to export the data and import it into your CRM system. The instructions in this article will give you through the process of creating an Azure Storage account, and a blob under that account. In addition, you can create a new flow using Power Automate to send an email notification when your offer receives a lead.

> **NOTE**
>
> The Power Automate connector used in these instructions requires a paid subscription to Power Automate. Make sure you account for this before you follow the instructions in this article.

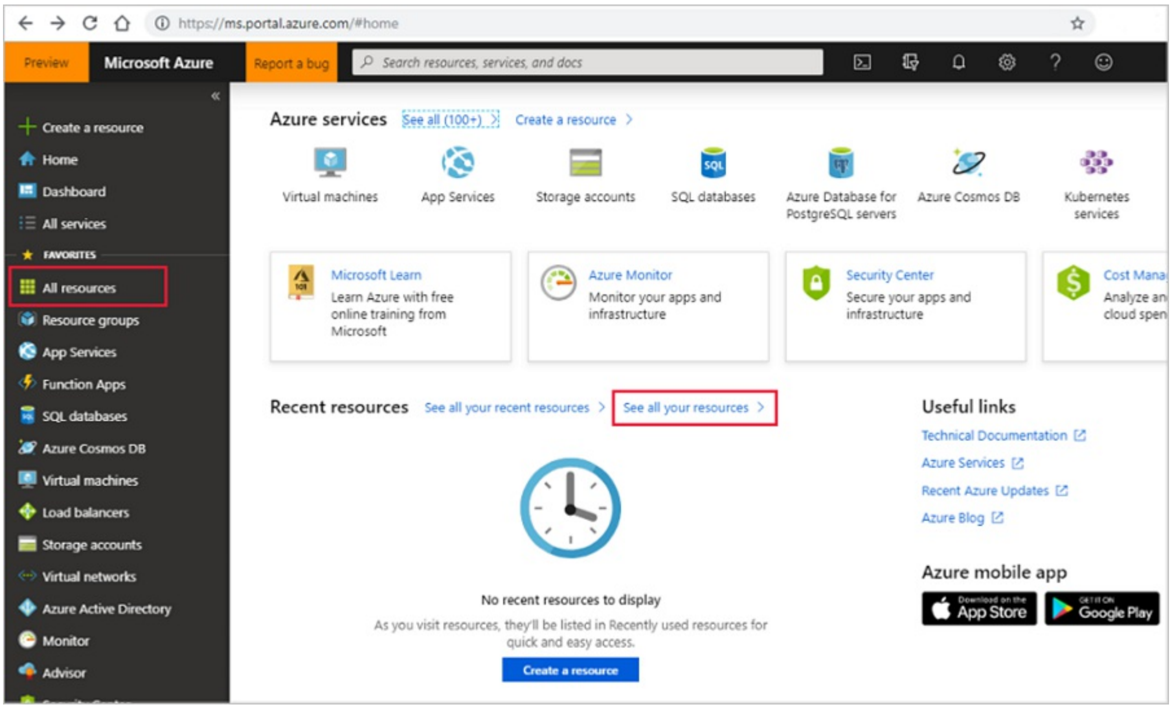
Configure Azure Blob storage

1. If you don't have an Azure account, you can create a free trial account.
2. After your Azure account is active, sign in to the Azure portal.
3. In the Azure portal, create a storage account using the following procedure.
   a. Select **+Create a resource** in the left menu bar. The **New** pane (blade) will be displayed to the right.
   b. Select **Storage** in the **New** pane. A **Featured** list is displayed to the right.
   c. Select the **Storage Account** to begin account creation. Follow the instructions in the article Create a storage account.



For more information about storage accounts, see this Quickstart. For more information about storage pricing, see storage pricing.

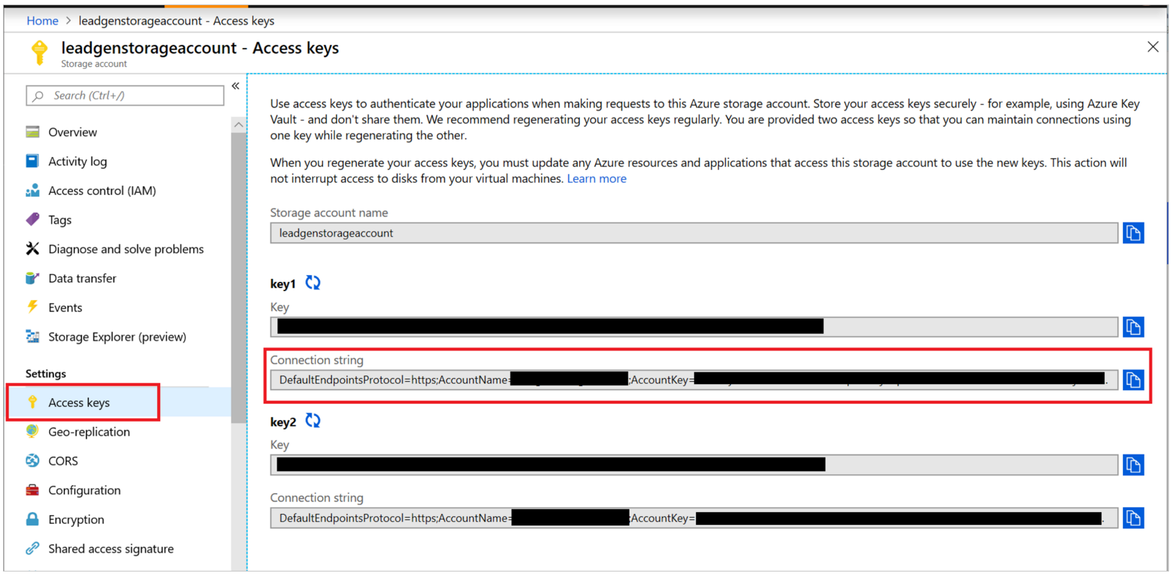
4. Wait until your storage account is provisioned, a process that typically takes a few minutes. Then access your storage account from the **Home** page of the Azure portal by selecting **See all your resources** or by selecting **All resources** from the left navigation menubar of the Azure portal.



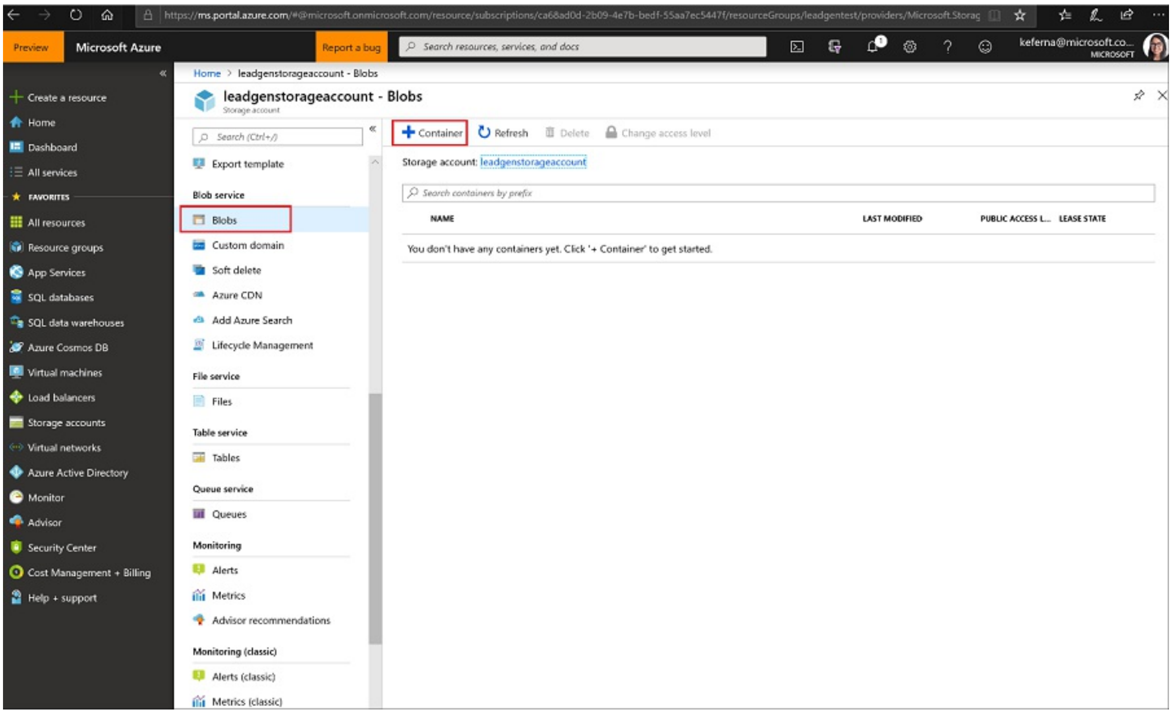
5. From your storage account pane, select **Access keys** and copy the *Connection string* value for the key. Save this value as this is the *Storage Account Connection String* value that you will need to provide in the publishing portal to receive leads for your marketplace offer.

An example of a connection string is:

```
DefaultEndpointsProtocol=https;AccountName=myAccountName;AccountKey=myAccountKey;EndpointSuffix=core.
windows.net
```



6. From your storage account page, select **Blobs**.



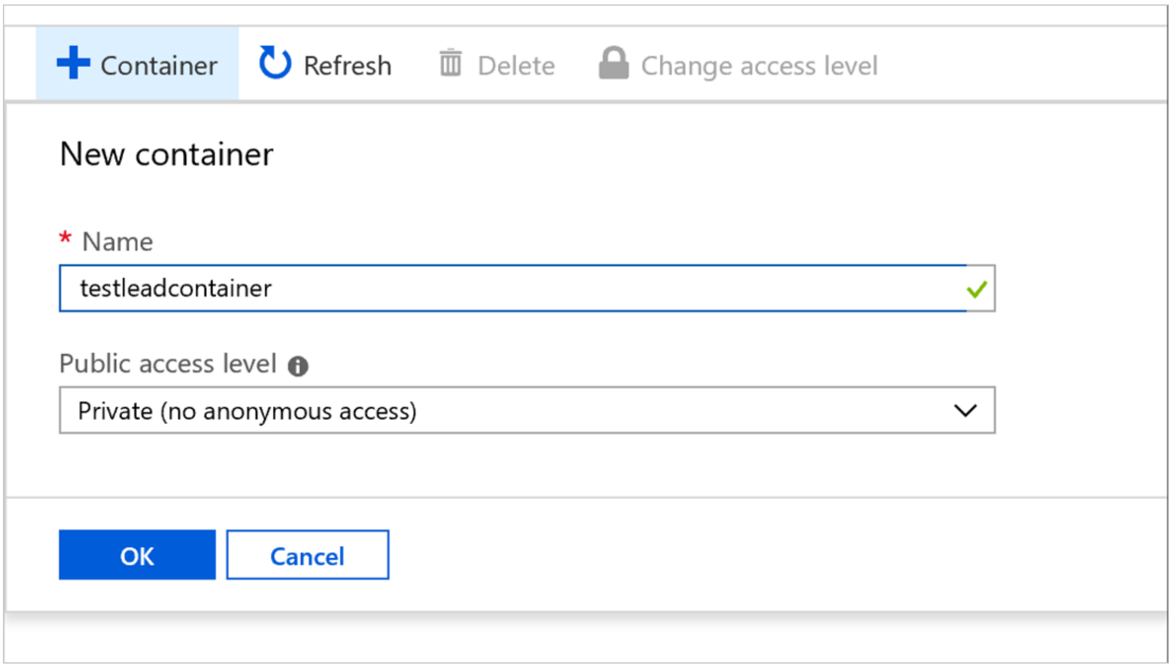
7. Once on the blobs page, select the **+ Container** button.

8. Type a **name** for your new container. The container name must be lowercase, must start with a letter or number, and can include only letters, numbers, and the dash (-) character. For more information about container and blob names, see Naming and referencing containers, blobs, and metadata.

   Save this value as this is the *Container Name* value that you need to provide in the publishing portal to receive leads for your marketplace offer.

9. Set the level of public access to the container as **Private (no anonymous access)**.

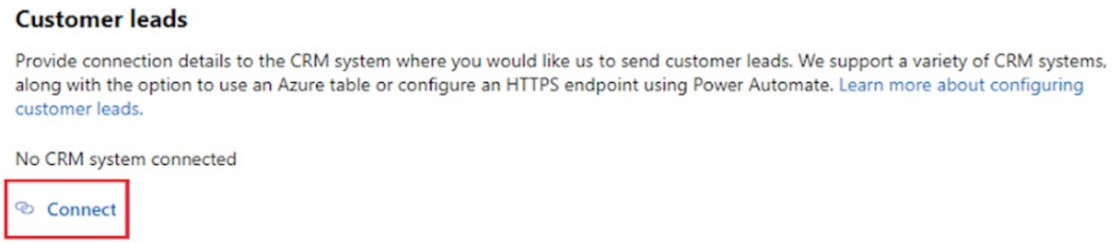
10. Select **OK** to create the container.



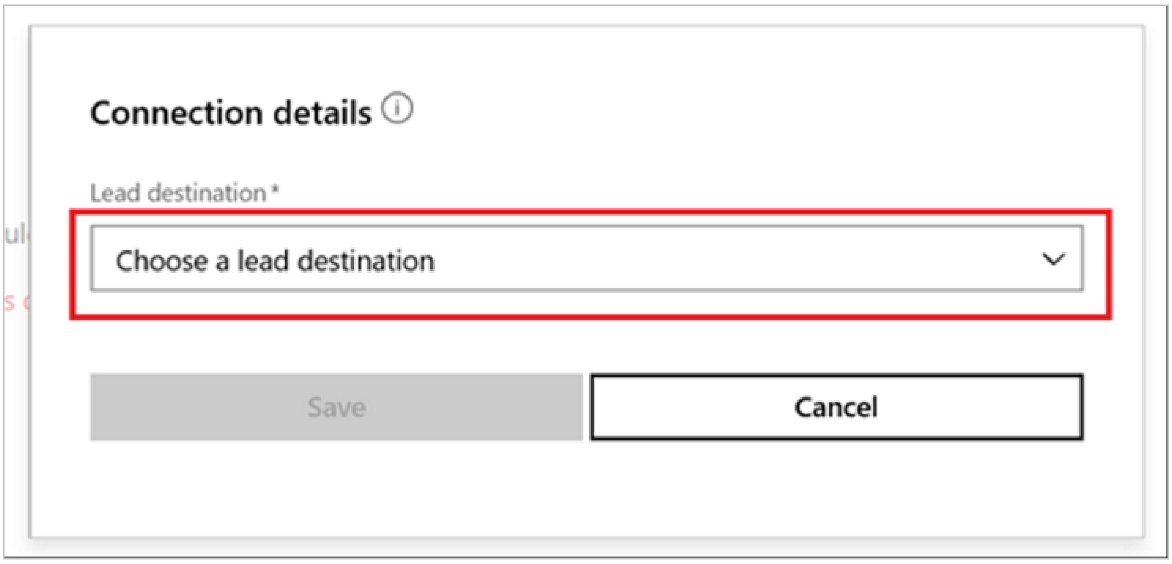
Configure your offer to send leads to Azure Blob storage

When you are ready to configure the lead management information for your offer in the publishing portal, follow the below steps:

1. Navigate to the **Offer setup** page for your offer.
2. Under the **Customer leads** section, select **Connect**.

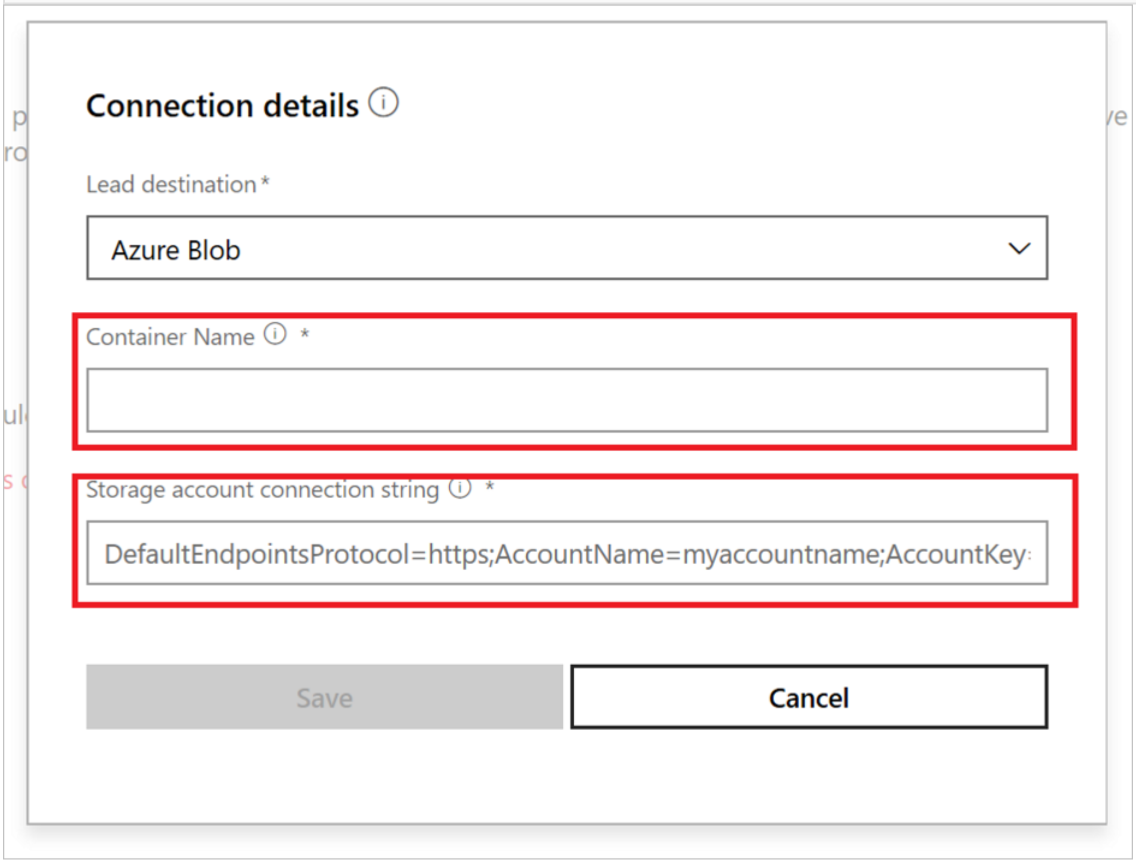


3. On the Connection details pop-up window, select **Azure Blob** for the Lead Destination.



4. Provide the **Container name** and **Storage Account Connection string** you got from following these instructions.

- Container name example: `marketplaceleadcontainer`
- Storage Account Connection string example:
`DefaultEndpointsProtocol=https;AccountName=myAccountName;AccountKey=myAccountKey;EndpointSuffix=core.windows.net`



5. Select **Save**.

> **NOTE**
>
> You must finish configuring the rest of the offer and publish it before you can receive leads for the offer.

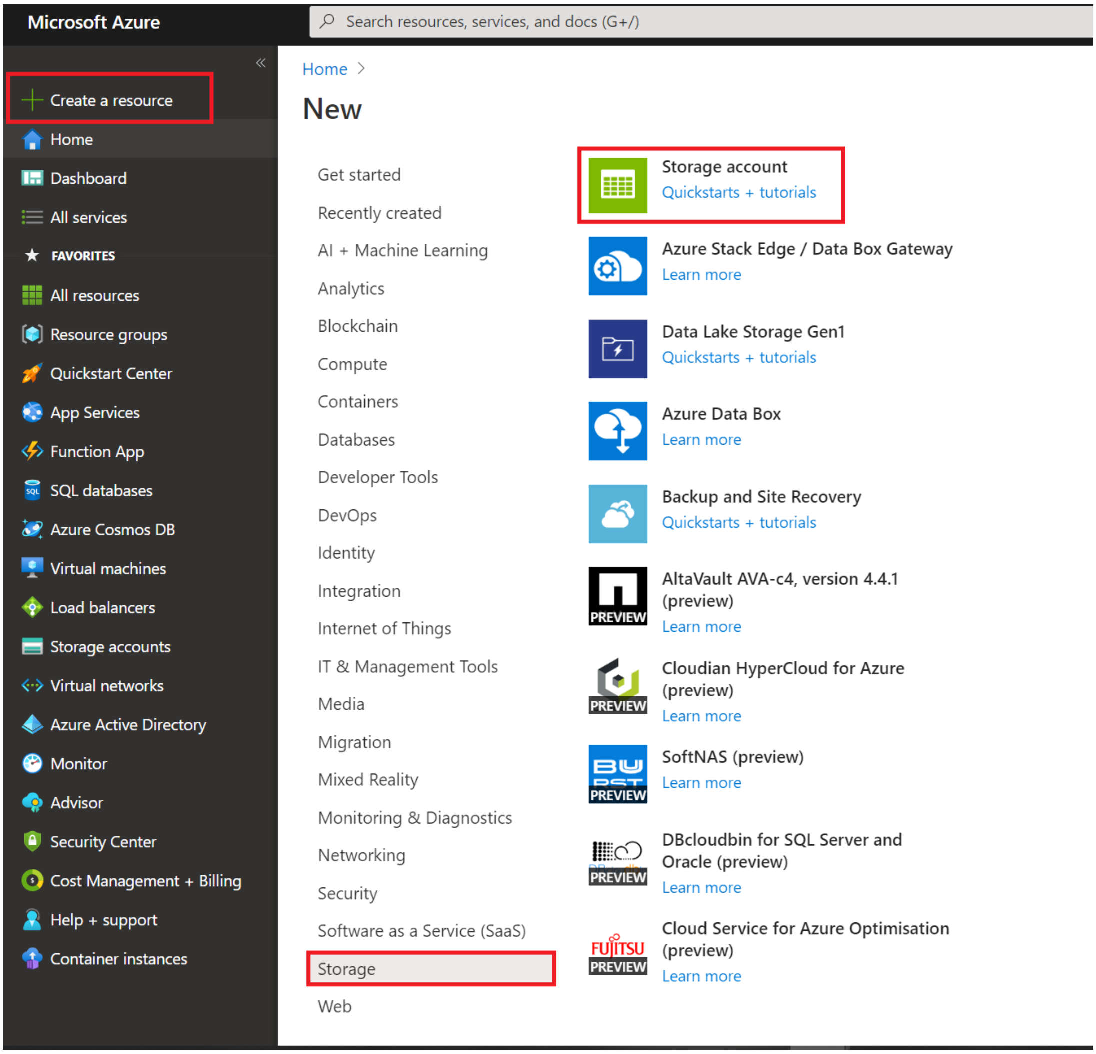
Use Azure Table storage to manage commercial marketplace leads

11/22/2021 • 7 minutes to read • Edit Online

If your customer relationship management (CRM) system isn't explicitly supported in Partner Center to receive Microsoft AppSource and Azure Marketplace leads, you can use Azure Table storage to handle these leads. You can then choose to export the data and import it into your CRM system. This article explains how to create an Azure storage account and a table under that account. In addition, you can create a new flow by using Power Automate to send an email notification when your offer receives a lead.

Configure an Azure storage account

1. If you don't have an Azure account, you can create a free trial account.
2. After your Azure account is active, sign in to the Azure portal.
3. In the Azure portal, create a storage account by using the following procedure:
   a. Select **+ Create a resource** in the left menu bar. The **New** pane appears to the right.
   b. Select **Storage** in the **New** pane. A **Featured** list appears to the right.
   c. Select **Storage account** to begin account creation. Follow the instructions in Create a storage account.

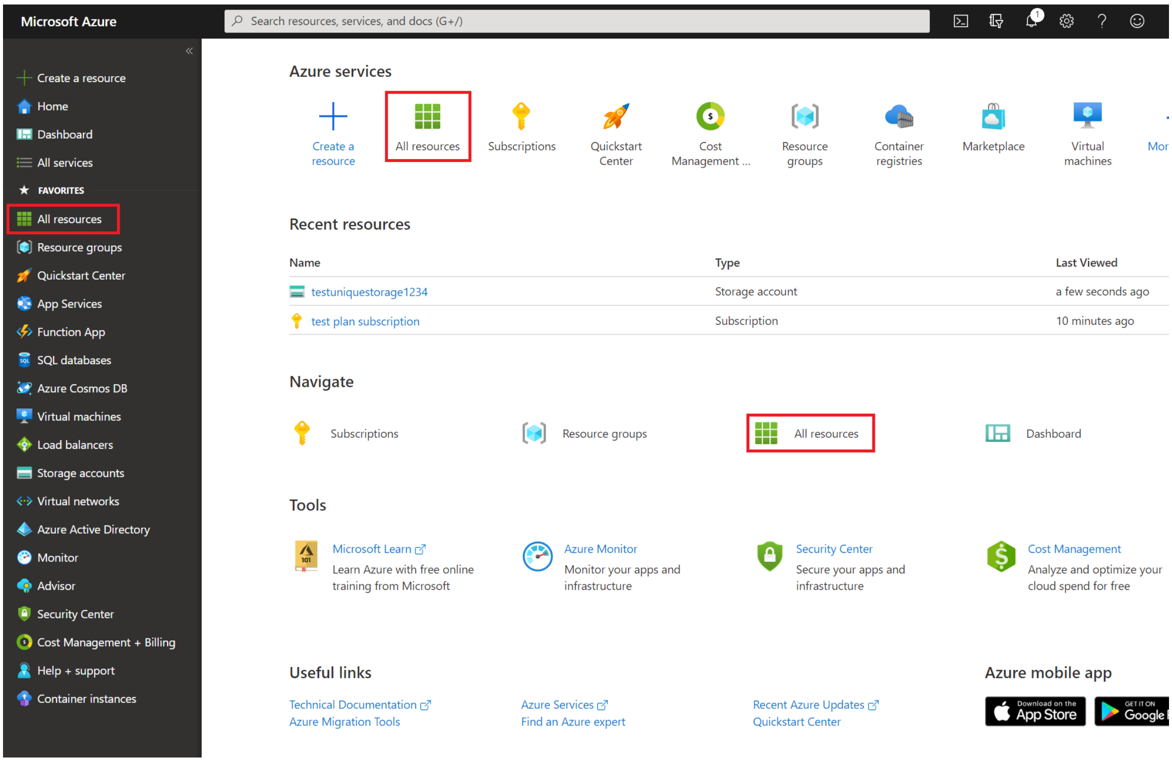


For more information about storage accounts, see Quickstart tutorial. For more information about storage pricing, see Storage pricing.

4. Wait until your storage account is provisioned. This process typically takes a few minutes.

Create a table in your storage account

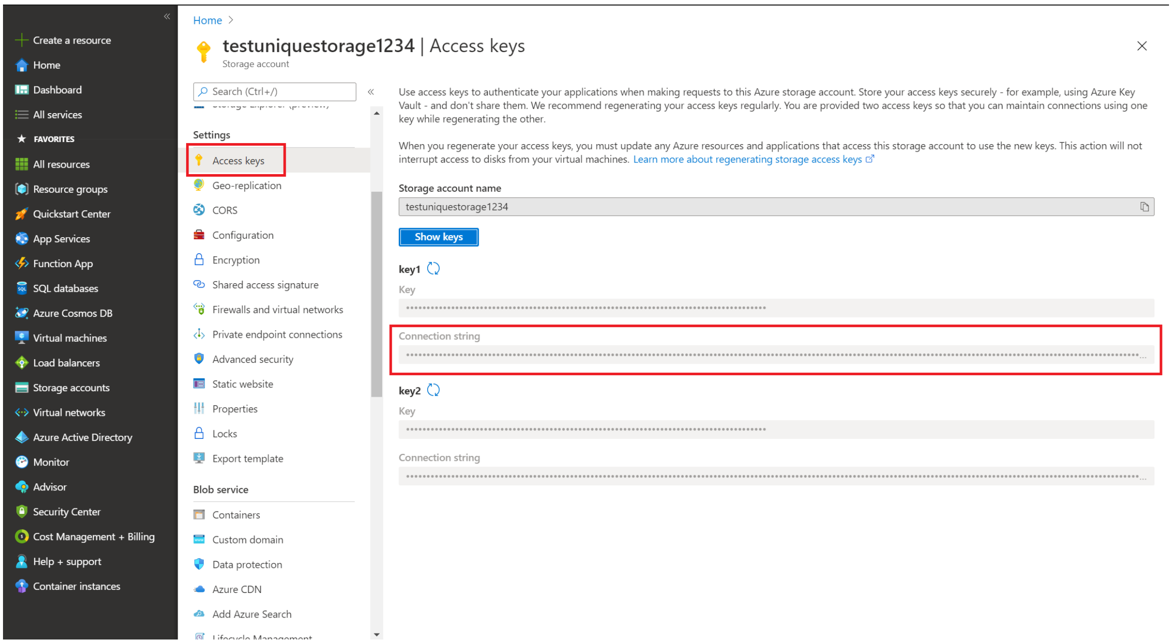
1. From the **Home** page of the Azure portal, select **See all your resources** to access your storage account. You can also select **All resources** from the left menu bar of the Azure portal.



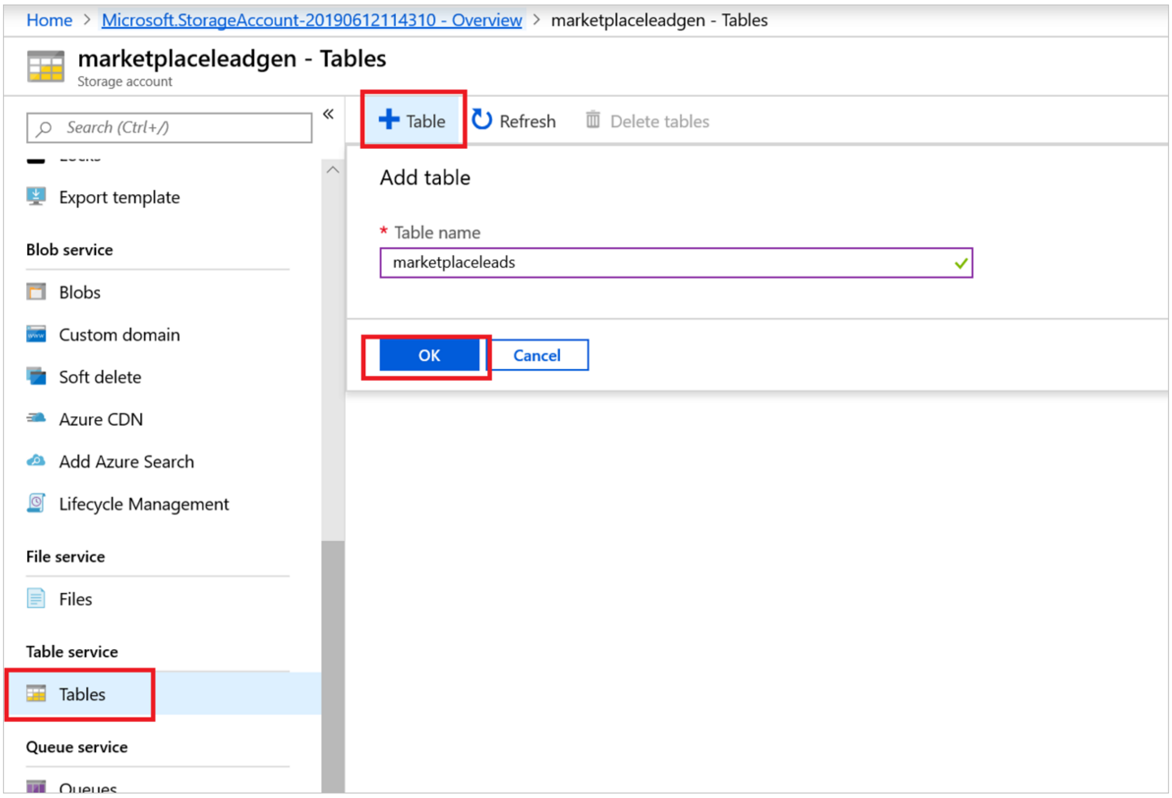
2. From your storage account pane, select **Access keys** and copy the **Connection string** value for the key. Save this value because it's the **Storage Account Connection String** value that you'll need to provide in the publishing portal to receive leads for your Azure Marketplace offer.

   Here's an example of a connection string.

```
DefaultEndpointsProtocol=https;AccountName=myAccountName;AccountKey=myAccountKey;EndpointSuffix=core.
screens.net
```



3. From your storage account pane, select **Tables**, and select **+ Table** to create a table. Enter a name for your table, and select **OK**. Save this value because you'll need it if you want to configure a flow to receive email notifications when leads are received.



You can use Azure Storage Explorer or any other tool to see the data in your storage table. You can also export the data in the Azure table.

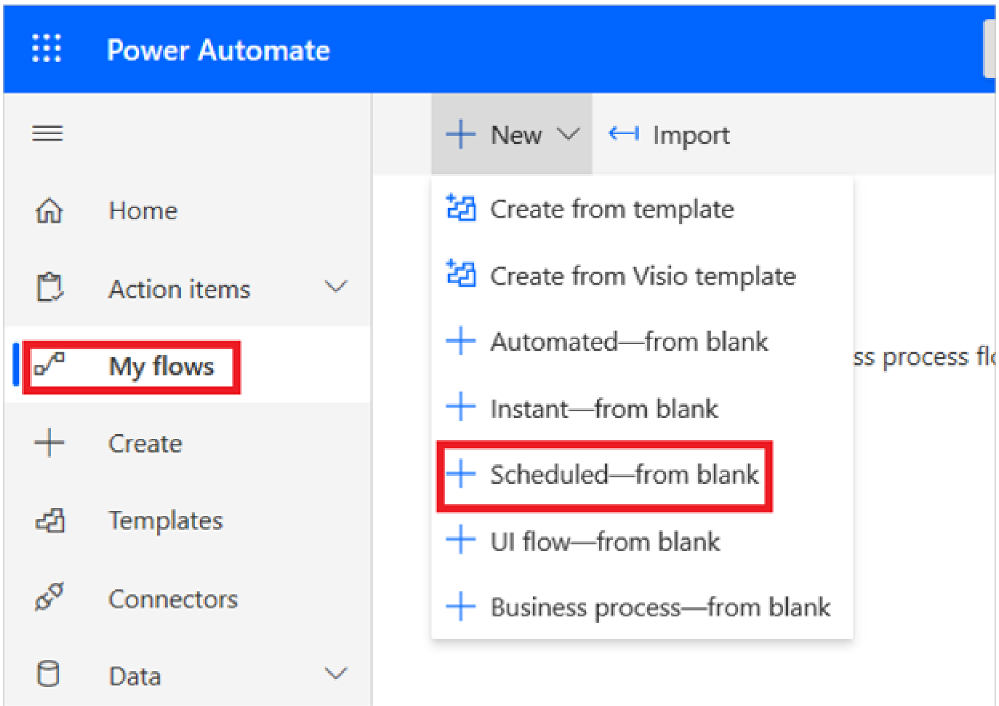
(Optional) Use Power Automate to get lead notifications

You can use Power Automate to automate notifications every time a lead is added to your Azure Storage table. If you don't have an account, you can sign up for a free account.

Lead notification example

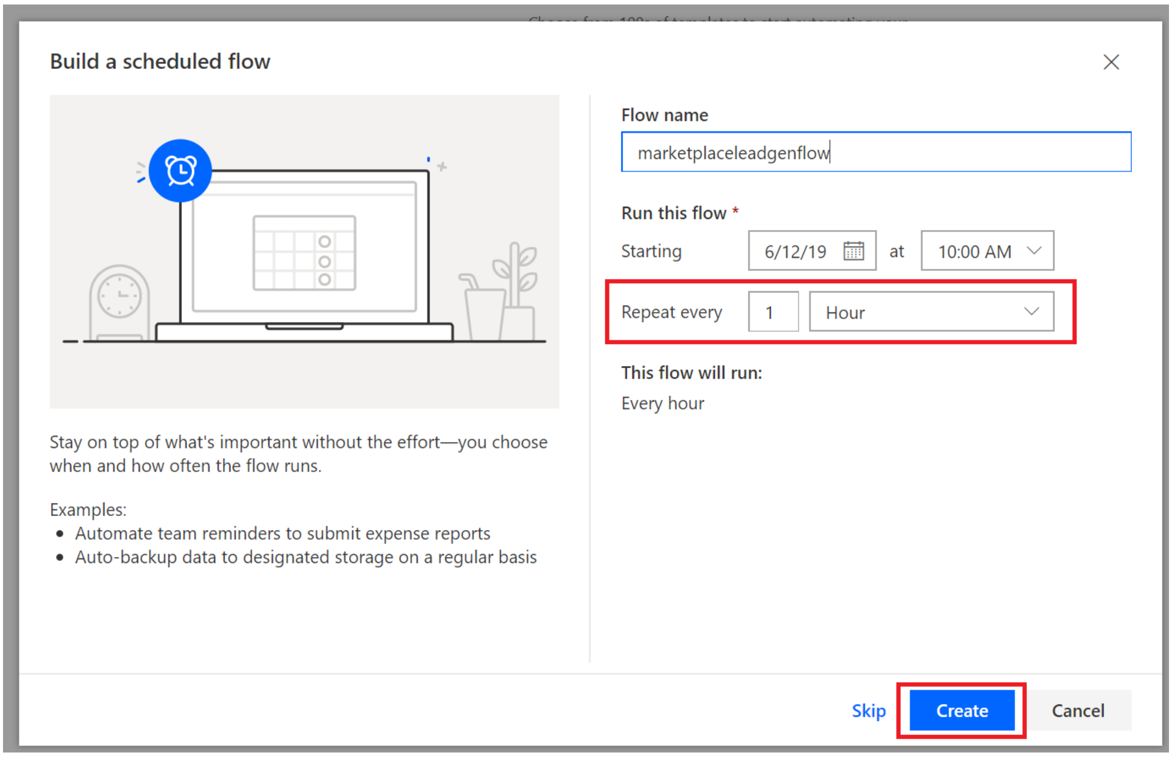
The example creates a flow that automatically sends an email notification when a new lead is added to Azure Table storage. This example sets up a recurrence to send lead information every hour if the table storage is updated.

1. Sign in to your Power Automate account.
2. On the left bar, select **My flows**.
3. On the top bar, select **+ New**.
4. In the drop-down list, select **+ Scheduled--from blank**.



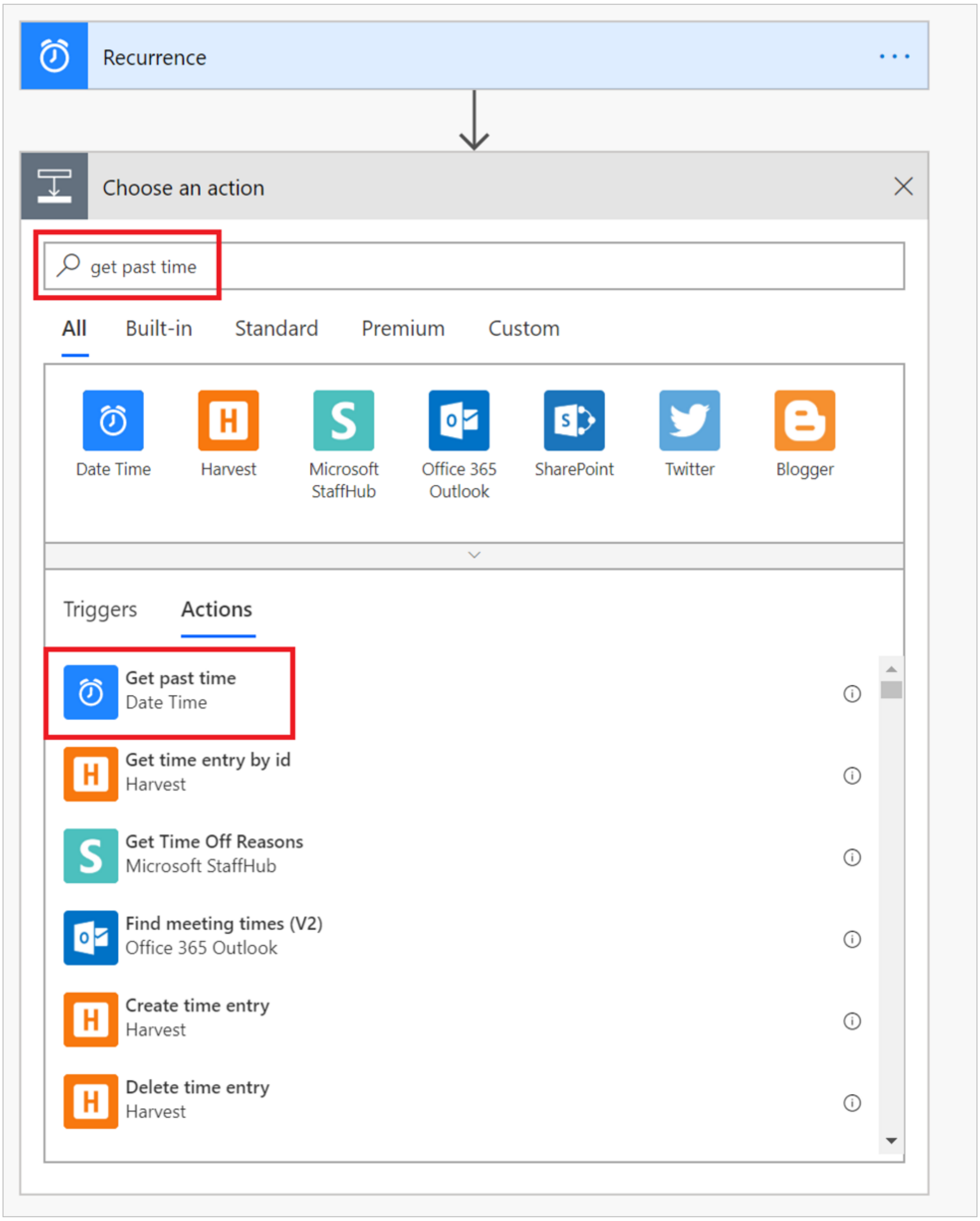
5. In the **Build a scheduled flow** window, for **Repeat every**, select **1** for the interval and **Hour** for the frequency. Also, give the flow a name if you want. Select **Create**.

> **NOTE**
>
> Although this example uses a one-hour interval, you can select the interval and frequency that's best for your business needs.



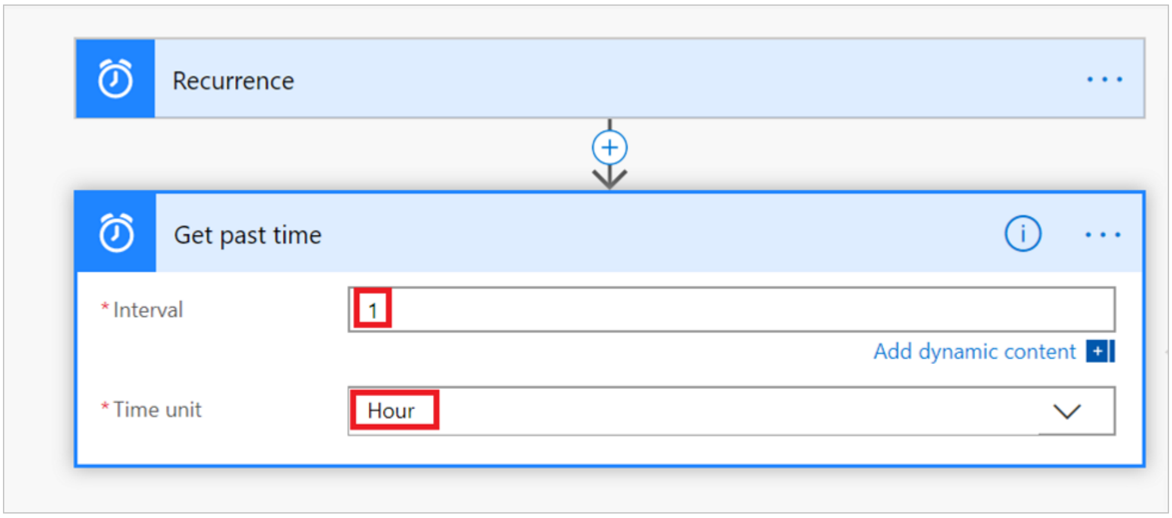
6. Select **+ New step**.

7. In the **Choose an action** window, search for **get past time**. Then under **Actions**, select **Get past time**.



8. In the **Get past time** window, set **Interval** to **1**. From the **Time unit** drop-down list, select **Hour**.

> **IMPORTANT**
>
> Make sure that the interval and time unit you sent in Step 8 match the interval and frequency that you configured for recurrence in Step 5.

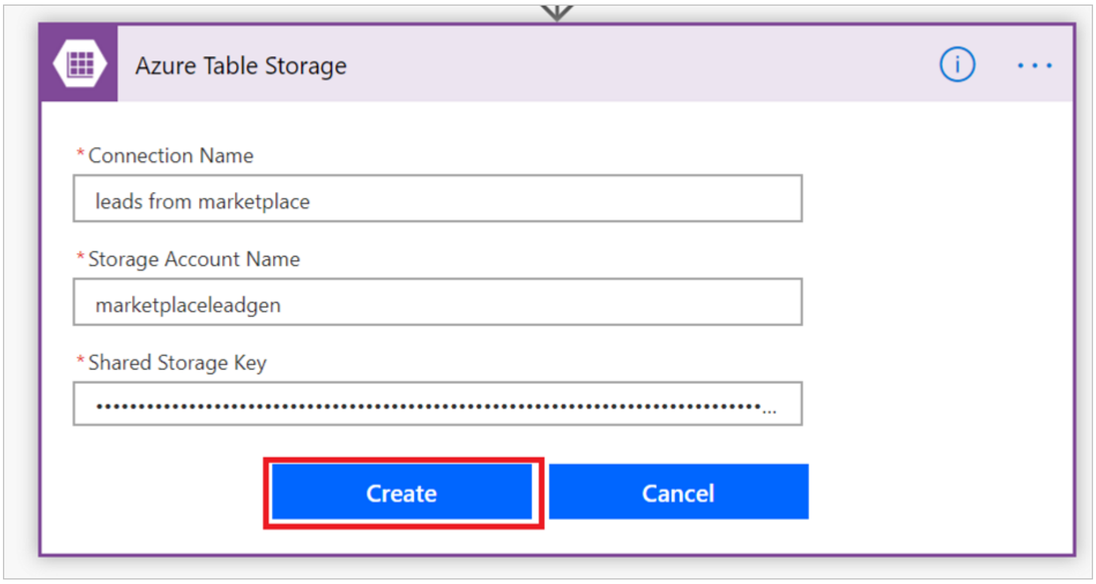


TIP

You can check your flow at any time to verify each step is configured correctly. To check your flow, select **Flow checker** from the **Flow** menu bar.

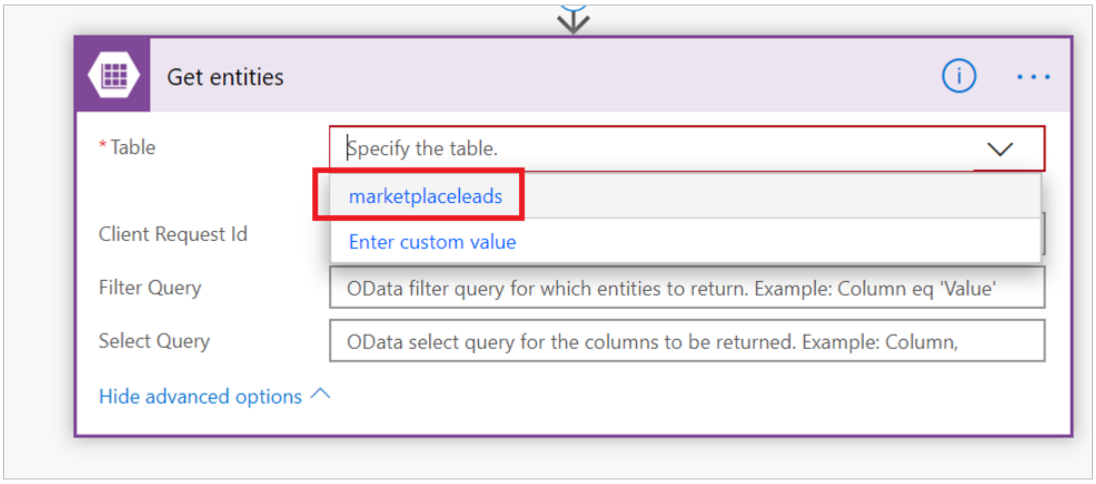
In the next set of steps, you'll connect to your table and set up the processing logic to handle new leads.

9. Select **+ New step**. Then search for **Get entities** In the **Choose an action** window.
10. Under **Actions**, select **Get entities (Azure Table Storage)**.
11. In the **Azure Table Storage** window, provide information for the following boxes and select **Create**:
    - **Connection Name**: Provide a meaningful name for the connection you're establishing between this flow and the table.
    - **Storage Account Name**: Provide the name of the storage account for your table. You can find this name on the storage account's **Access keys** page.
    - **Shared Storage Key**: Provide the key value for your store account for your table. You can find this value on the storage account's **Access keys** page.

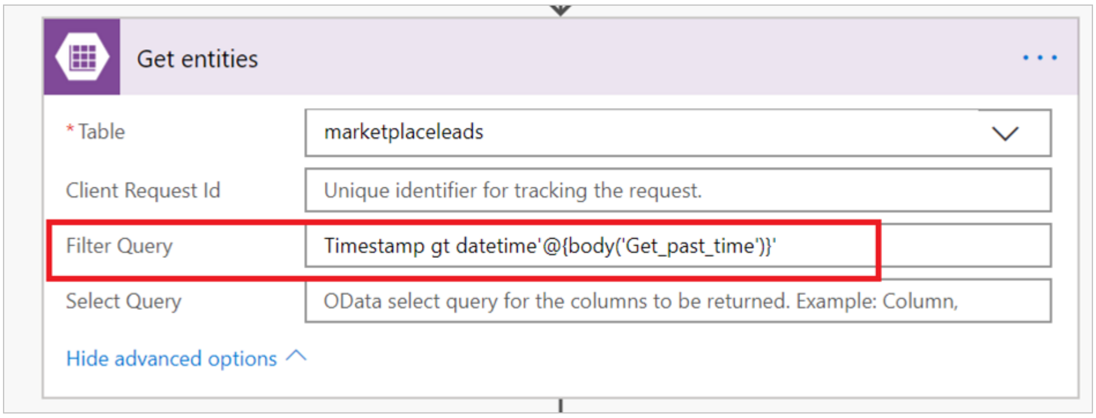


After you select **Create**, the **Get entities** window appears. Here, select **Show advanced options**, and provide information for the following boxes:

- **Table**: Select the name of your table (from Create a table). The following image shows the prompt when `marketplaceleads` table is selected for this example.

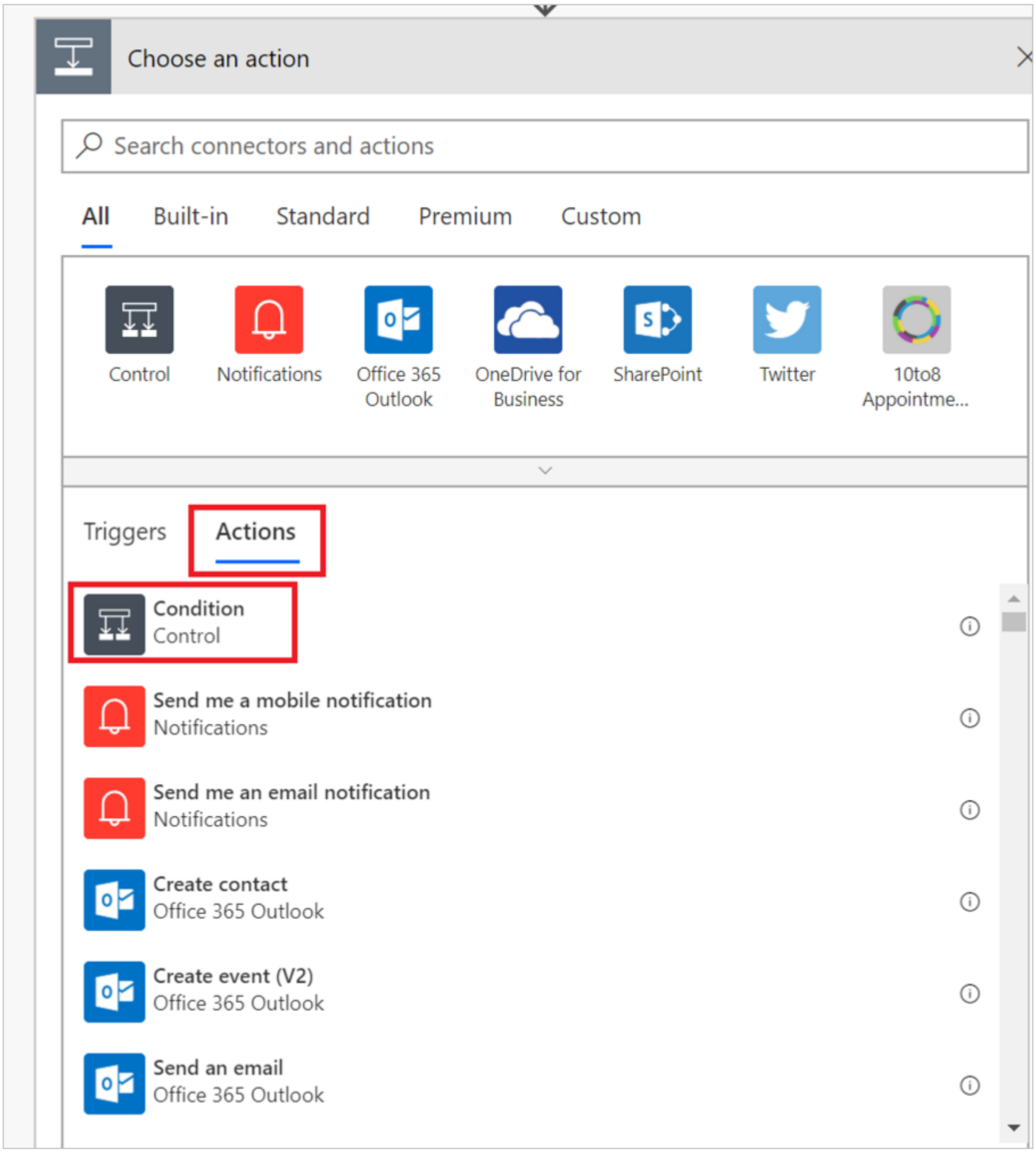


- **Filter Query**: Select this box, and paste this function into the box: `Timestamp gt datetime'@{body('Get_past_time')}'`



12. Now that you've completed setting up the connection to the Azure table, select **New step** to add a condition to scan the Azure table for new leads.

13. In the **Choose an action** window, select **Actions**. Then select **Condition Control**.



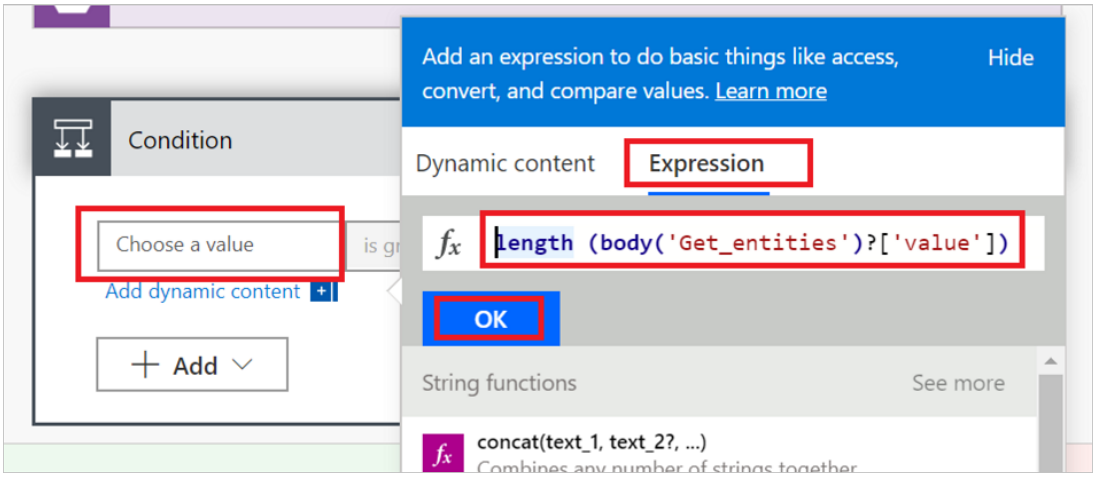
14. In the **Condition** window, select **Choose a value**. Then select **Expression** in the pop-up window.

15. Paste `length(body('Get_entities')?['value'])` into the **fx** box. Select **OK** to add this function.

16. To finish setting up the condition:

    a. Select **is greater than** from the drop-down list.

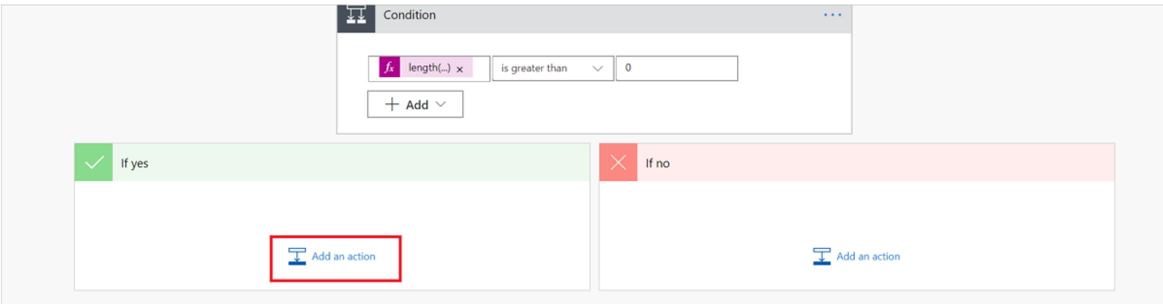
    b. Enter **0** as the value.



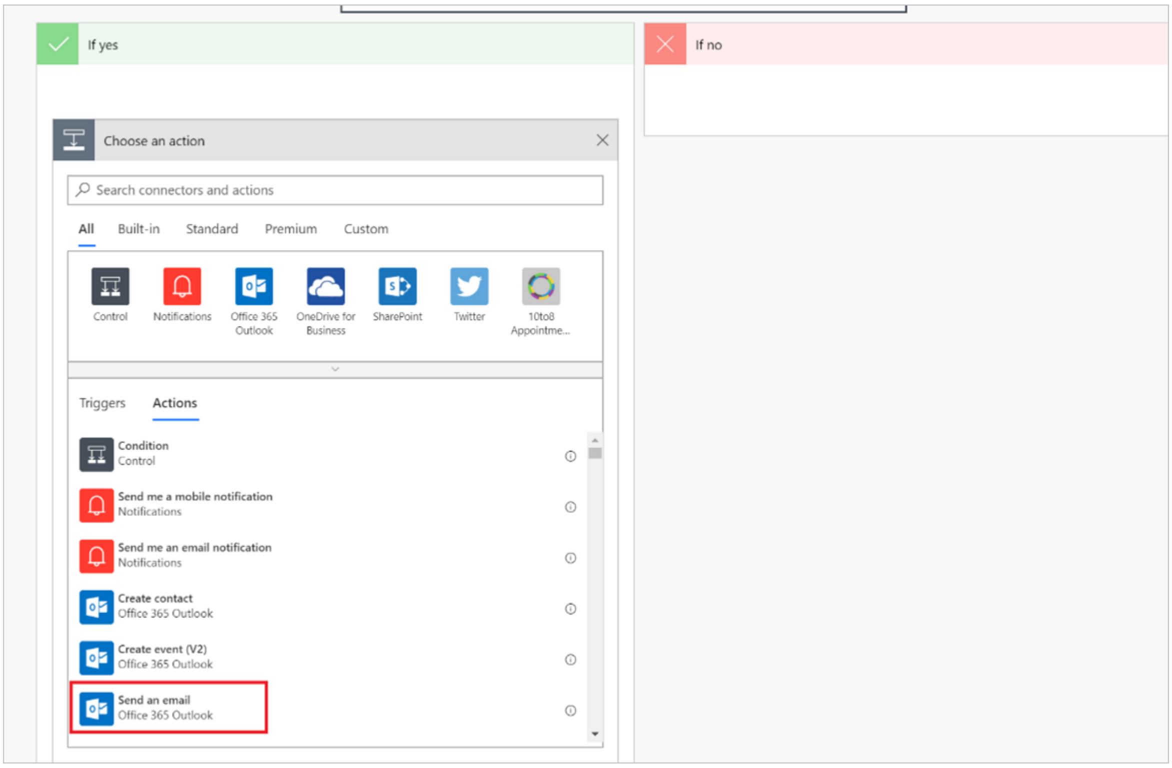
In the next few steps, you set up the action to take based on the result of the condition:

- If the condition resolves to **If no**, don't do anything.
- If the condition resolves to **If yes**, trigger an action that connects your work or school account to send an email.

17. Select **Add an action** under **If yes**.



18. Select **Send an email (Office 365 Outlook)**.



> **NOTE**
>
> To use a different email provider, search for and select **Send an email notification (Mail)** as the action instead. The instructions show you how to configure by using Office 365 Outlook, but the instructions are similar for a different email provider.

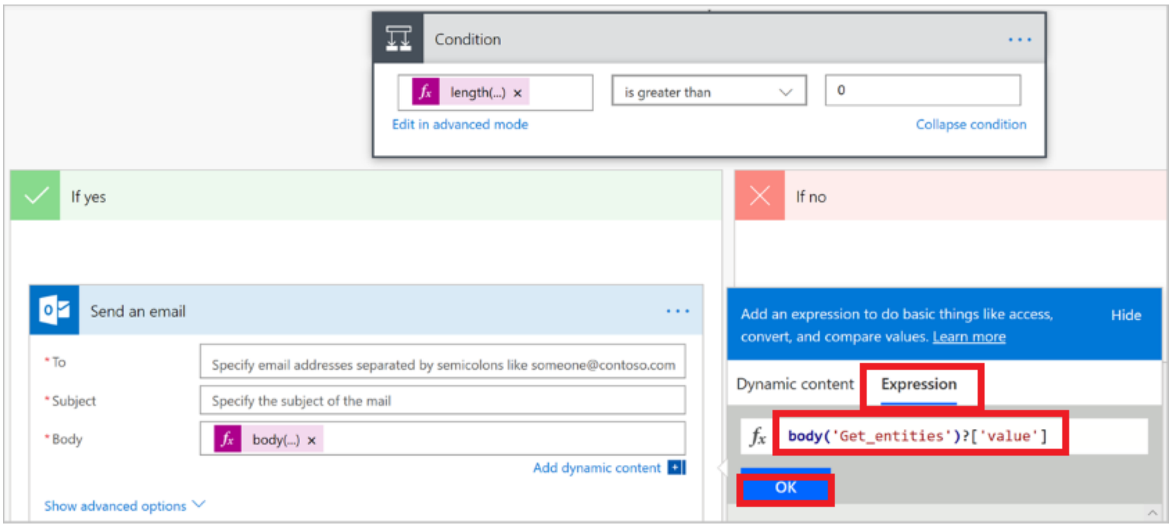
19. In the Office 365 Outlook window, provide information for the following boxes:

    a. **To**: Enter an email address for everyone who will get this notification.

    b. **Subject**: Provide a subject for the email. An example is **New leads!**

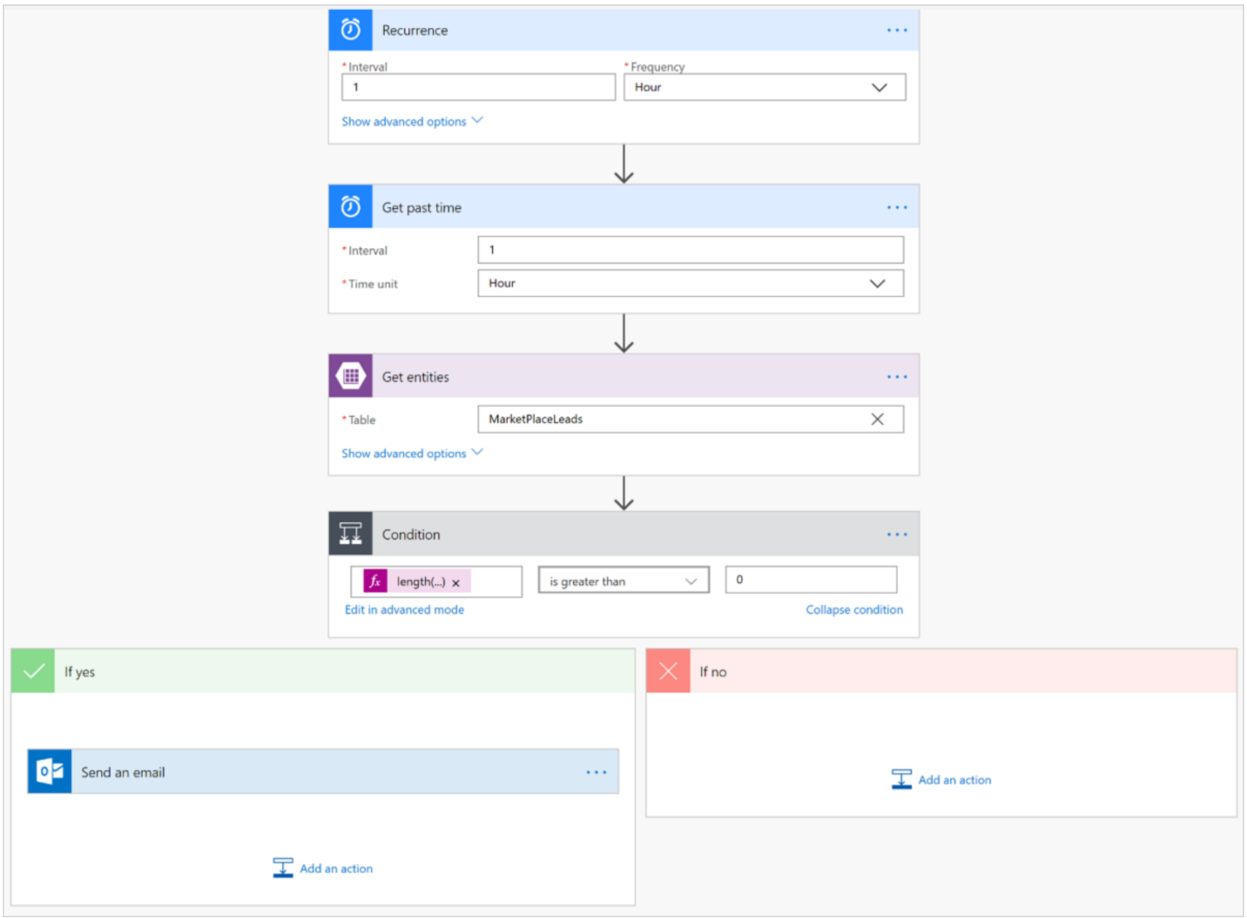
    c. **Body**: Add the text that you want to include in each email (optional), and then paste in `body('Get_entities')?['value']`.

> **NOTE**
>
> You can insert additional static or dynamic data points to the body of this email.



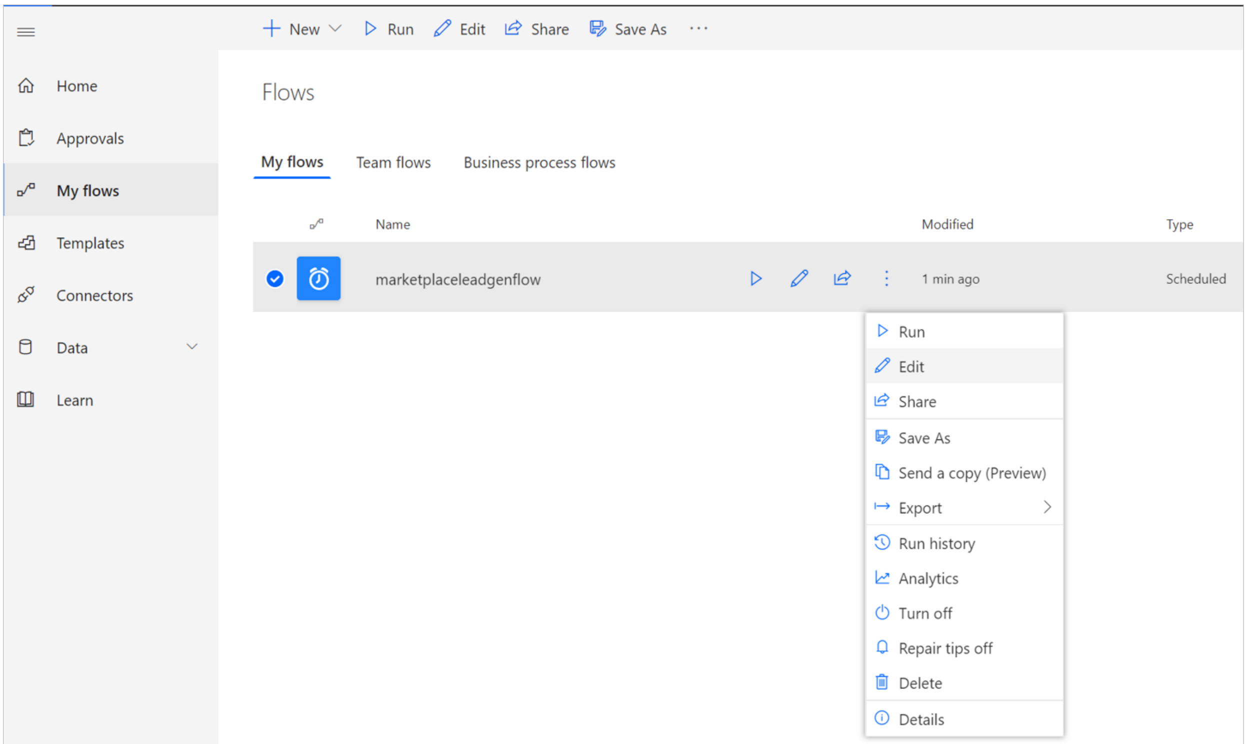
20. Select **Save** to save the flow. Power Automate automatically tests the flow for errors. If there aren't any errors, your flow starts running after it's saved.

The following image shows an example of how the final flow should look.



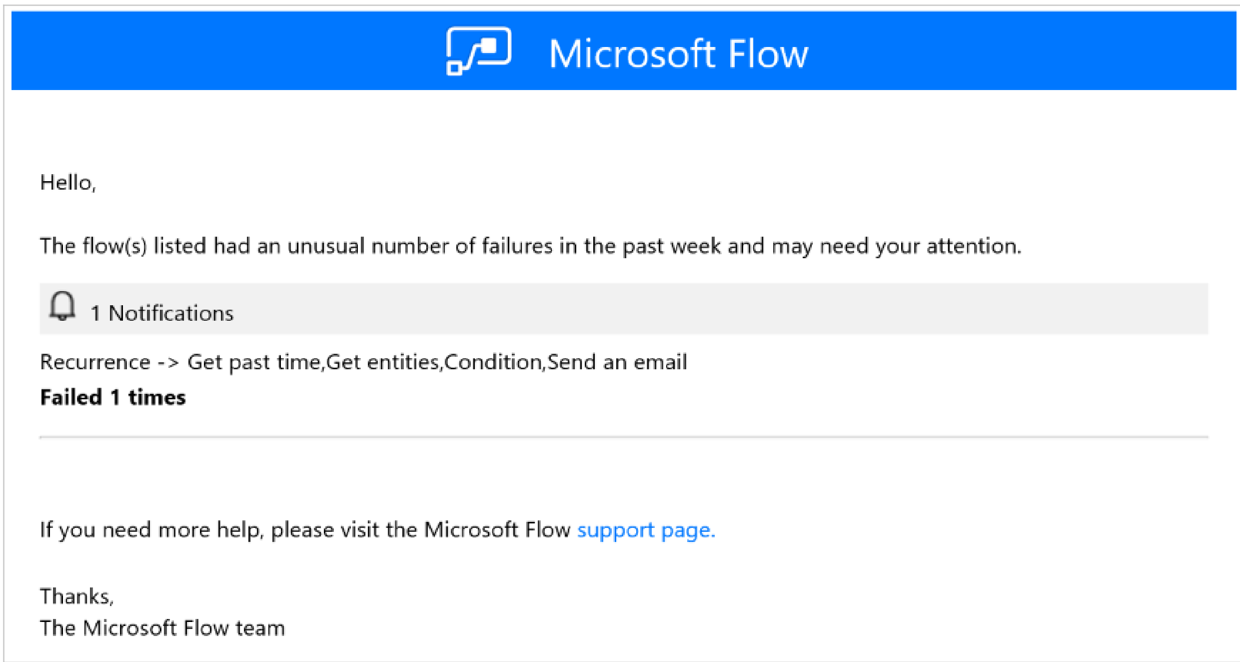
Manage your flow

Managing your flow after it's running is easy. You have complete control over your flow. For example, you can stop it, edit it, see a run history, and get analytics. The following image shows the options that are available to manage a flow.



The flow keeps running until you stop it by using the **Turn flow off** option.

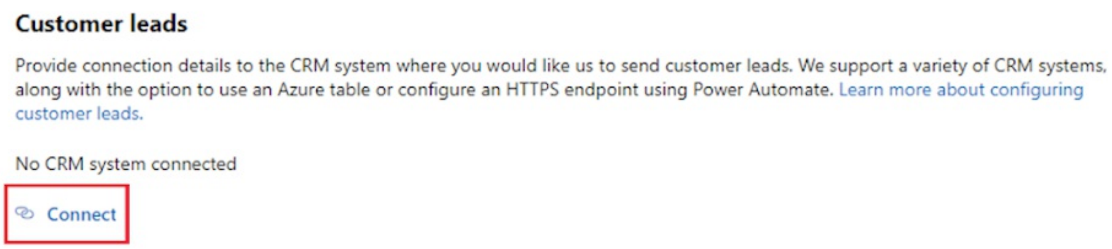
If you're not getting any lead email notifications, it means that new leads haven't been added to the Azure table. If there are any flow failures, you'll get an email like this example.



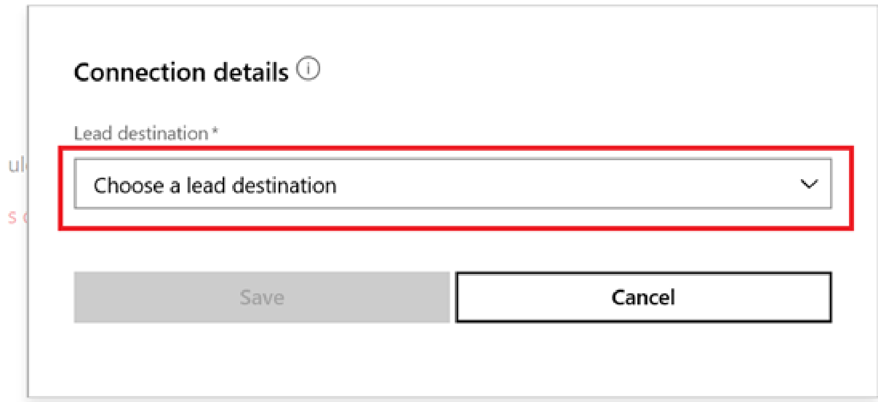
Configure your offer to send leads to the Azure table

When you're ready to configure the lead management information for your offer in the publishing portal, follow these steps.

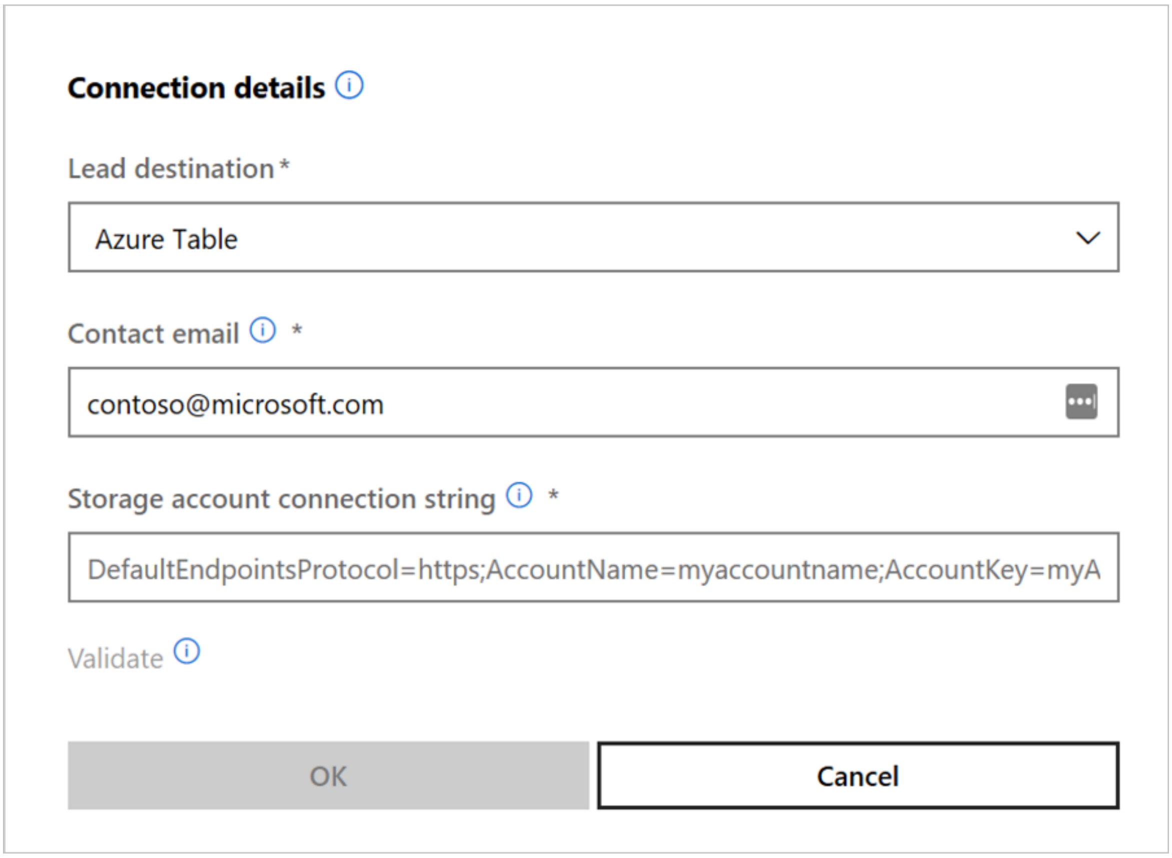
1. Go to the **Offer setup** page for your offer.
2. Under the **Customer leads** section, select **Connect**.



3. In the **Connection details** pop-up window, select **Azure Table** for the **Lead destination**.



4. Paste in the connection string from the Azure storage account you created by following earlier steps in the **Storage account connection string** box.



5. **Contact email**: Provide emails for people in your company who should receive email notifications when a new lead is received. You can provide multiple emails by separating them with semicolons.

6. Select **OK**.

To make sure you have successfully connected to a lead destination, select the **Validate** button. If successful, you'll have a test lead in the lead destination.

> **NOTE**
> You must finish configuring the rest of the offer and publish it before you can receive leads for the offer.

When leads are generated, Microsoft sends leads to the Azure table. If you configured a flow, an email will also be sent to the email address you configured.

Next steps

- Lead management FAQ and troubleshooting

Configure lead management for Dynamics 365 Customer Engagement

11/22/2021 • 7 minutes to read • Edit Online

This article describes how to set up Dynamics 365 Customer Engagement (previously named Dynamics CRM Online). Read more about the change in Configure server-based authentication with Customer Engagement and SharePoint Online to process sales leads from your commercial marketplace offer.

> **NOTE**
>
> These instructions are specific for the Microsoft-hosted cloud environment for Dynamics 365 Customer Engagement. Connecting directly to a Dynamics on-premises environment isn't currently supported. There are other options for you to receive leads, such as configuring an HTTPS endpoint or an Azure table.

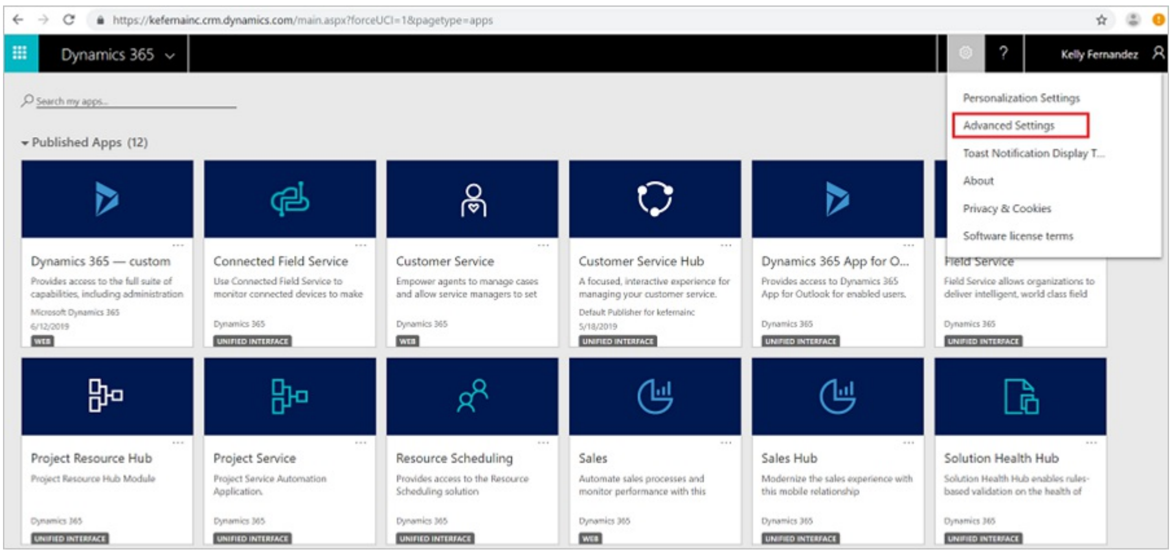
Prerequisites

The following user permissions are necessary to complete the steps in this article:

- Administrator rights on your Dynamics 365 Customer Engagement instance to be able to install a solution.
- Tenant admin rights to create a new service account for the lead service used to send leads from commercial marketplace offers.
- Access to the admin portal.
- Access to the Azure portal.

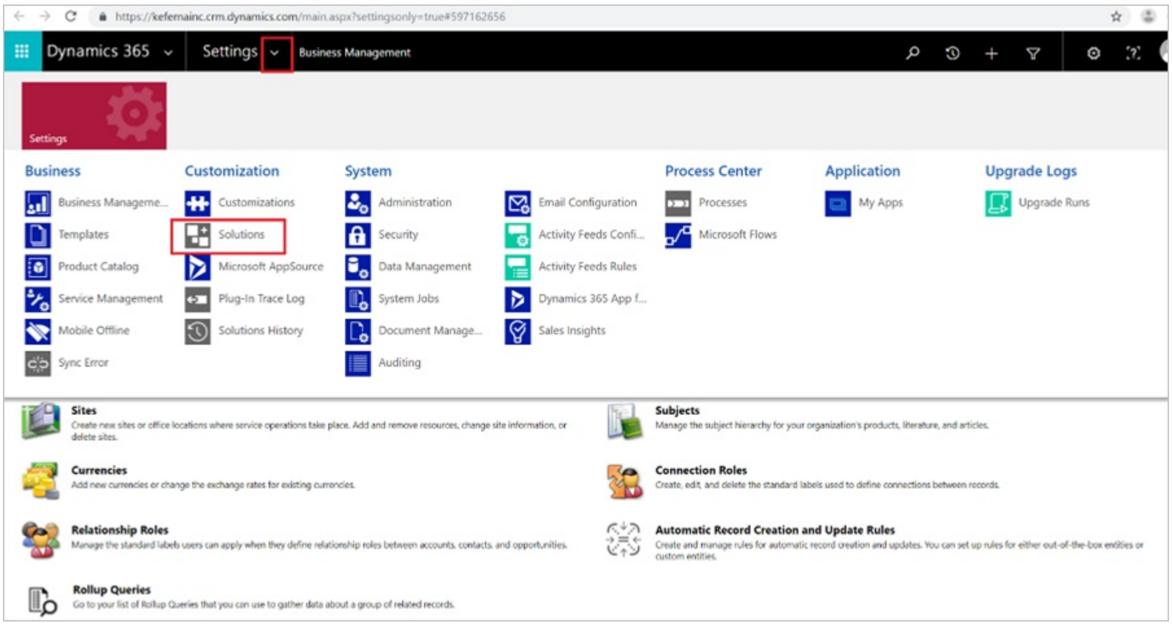
Install the solution

1. Download the Microsoft Marketplace Lead Writer solution, and save it locally to your computer.
2. Open Dynamics 365 Customer Engagement by going to the URL for your Dynamics instance, such as `https://tenant.crm.dynamics.com`.
3. Select the gear icon on the top bar, and then select **Advanced Settings**.

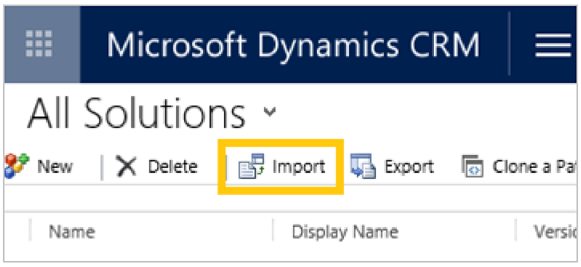


4. On the **Settings** page, open the **Settings** menu on the top bar and select **Solutions**.

> **NOTE**
>
> If you don't see the options in the following screen, you don't have the permissions you need to proceed. Contact an admin on your Dynamics 365 Customer Engagement instance.



5. On the **Solutions** page, select **Import** and go to where you saved the **Microsoft Marketplace Lead Writer** solution that you downloaded in step 1.



6. Complete importing the solution by following the Import solution wizard.

Configure user permissions

To write leads into your Dynamics 365 Customer Engagement instance, you must share a service account with Microsoft and configure permissions for the account.

Use the following steps to create the service account and assign permissions. You can use Azure Active Directory or Office 365.

> **NOTE**
>
> Skip to the corresponding instructions based on the authentication option you select. See Azure Active Directory or Office 365.

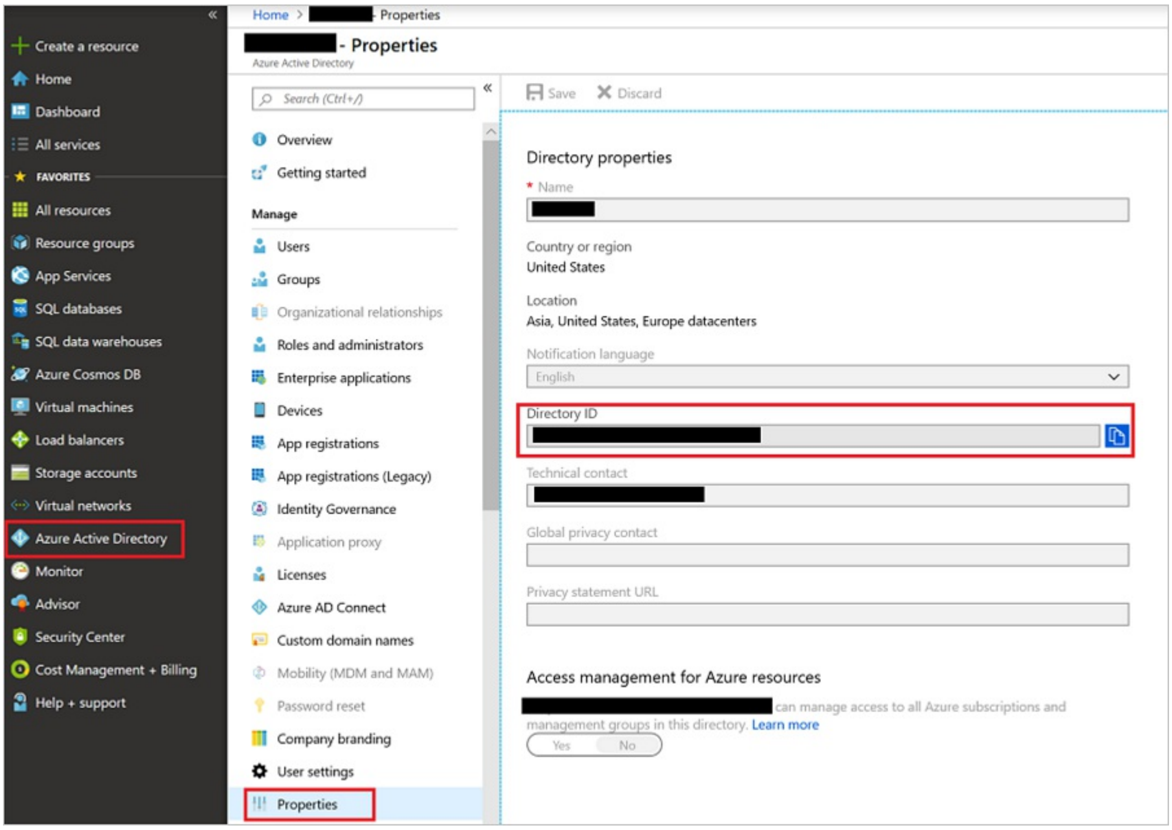
Azure Active Directory

We recommend this option because you never need to update your username or password to keep getting leads. To use the Azure Active Directory option, you provide the App ID, Application Key, and Directory ID from your Active Directory application.

To configure Azure Active Directory for Dynamics 365 Customer Engagement:

1. Sign in to the Azure portal. In the left pane, select **Azure Active Directory**.

2. Select **Properties**, and copy the **Directory ID** value on the **Directory properties** page. Save this value because you'll need to provide it in the publishing portal to receive leads for your marketplace offer.



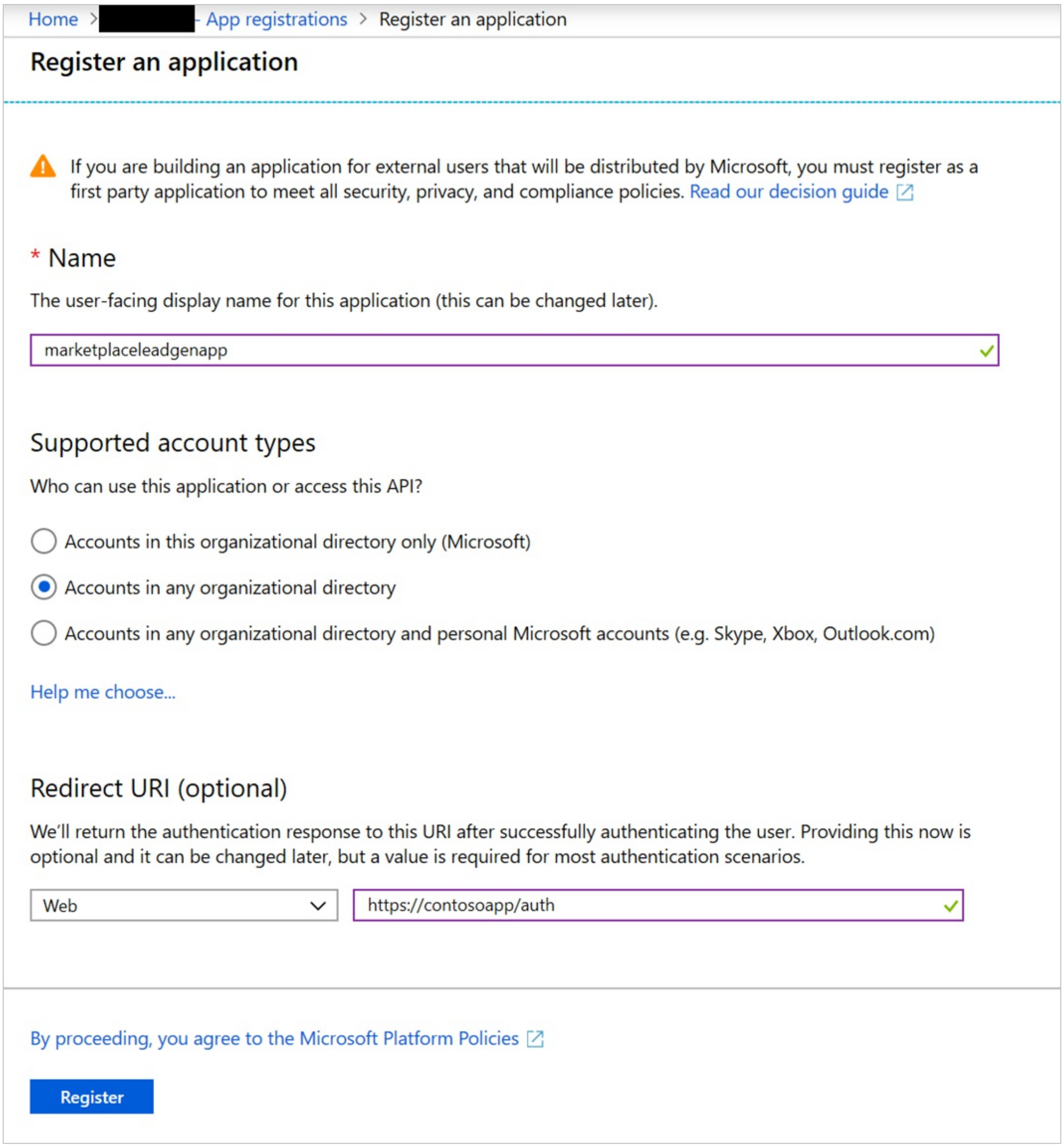
3. Select **App registrations** from the Azure Active Directory left pane, and then select **New registration** on that page.

4. Enter a meaningful name for the application name.

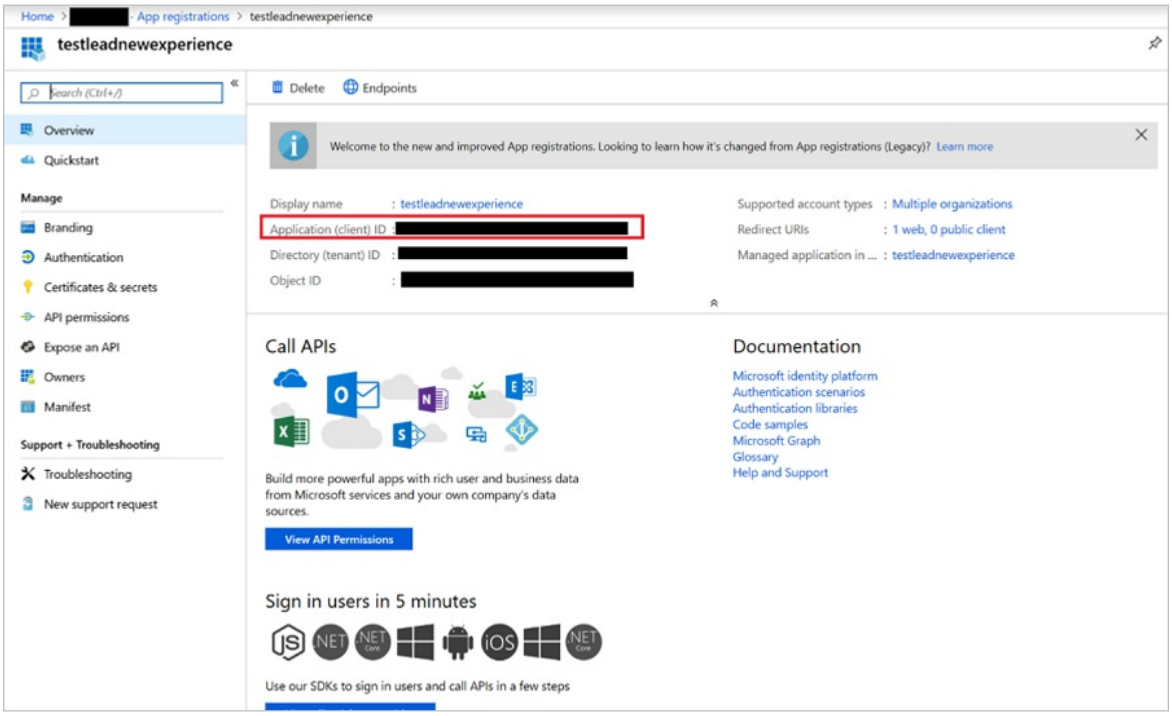
5. Under **Supported account types**, select **Accounts in any organizational directory**.

6. Under **Redirect URI (optional)**, select **Web** and enter a URI, such as `https://contosoapp1/auth`.

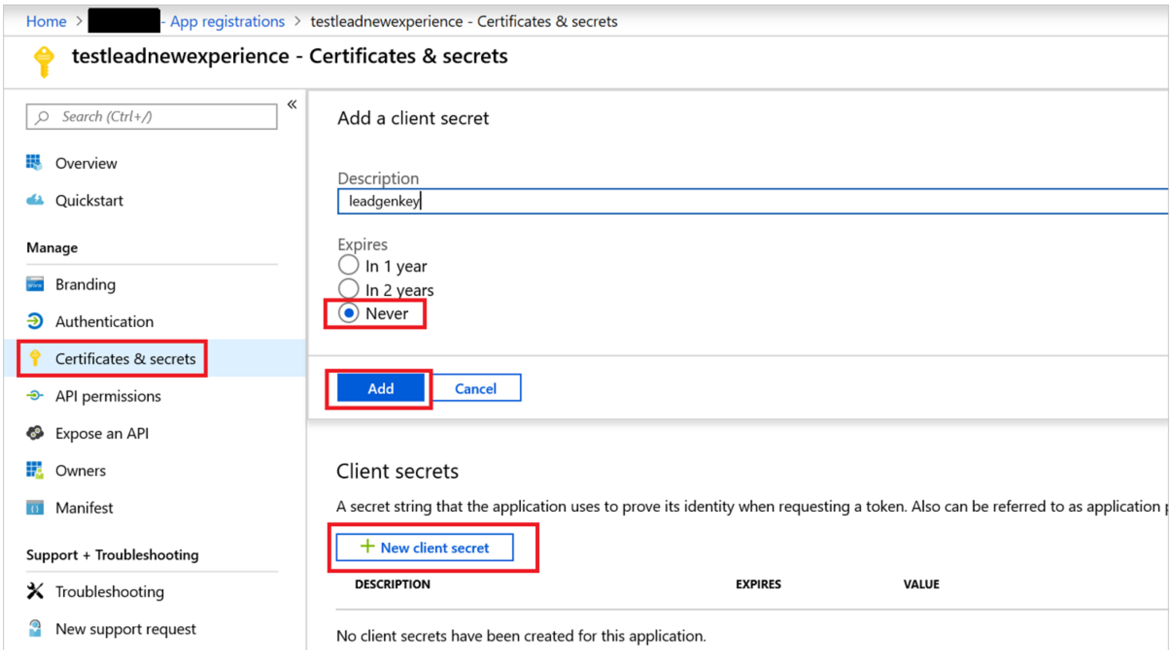
7. Select **Register**.



8. Now that your application is registered, access the application's overview page. Copy the **Application (client) ID** value on that page. Save this value because you'll need to provide it in the publishing portal and in Dynamics 365 to receive leads for your marketplace offer.



9. Select **Certificates & secrets** from the app's left pane, and select the **New client secret** button. Enter a meaningful description for the client secret, and select the **Never** option under **Expires**. Select **Add** to create the client secret.



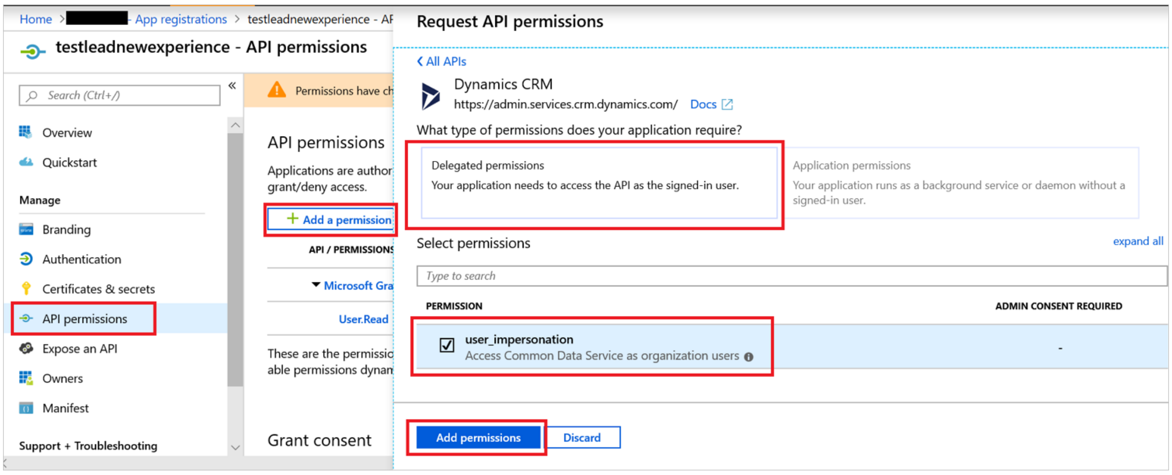
10. As soon as the client secret is successfully created, copy the **Client secret** value. You won't be able to retrieve the value after you leave the page. Save this value because you'll need to provide it in the publishing portal to receive leads for your marketplace offer.

11. Select **API permissions** from the app's left pane, and then select **+ Add a permission**.

12. Select **Microsoft APIs**, and then select **Dynamics CRM** as the API.

13. Under **What type of permissions does your application require?**, make sure **Delegated permissions** is selected.

14. Under **Permission**, select the **user_impersonation** check box for **Access Common Data Service as organization users**. Then select **Add permissions**.



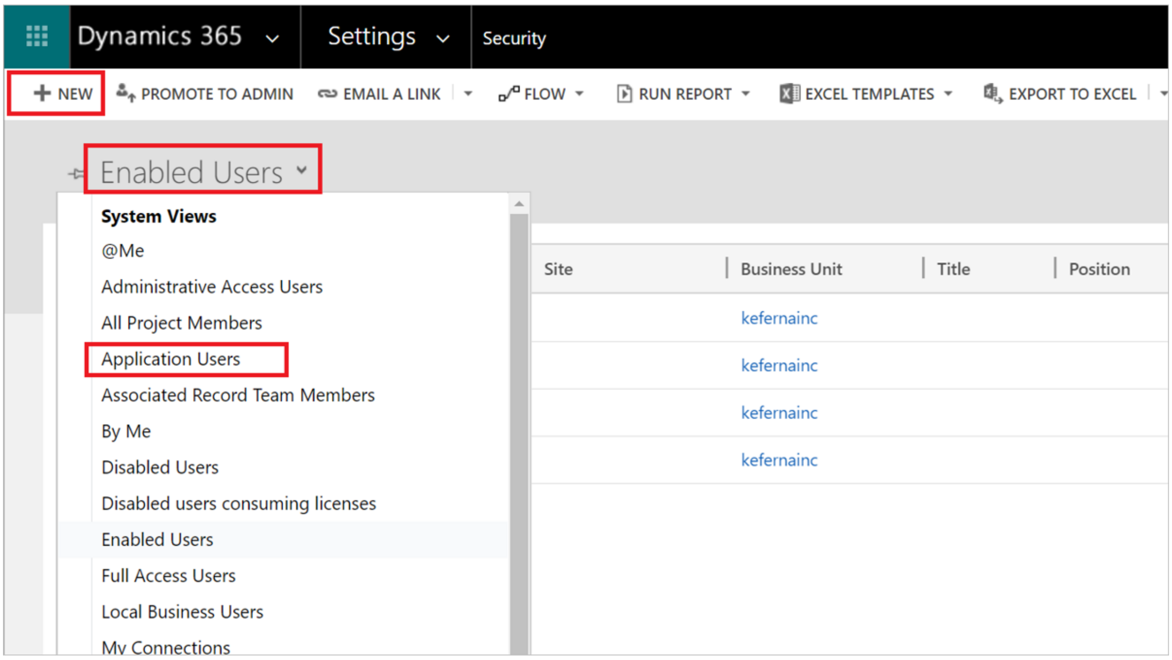
15. After you complete steps 1 through 14 in the Azure portal, go to your Dynamics 365 Customer Engagement instance by going to the URL, such as `https://tenant.crm.dynamics.com`.

16. Select the gear icon on the top bar, and then select **Advanced Settings**.

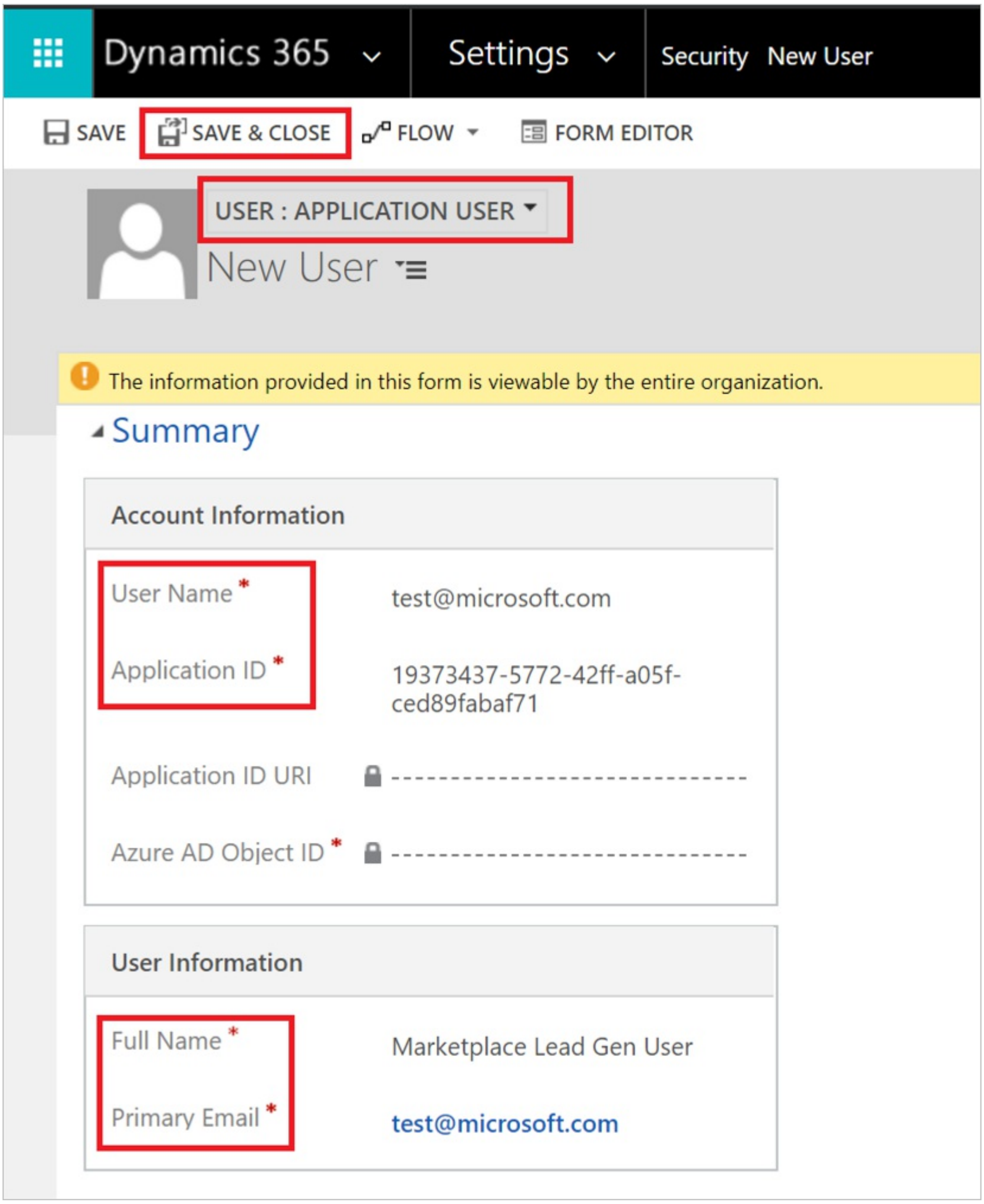
17. On the **Settings** page, open the **Settings** menu on the top bar and select **Security**.

18. On the **Security** page, select **Users**. On the **Users** page, select the **Enabled Users** drop-down and then select **Application Users**.

19. Select **New** to create a new user.



20. In the **New User** pane, make sure that **USER: APPLICATION USER** is selected. Provide a username, full name, and email address for the user that you want to use with this connection. Also, paste in the **Application ID** for the app you created in the Azure portal from step 8. Select **Save & Close** to finish adding the user.



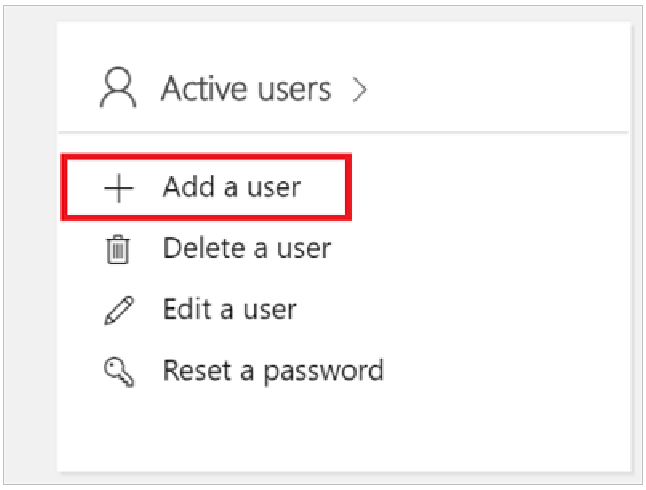
21. Go to the "Security settings" section in this article to finish configuring the connection for this user.

Office 365

If you don't want to use Azure Active Directory, you can register a new user on the Microsoft 365 admin center. You'll be required to update your username and password every 90 days to continue getting leads.

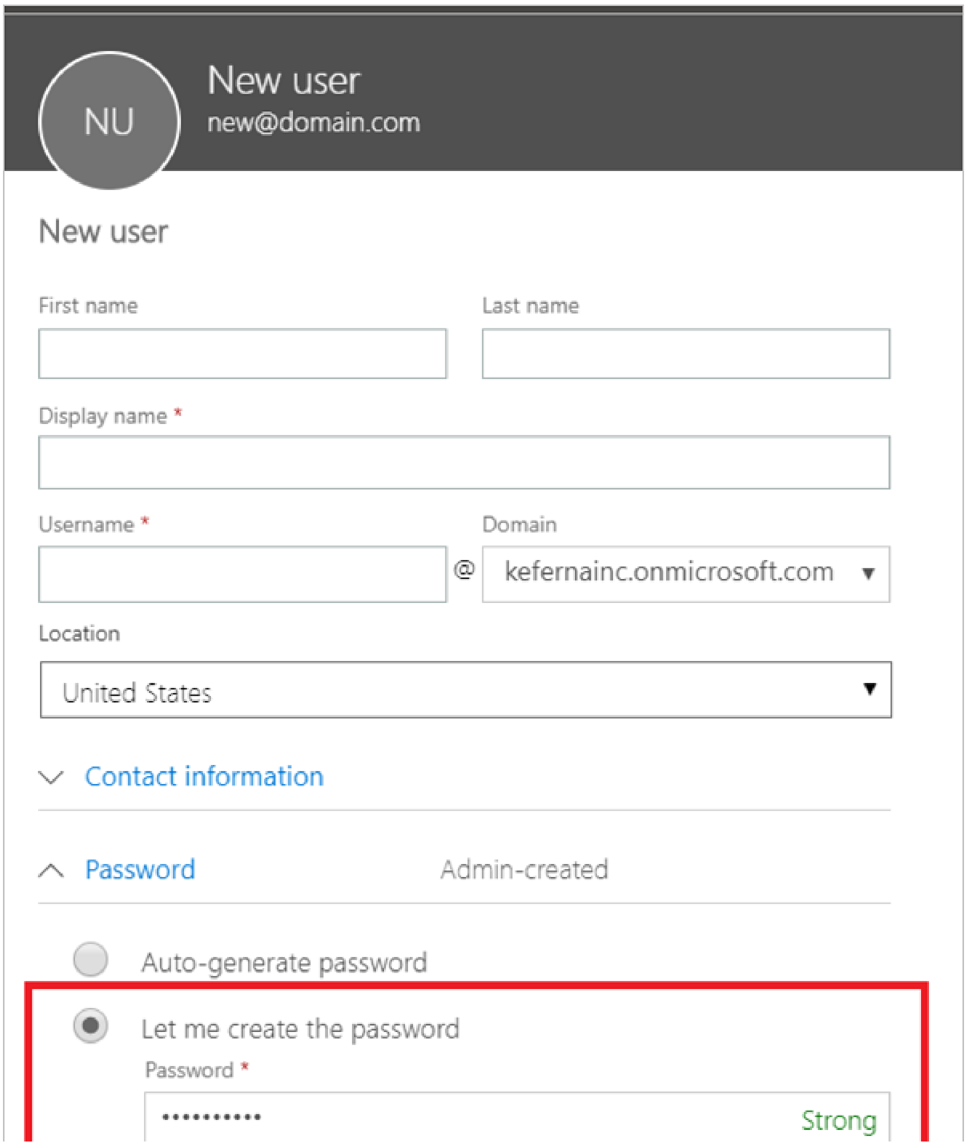
To configure Office 365 for Dynamics 365 Customer Engagement:

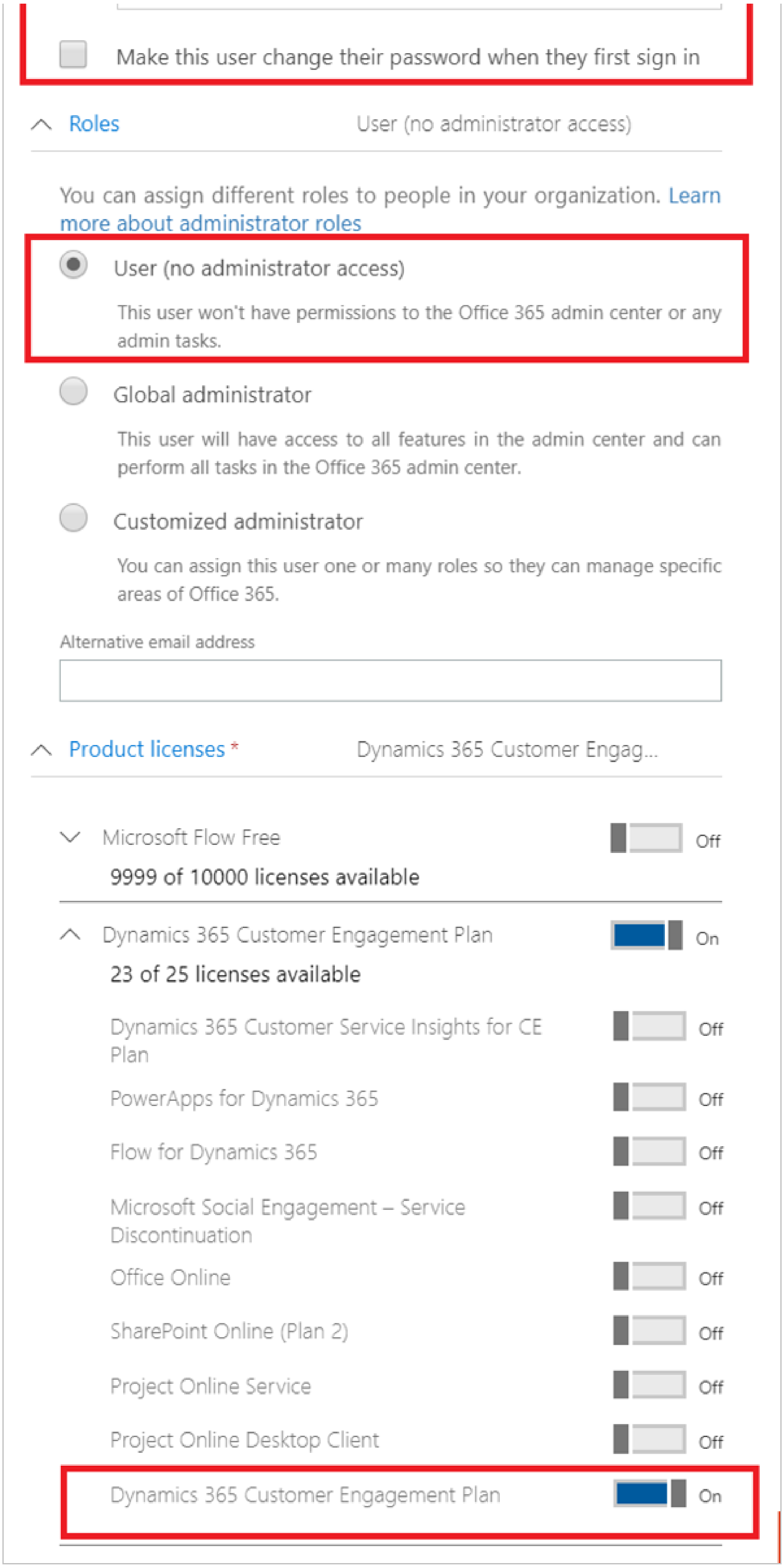
1. Sign in to the Microsoft 365 admin center.
2. Select **Add a user**.



3. Create a new user for the lead writer service. Configure the following settings:
    - Enter a username.
    - Enter a password, and clear the **Make this user change their password when they first sign in** option.
    - Select **User (no administrator access)** as the role for the user.
    - Select **Dynamics 365 Customer Engagement Plan** as the product license, as shown in the following screen. You'll be charged for the license you choose.

Save these values because you'll need to provide the **Username** and **Password** values in the publishing portal to receive leads for your marketplace offer.





Security settings

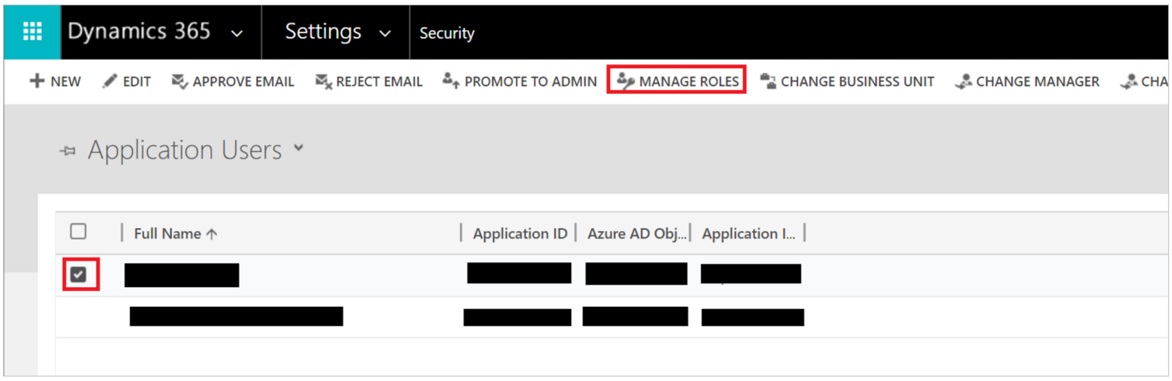
The final step is to enable the user you created to write the leads.

1. Open Dynamics 365 Customer Engagement by going to the URL for your Dynamics instance, such as `https://tenant.crm.dynamics.com`.

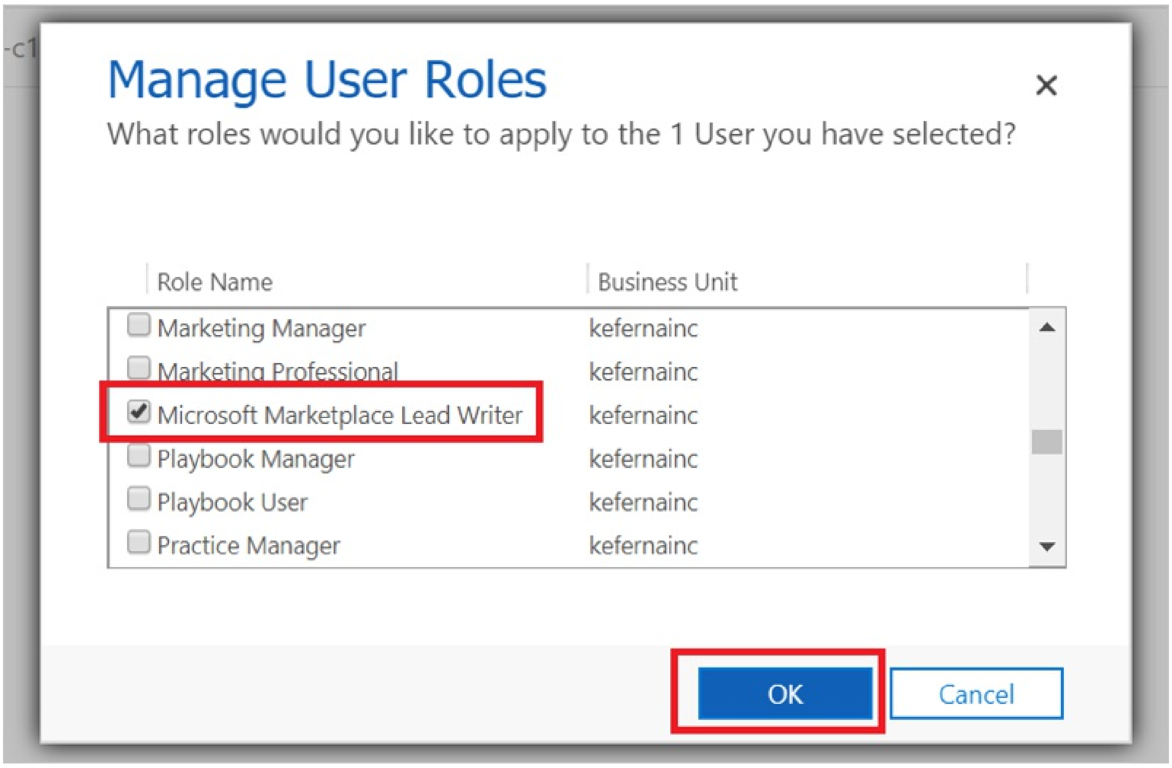
2. Select the gear icon on the top bar, and then select **Advanced Settings**.

3. On the **Settings** page, open the **Settings** menu on the top bar and select **Security**.

4. On the **Security** page, select **Users** and select the user that you created in the "Configure user permissions" section of this document. Then select **Manage Roles**.

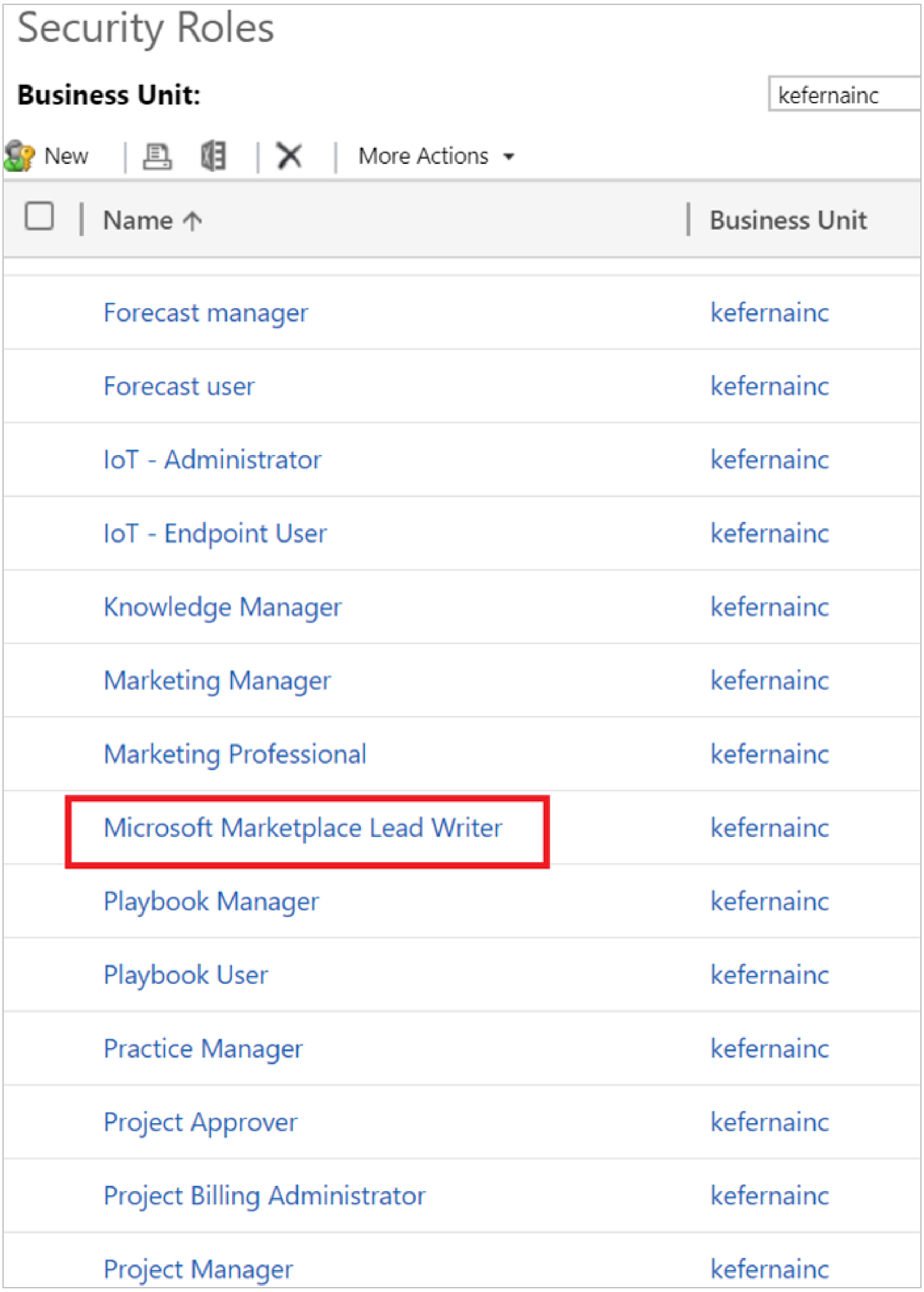


5. Search for the role name **Microsoft Marketplace Lead Writer**, and select it to assign the user the role.

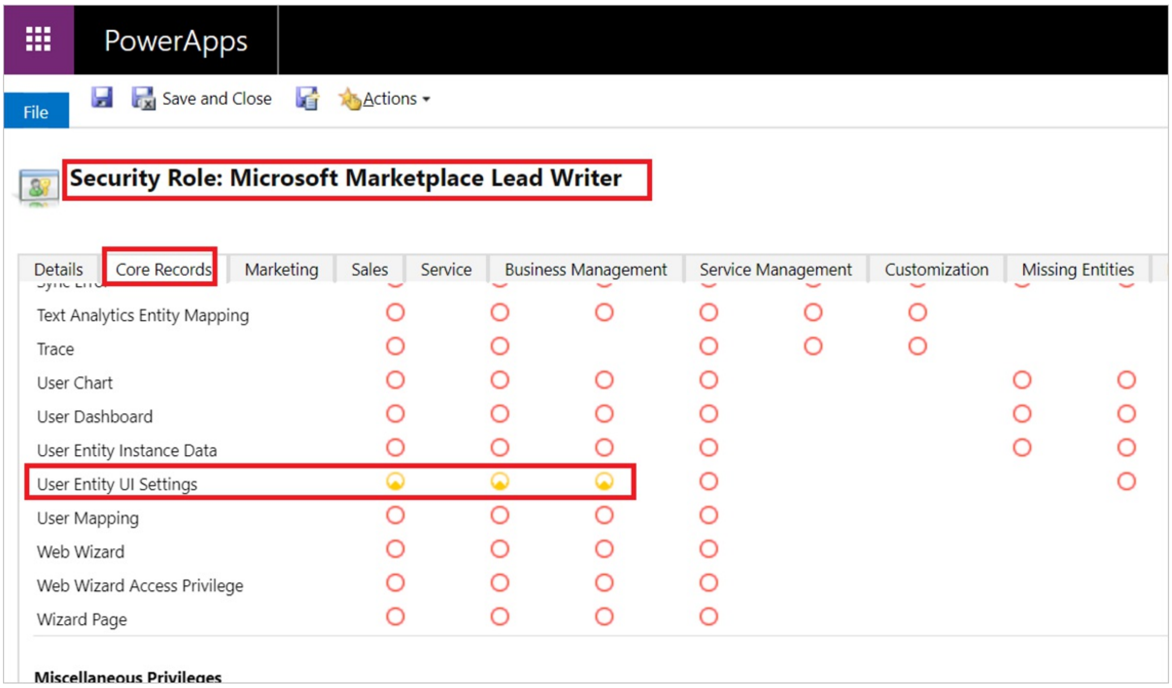


> **NOTE**
>
> This role is created by the solution that you imported and only has permissions to write the leads and to track the solution version to ensure compatibility.

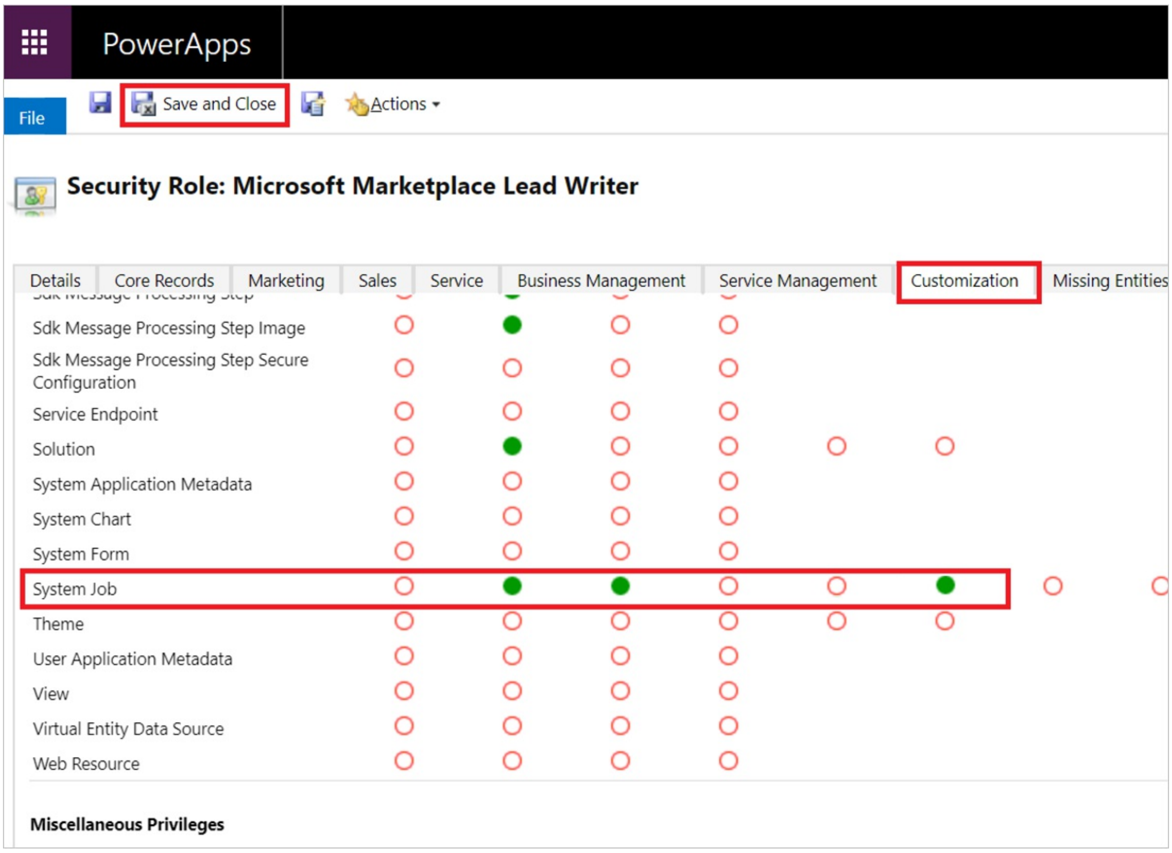
6. Go back to the **Security** page, and select **Security Roles**. Search for the role **Microsoft Marketplace Lead Writer**, and select it.



7. In the security role, select the **Core Records** tab. Search for the **User Entity UI Settings** item. Enable the Create, Read, and Write permissions to User (1/4 yellow circle) for that entity by selecting the corresponding radio buttons.



8. On the **Customization** tab, search for the **System Job** item. Enable the Read, Write, and AppendTo permissions to Organization (solid green radio buttons) for that entity by selecting the corresponding radio buttons.



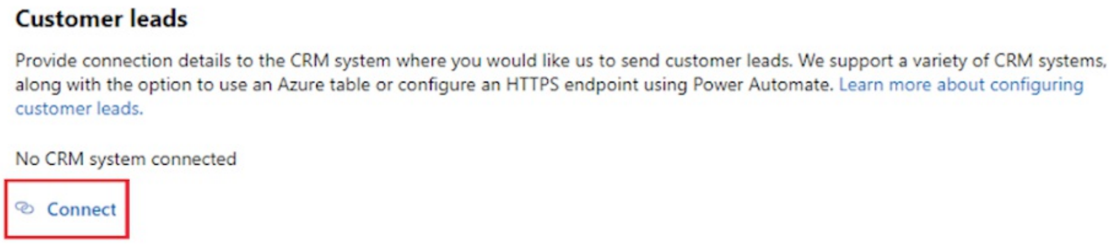
9. Select **Save and close**.

Configure your offer to send leads to Dynamics 365 Customer Engagement

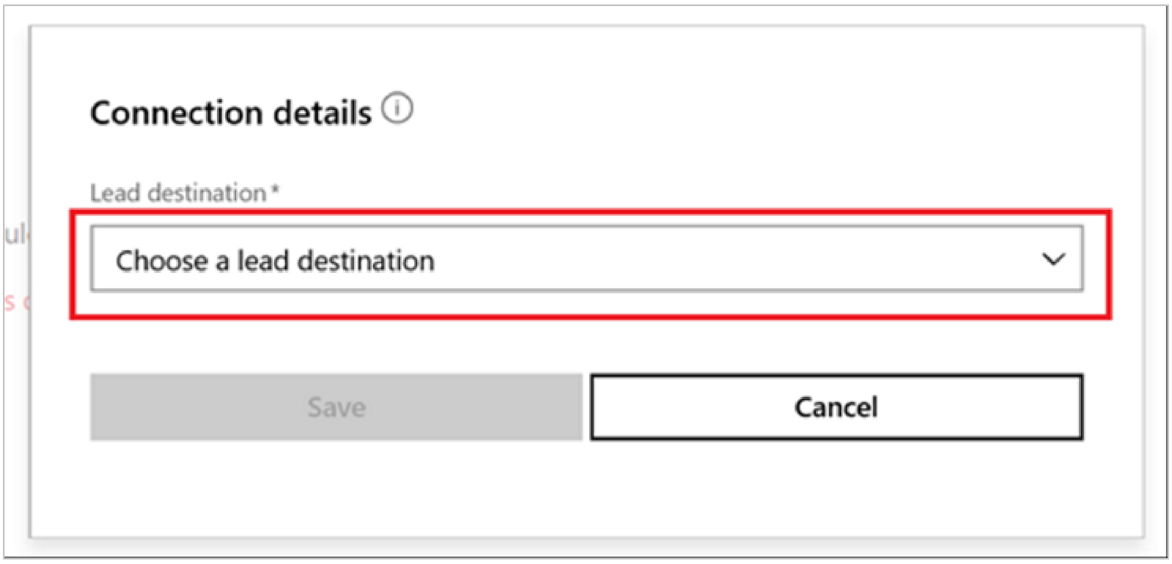
To configure the lead management information for your offer in the publishing portal:

1. Go to the **Offer setup** page for your offer.

2. Under the **Customer leads** section, select **Connect**.



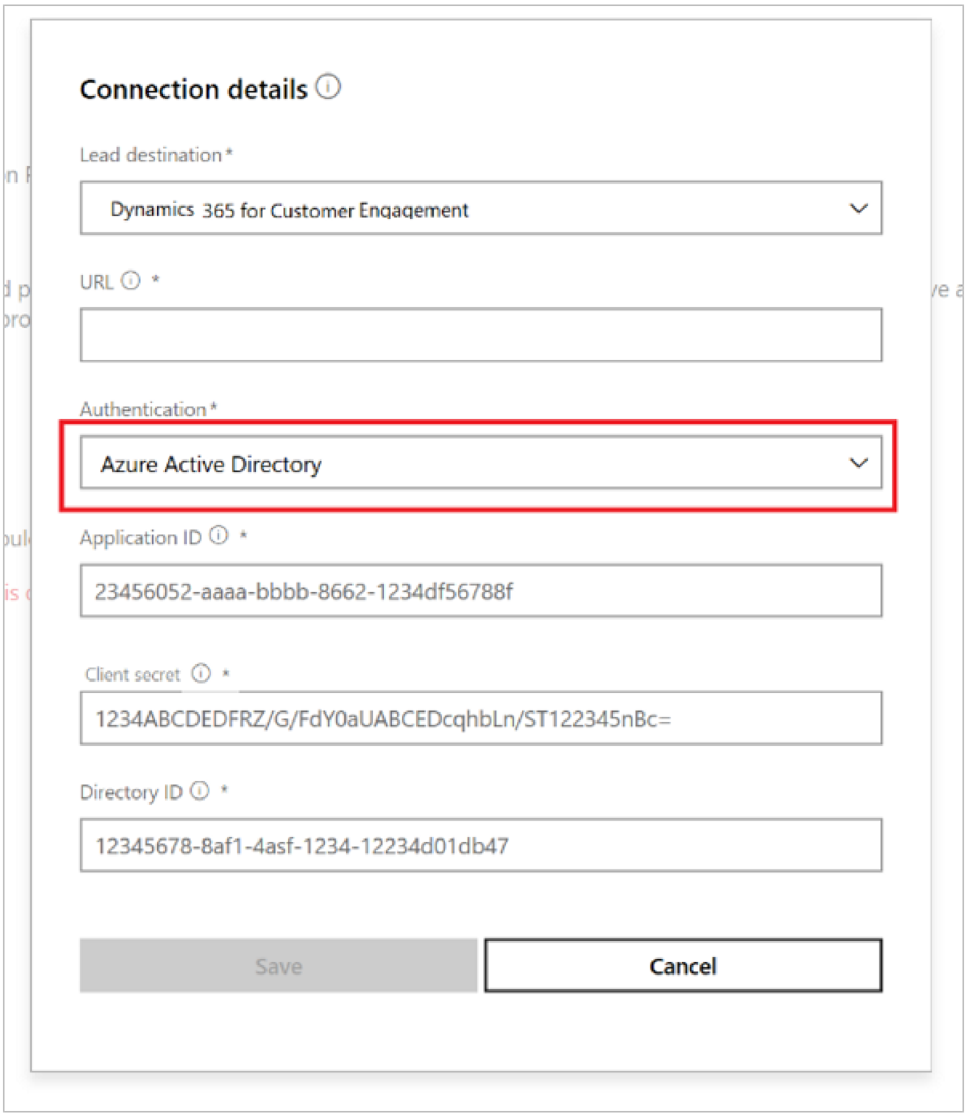
3. In the Connection details pop-up window, select **Dynamics 365 Customer Engagement** for the lead destination.



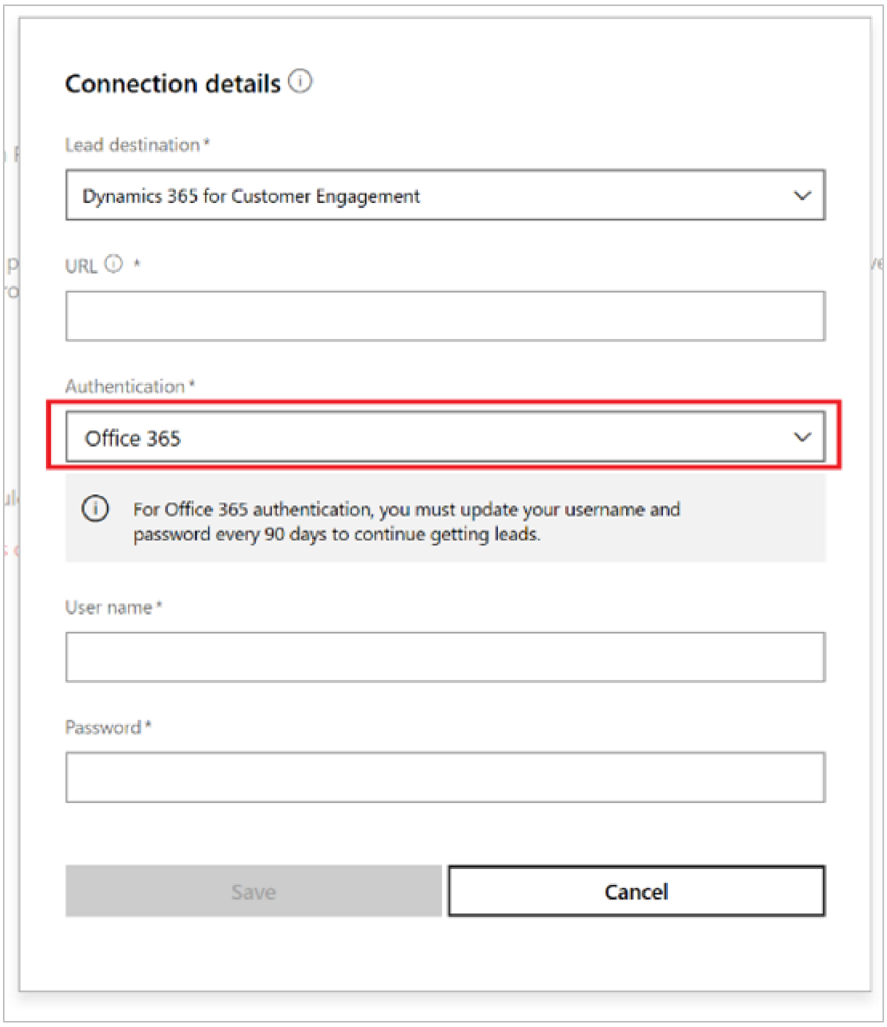
4. Enter the **URL** for the Dynamics 365 instance, such as `https://contoso.crm4.dynamics.com`.

5. Select the method of **Authentication**, either Azure Active Directory or Office 365.

6. If you selected **Azure Active Directory**, enter the **Application (client) ID** (for example, `23456052-aaaa-bbbb-8662-1234df56788f`), **Directory ID** (for example, `12345678-8af1-4asf-1234-12234d01db47`), and **Client secret** (for example, `1234ABCDEDFRZ/G/FdY0aUABCEDcqhbLn/ST122345nBc=`).



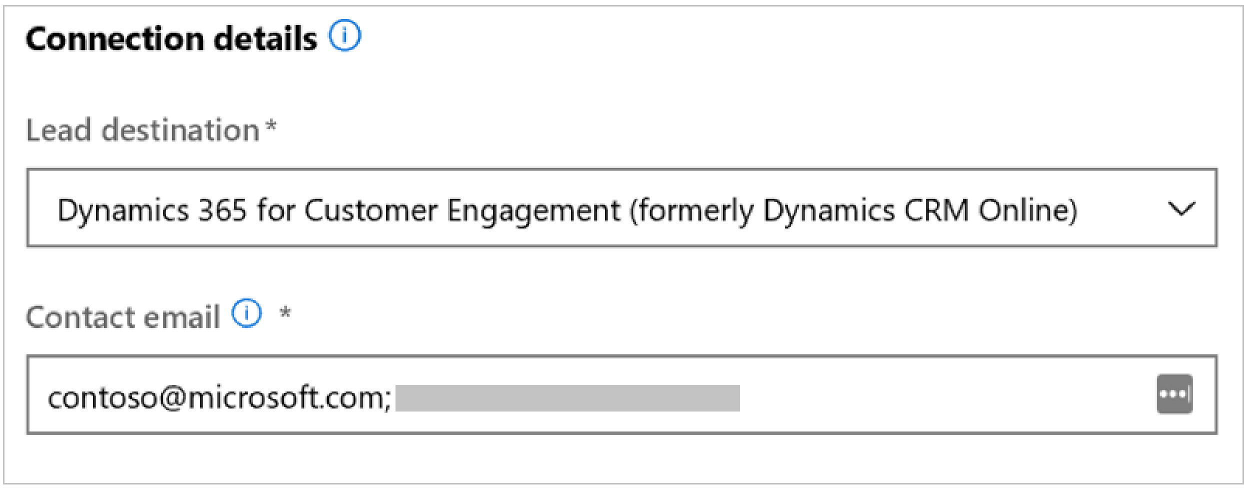
7. If you selected **Office 365**, enter the **User name** (for example, `contoso@contoso.onmicrosoft.com`) and **Password** (for example, `P@ssw0rd`).



8. For **Contact email**, enter email addresses for people in your company who should receive email notifications when a new lead is received. You can enter multiple email addresses by separating them with semicolons.

9. Select **OK**.

To make sure you've successfully connected to a lead destination, select the **Validate** button. If successful, you'll have a test lead in the lead destination.



NOTE

You must finish configuring the rest of the offer and publish it before you can receive leads for the offer.

Use an HTTPS endpoint to manage commercial marketplace leads

11/22/2021 • 6 minutes to read • Edit Online

If your customer relationship management (CRM) system isn't explicitly supported in Partner Center to receive Microsoft AppSource and Azure Marketplace leads, you can use an HTTPS endpoint in Power Automate to handle these leads. With an HTTPS endpoint, commercial marketplace leads can be sent out as an email notification or they can be written to a CRM system supported by Power Automate.

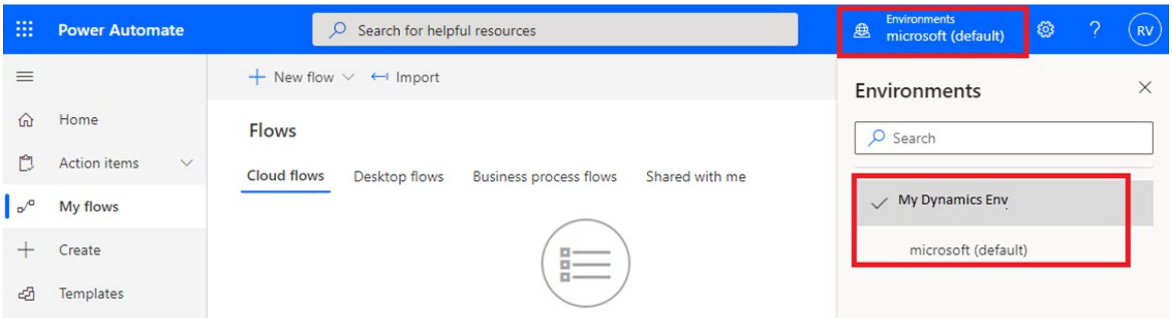
This article explains how to create a new flow in Power Automate to generate the HTTP POST URL that you'll use to configure leads in Partner Center. It also includes steps to test your flow with Postman.

> **NOTE**
> The Power Automate connector used in these instructions requires a paid subscription to Power Automate. Make sure you account for this before you configure this flow.

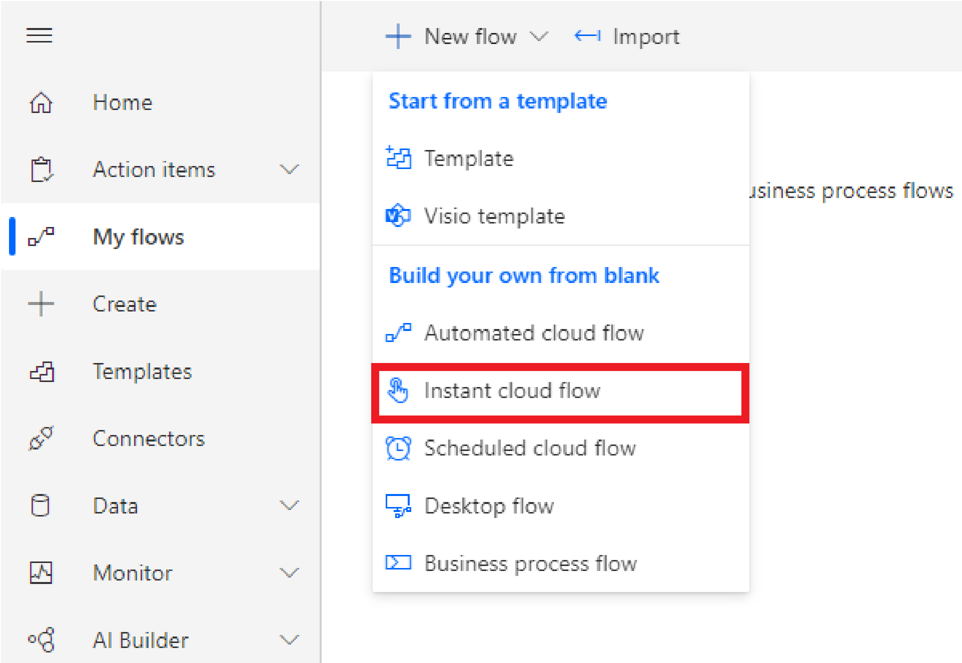
Create a flow by using Power Automate

1. Open the Power Automate webpage. Select **Sign in**. If you don't already have an account, select **Sign up free** to create one.

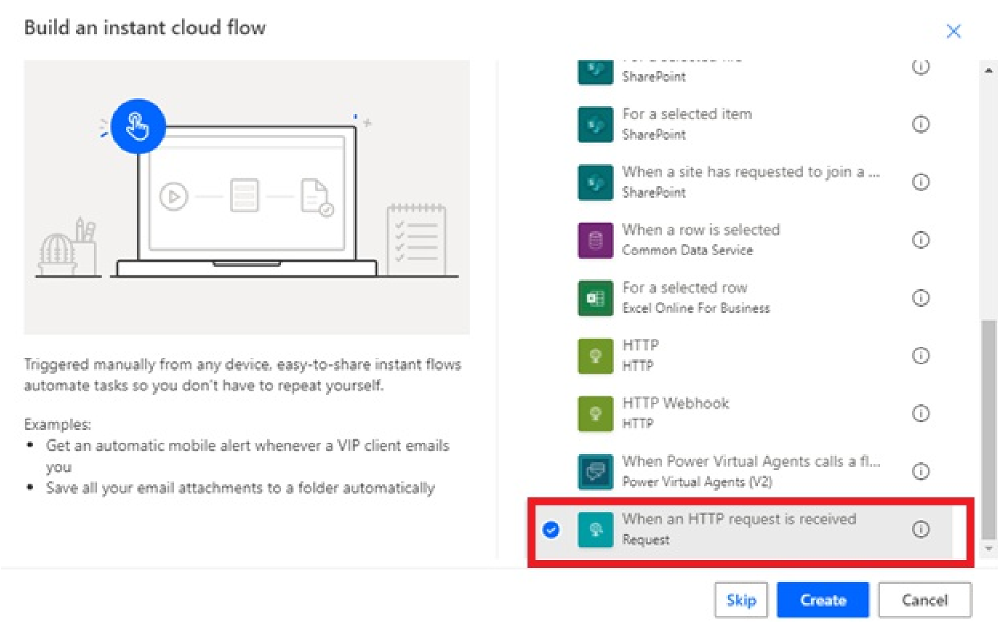
2. Sign in, select **My flows**, and switch the Environment from **Microsoft (default)** to your Dataverse (CRM) Environment.



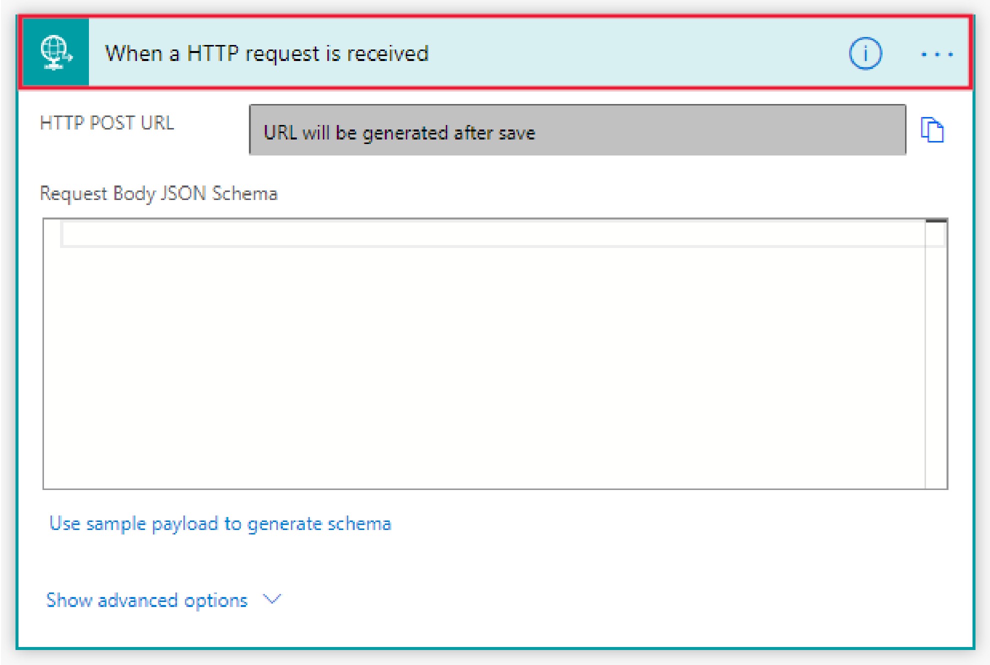
3. Under **+ New**, select **+ Instant cloud flow**.



4. Name your flow, and then under **Choose how to trigger this flow**, select **When a HTTP request is received**.



5. Click the flow step to expand it.



6. Use one of the following methods to configure the **Request Body JSON Schema**:

   - Copy the JSON schema into the **Request Body JSON Schema** text box.
   - Select **Use sample payload to generate schema**. In the **Enter or paste a sample JSON payload** text box, paste in the JSON example. Select **Done** to create the schema.

   JSON schema

```
{
  "$schema": "https://json-schema.org/draft-04/schema#",
  "definitions": {},
  "id": "http://example.com/example.json",
  "properties": {
    "ActionCode": {
      "id": "/properties/ActionCode",
      "type": "string"
    },
    "OfferTitle": {
      "id": "/properties/OfferTitle",
      "type": "string"
    },
    "LeadSource": {
      "id": "/properties/LeadSource",
      "type": "string"
    },
    "Description": {
      "id": "/properties/Description",
      "type": "string"
    },
    "UserDetails": {
      "id": "/properties/UserDetails",
      "properties": {
        "Company": {
          "id": "/properties/UserDetails/properties/Company",
          "type": "string"
        },
        "Country": {
          "id": "/properties/UserDetails/properties/Country",
          "type": "string"
        },
        "Email": {
          "id": "/properties/UserDetails/properties/Email",
          "type": "string"
        },
        "FirstName": {
          "id": "/properties/UserDetails/properties/FirstName",
          "type": "string"
        },
        "LastName": {
          "id": "/properties/UserDetails/properties/LastName",
          "type": "string"
        },
        "Phone": {
          "id": "/properties/UserDetails/properties/Phone",
          "type": "string"
        },
        "Title": {
          "id": "/properties/UserDetails/properties/Title",
          "type": "string"
        }
      },
      "type": "object"
    }
  },
  "type": "object"
}
```

JSON example

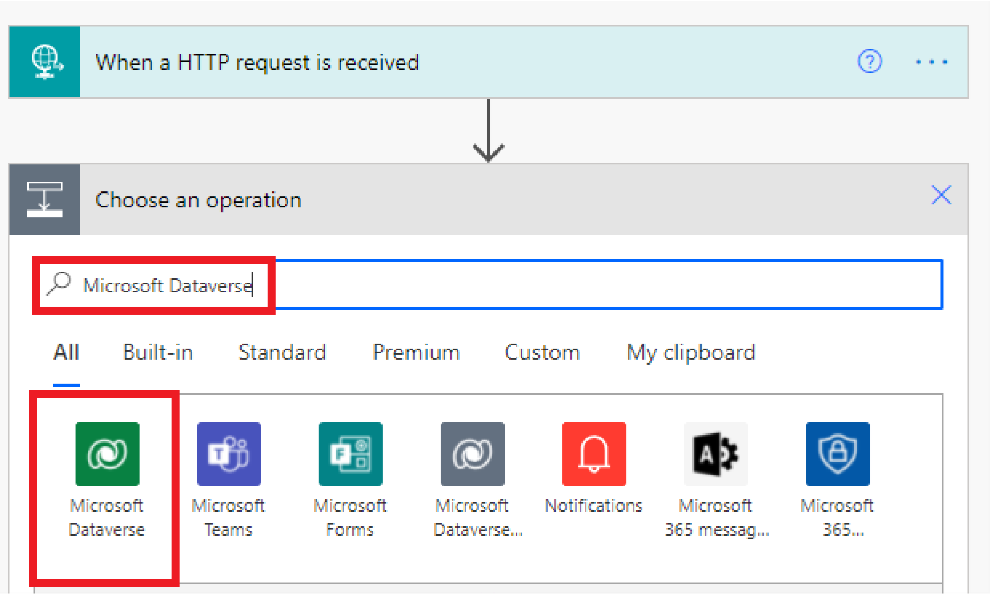
```
{
  "UserDetails": {
    "FirstName": "Some",
    "LastName": "One",
    "Email": "someone@contoso.com",
    "Phone": "16175555555",
    "Country": "USA",
    "Company": "Contoso",
    "Title": "Esquire"
 },
  "LeadSource": "AzureMarketplace",
  "ActionCode": "INS",
  "OfferTitle": "Test Microsoft",
  "Description": "Test run through Power Automate"
}
```

> **NOTE**
>
> At this point in the configuration, you can select to either connect to a CRM system, or configure an email notification. Follow the remaining instructions based on your choice.

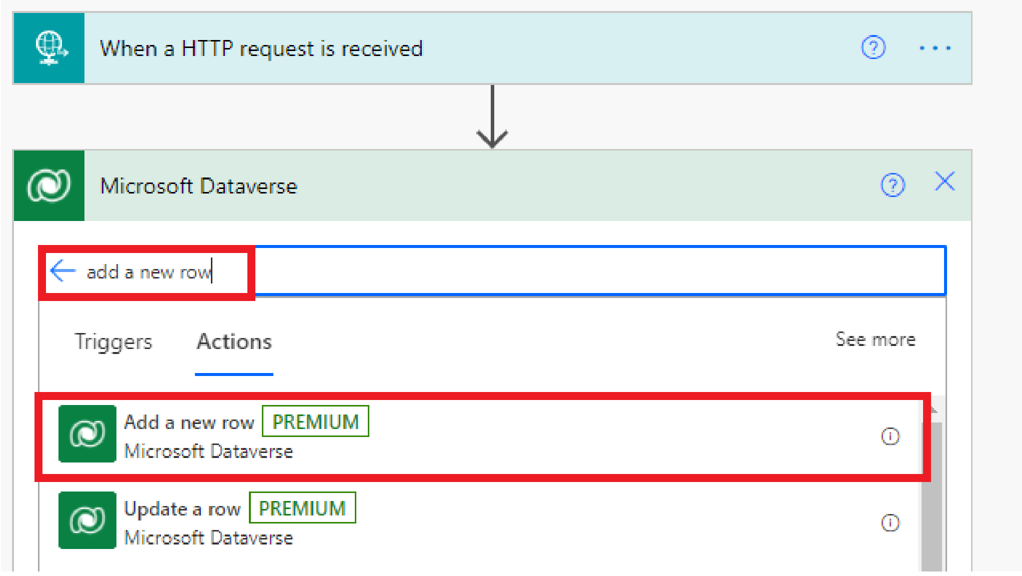
Connect to a CRM system

1. Select **+ New step**.

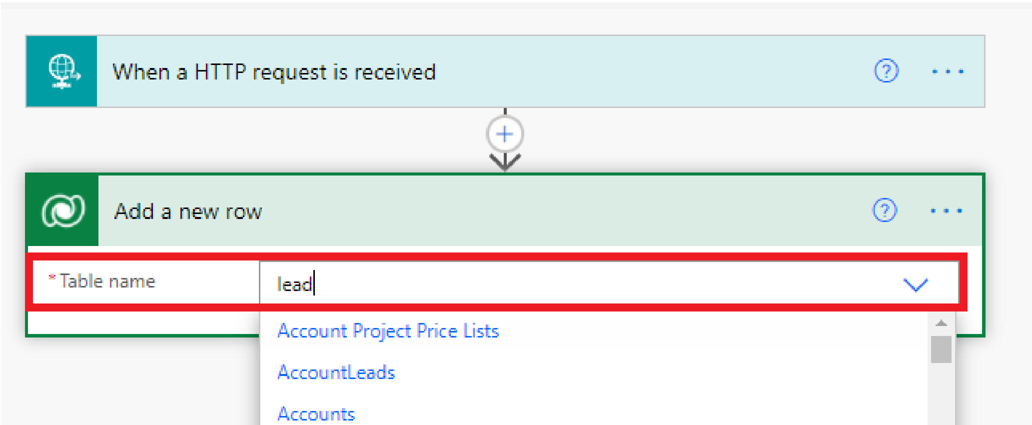
2. Search for and select a CRM system in the **Search connectors and actions** box. The following screen shows **Create a new record (Microsoft Dataverse)** as an example.



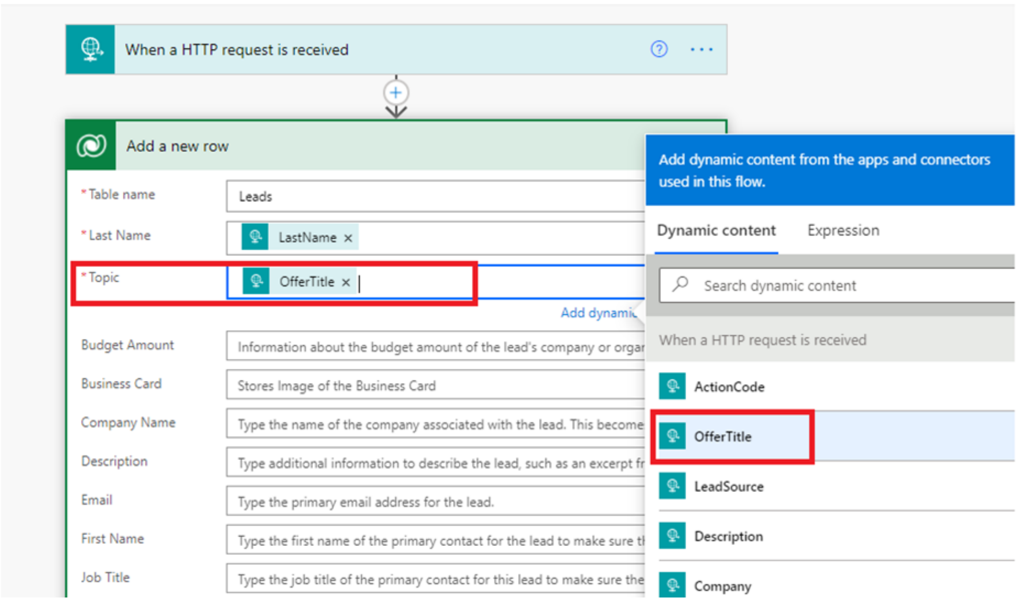
3. Select the **Actions tab** with the action to **Add a new row**.



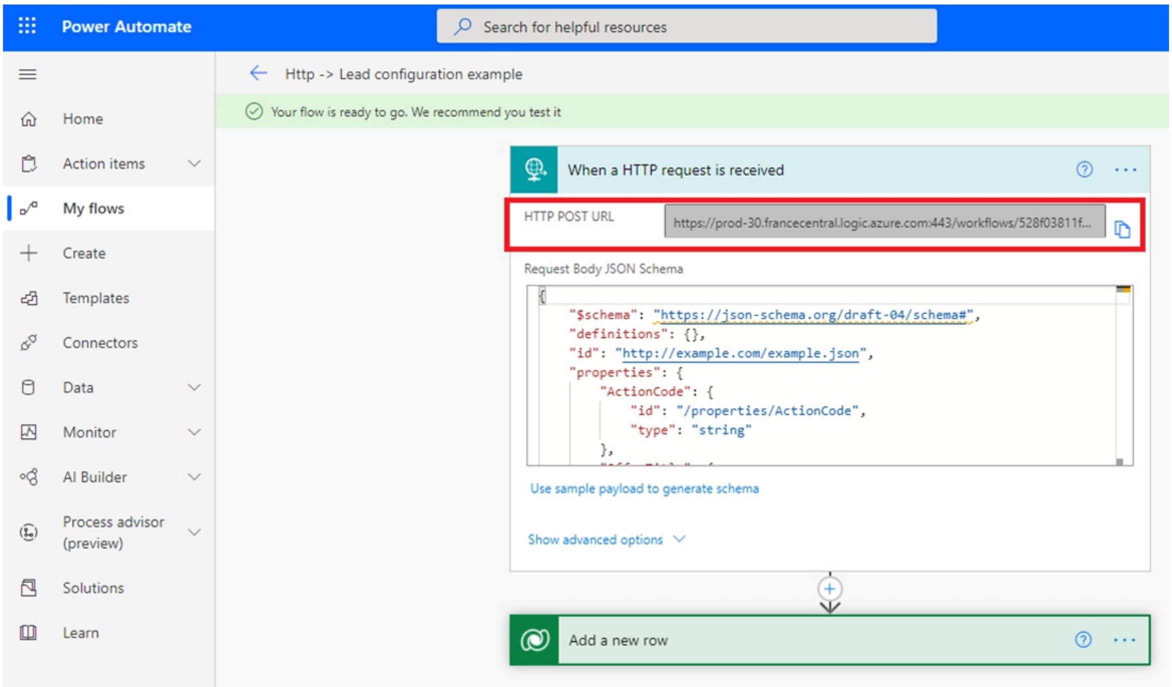
4. Select **lead** from the **Table Name** drop-down list.



5. Power Automate shows a form for providing lead information. You can map items from the input request by choosing to add dynamic content. The following screen shows **OfferTitle** as an example.



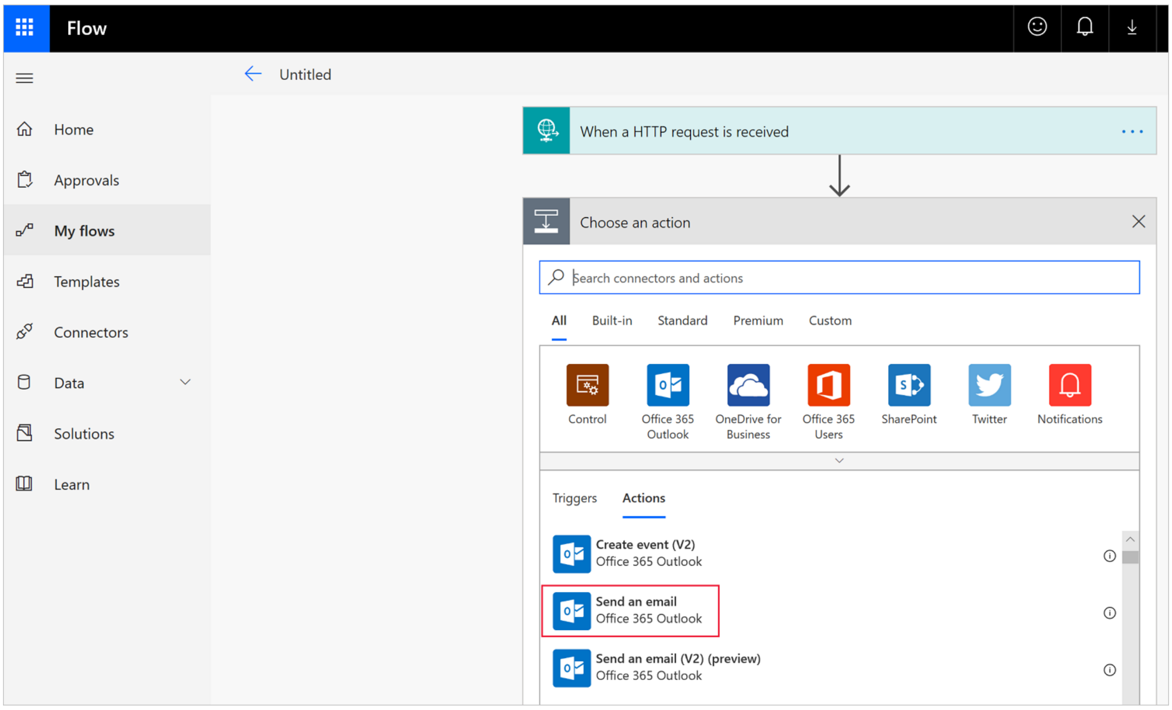
6. Map the fields you want, and then select **Save** to save your flow. An HTTP POST URL is created and is accessible in the **When an HTTP request is received** window. Copy this URL by using the copy control, which is located to the right of the HTTP POST URL. Using the copy control is important so that you don't miss any part of the entire URL. Save this URL because you'll need it when you configure lead management in the publishing portal.



Set up email notification

1. Now that you've finished the JSON schema, select **+ New step**.
2. Under **Choose an action**, select **Actions**.
3. On the **Actions** tab, select **Send an email (Office 365 Outlook)**.

> **NOTE**
>
> If you want to use a different email provider, search for and select **Send an email notification (Mail)** as the action instead.

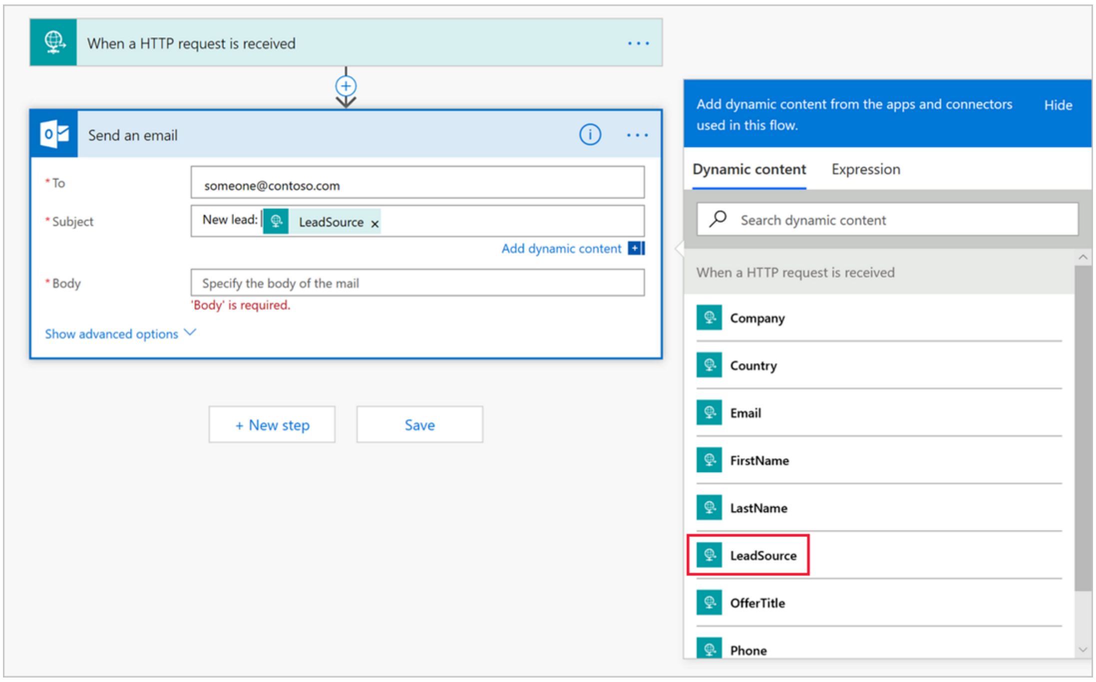


4. In the **Send an email** window, configure the following required fields:

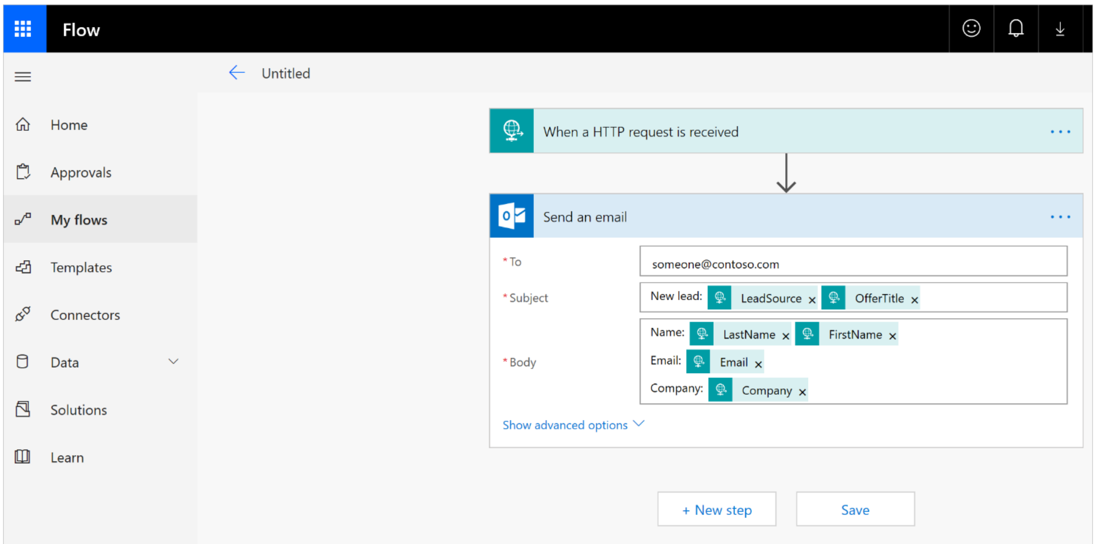
- **To**: Enter at least one valid email address where the leads will be sent.
- **Subject**: Power Automate gives you the option of adding dynamic content, like **LeadSource**

shown in the following screen. Start by entering a field name. Then select the dynamic content pick list from the pop-up window.

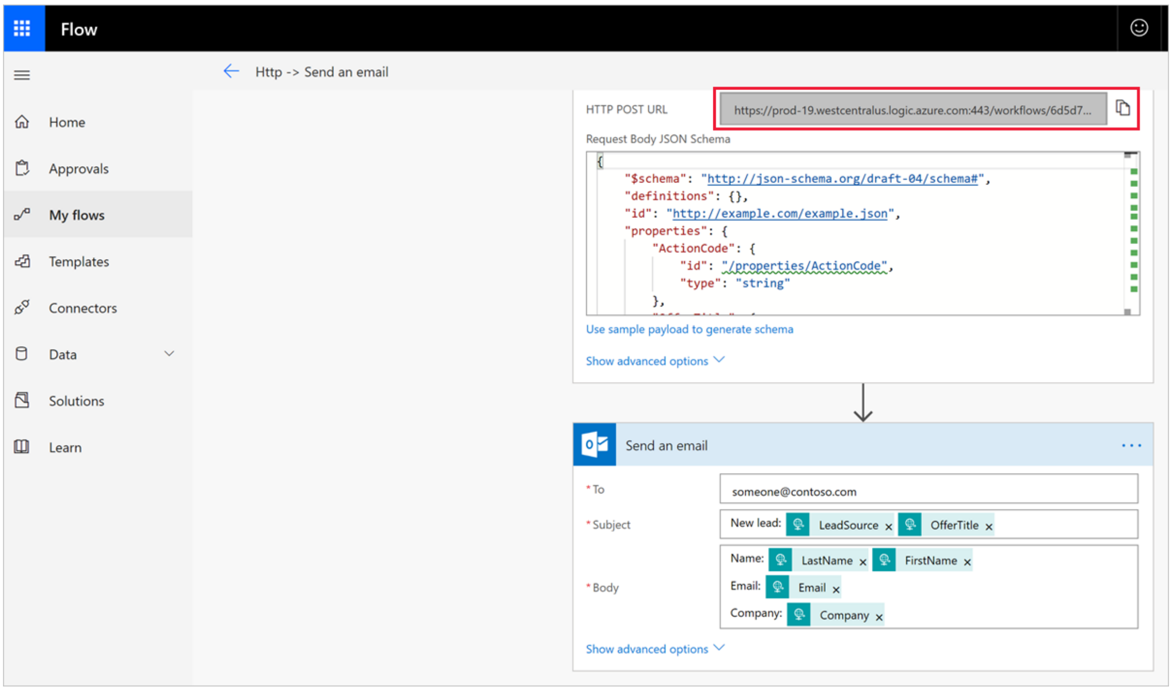
> **NOTE**
>
> When you add field names, you can follow each name with a colon (:) and then select **Enter** to create a new row. After you have your field names added, you can then add each associated parameter from the dynamic pick list.



- **Body**: From the dynamic content pick list, add the information you want in the body of the email. For example, use LastName, FirstName, Email, and Company. When you're finished setting up the email notification, it looks like the example in the following screen.



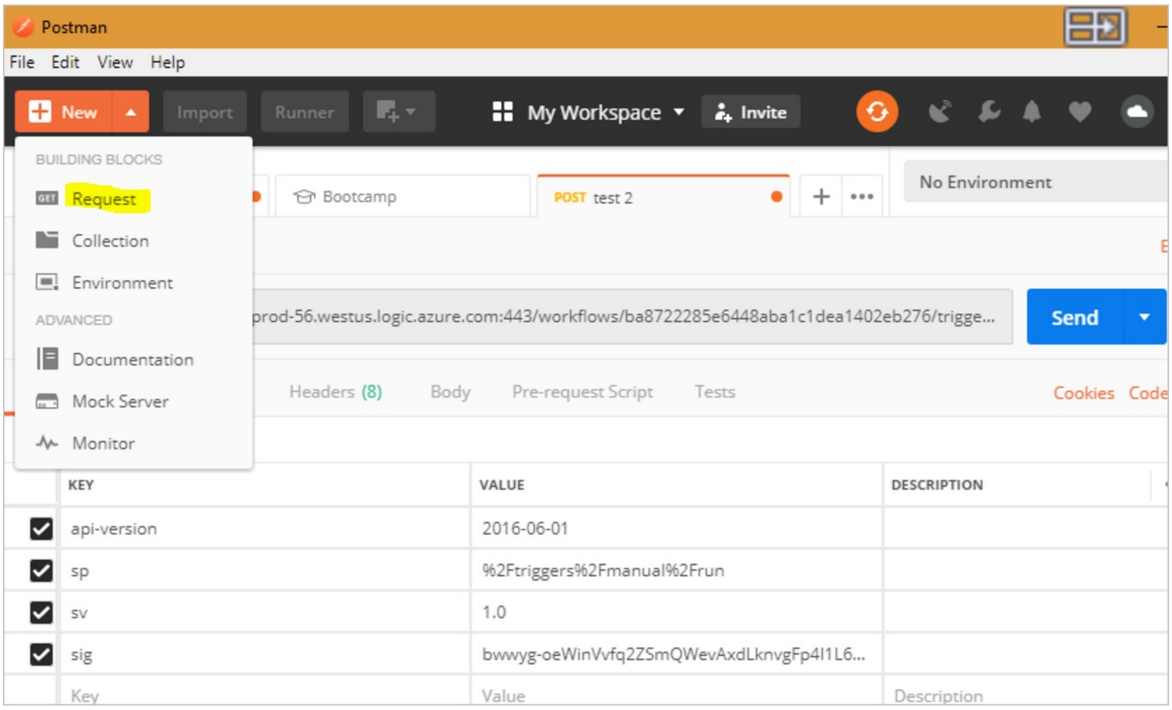
5. Select **Save** to finish your flow. An HTTP POST URL is created and is accessible in the **When an HTTP request is received** window. Copy this URL by using the copy control, which is located to the right of the HTTP POST URL. Using this control is important so that you don't miss any part of the entire URL. Save this URL because you'll need it when you configure lead management in the publishing portal.



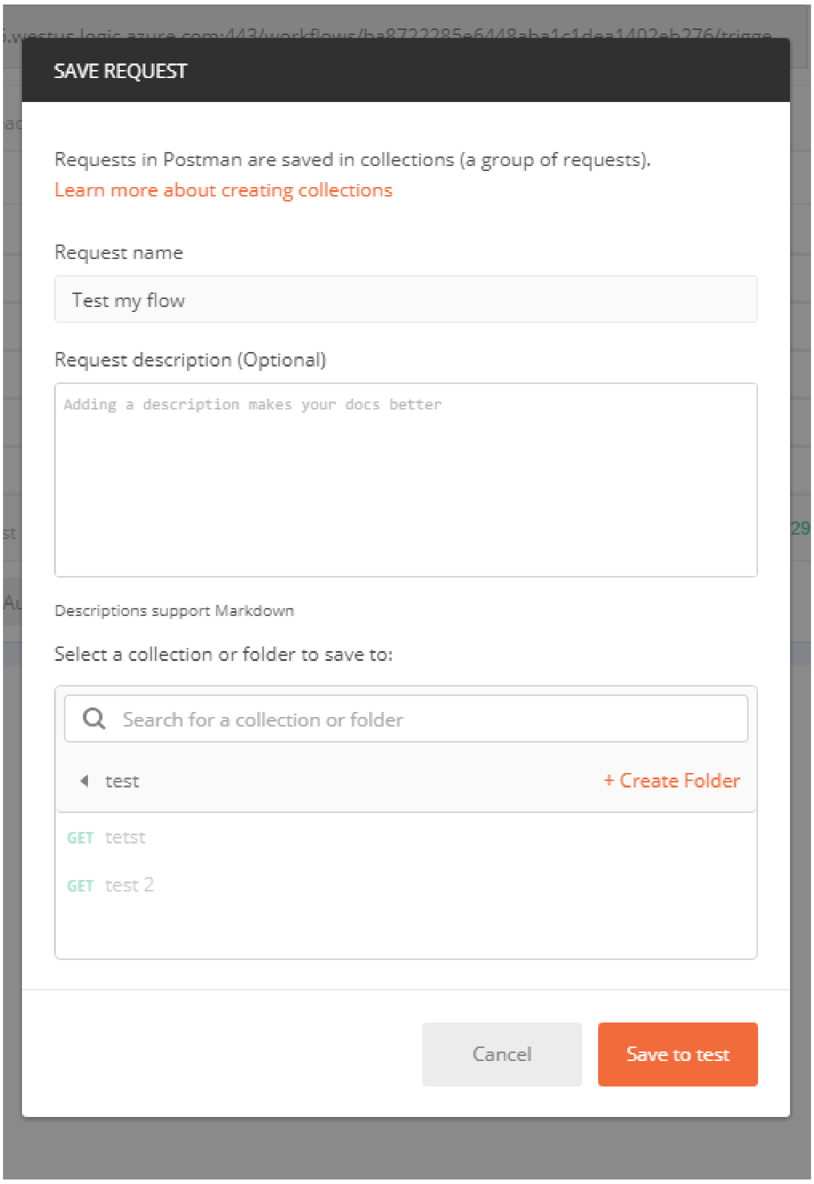
Testing

You can test your configuration with Postman. An online download of Postman is available for Windows.

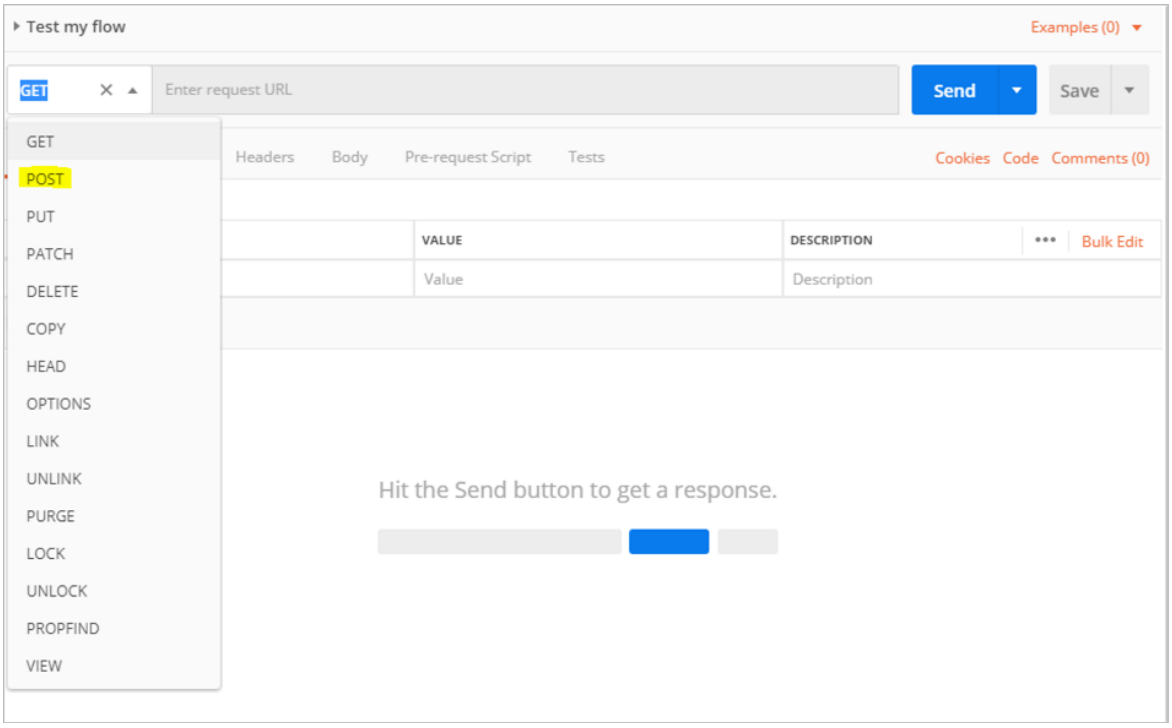
1. Start Postman, and select **New** > **Request** to set up your test tool.



2. Fill in the **Save Request** form, and then save to the folder you created.

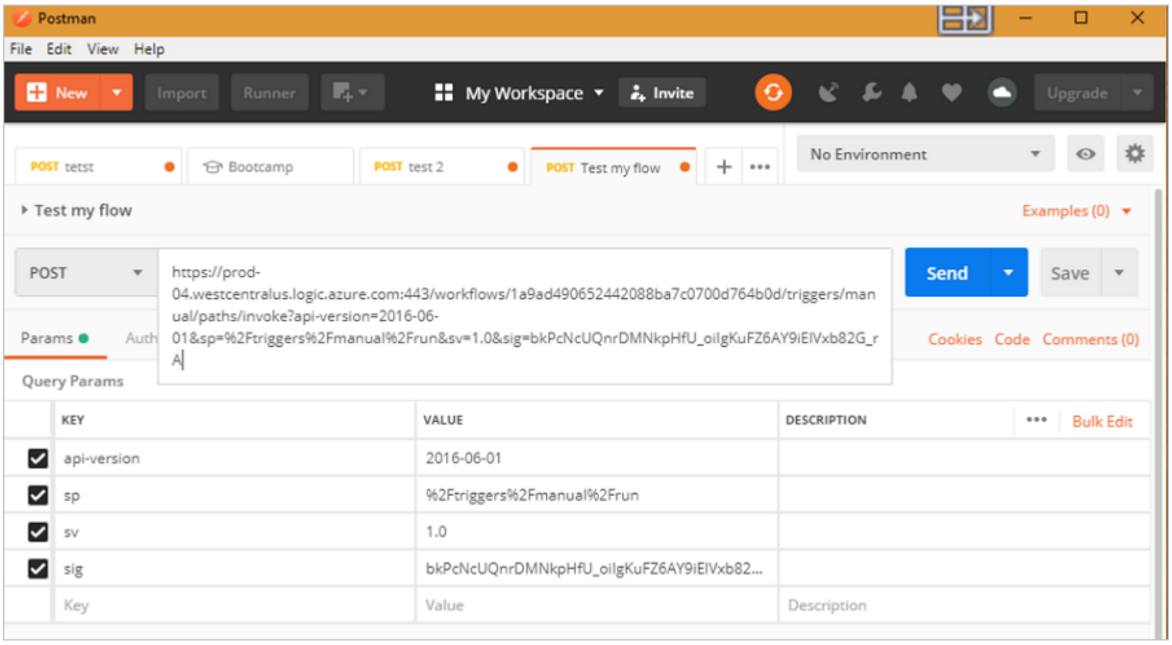


3. Select **POST** from the drop-down list.



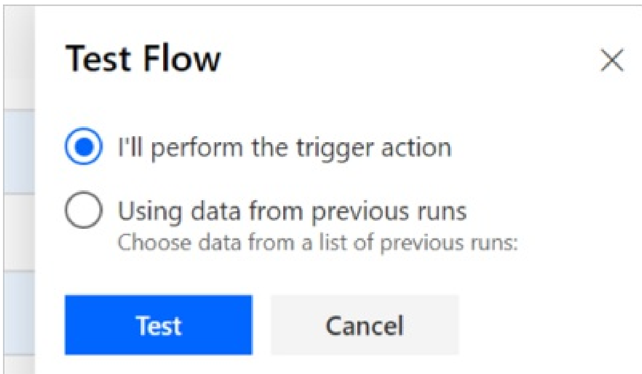
4. Paste the HTTP POST URL from the flow you created in Power Automate where it says **Enter request**

URL.

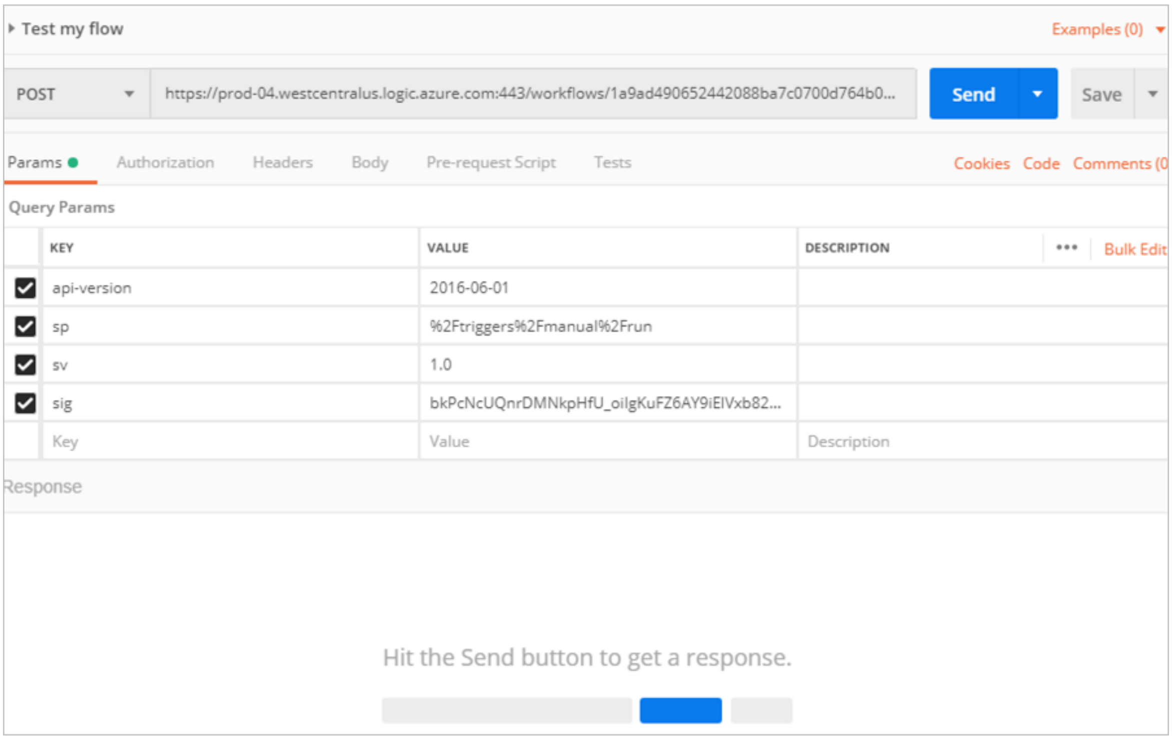


5. Go back to [Power Automate](). Find the flow you created to send leads by going to **My Flows** from the Power Automate menu bar. Select the ellipsis next to the flow name to see more options, and select **Edit**.

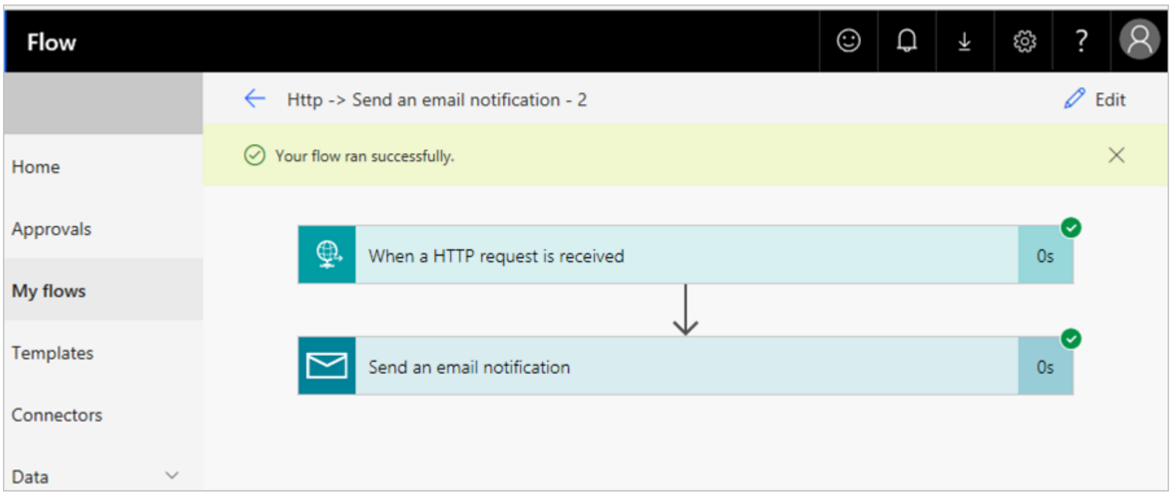
6. Select **Test** in the upper-right corner, select **I'll perform the trigger action**, and then select **Test**. You'll see an indication at the top of the screen that the test has started.



7. Go back to your Postman app, and select **Send**.

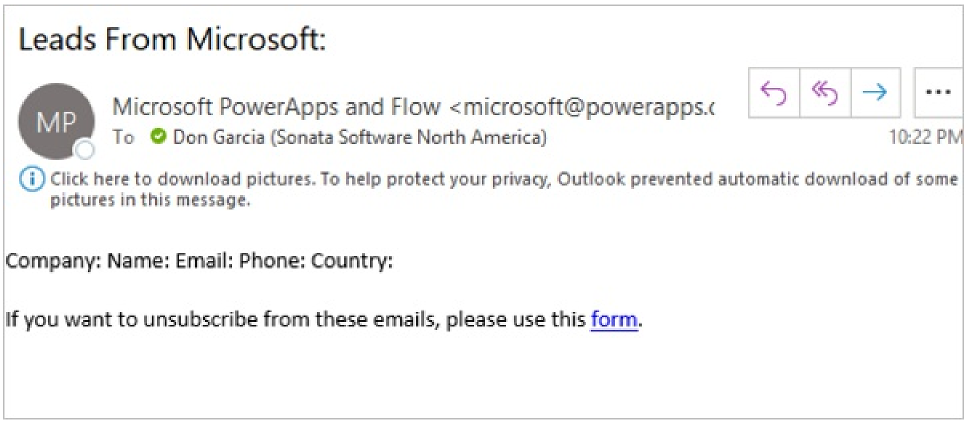


8. Go back to your flow and check the result. If everything works as expected, you'll see a message that indicates the flow was successful.



9. You should have also received an email. Check your email inbox.

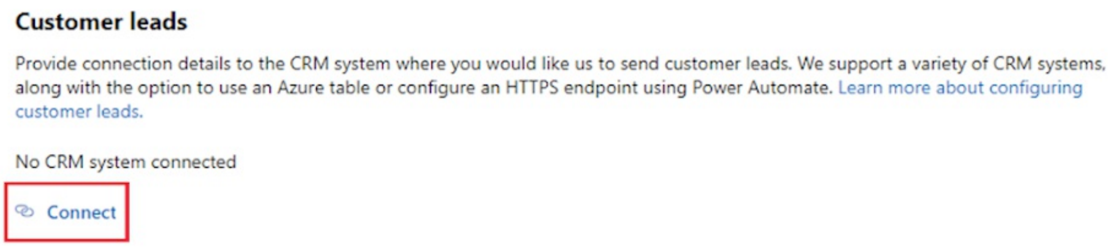
> **NOTE**
>
> If you don't see an email from the test, check your spam and junk folders. In the following screen, you'll notice just the field labels you added when you configured the email notification. If this were an actual lead generated from your offer, you would also see the actual information from the lead contact in the body and in the subject line.



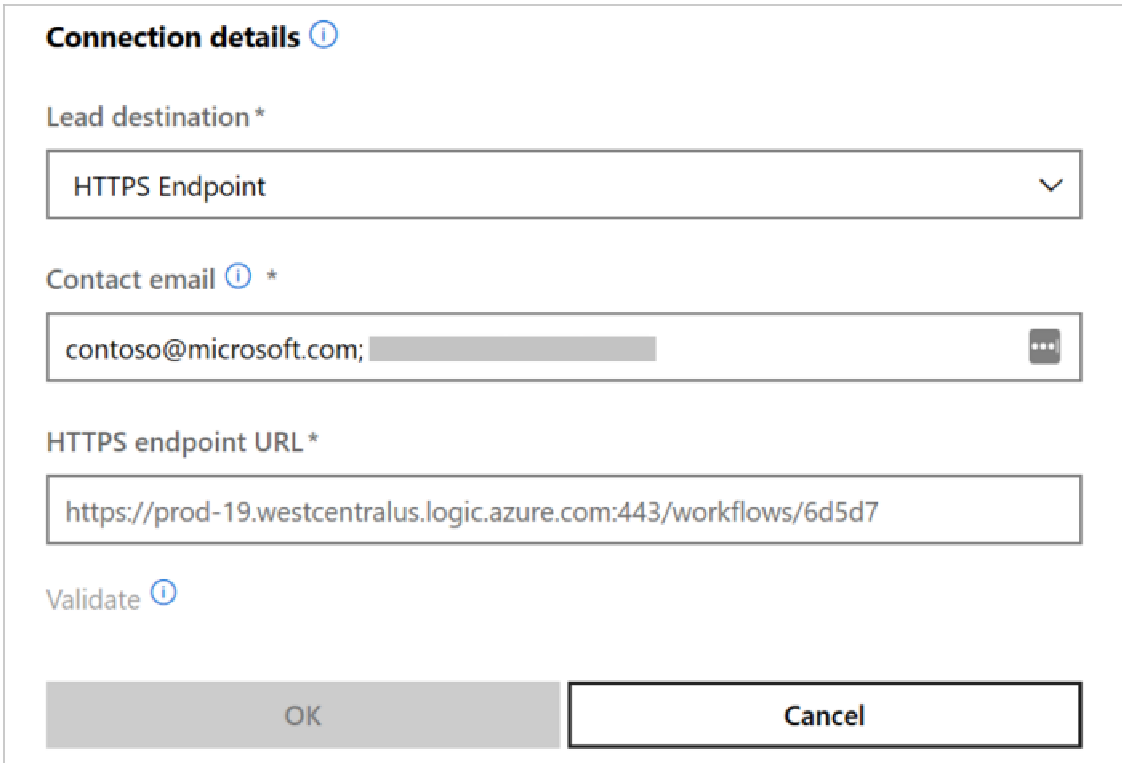
Configure your offer to send leads to the HTTPS endpoint

When you're ready to configure the lead management information for your offer in the publishing portal, follow these steps.

1. Sign in to Partner Center.
2. Select your offer, and go to the **Offer setup** tab.
3. Under the **Customer leads** section, select **Connect**.



4. In the **Connection details** pop-up window, select **HTTPS Endpoint** for the **Lead Destination**. Paste the HTTP POST URL from the flow you created by following earlier steps into the **HTTPS endpoint URL** field.



5. Under **Contact email**, enter email addresses for people in your company who should receive email

notifications when a new lead is received. You can provide multiple emails by separating them with a semicolon.

6. Select **OK**.

To make sure you have successfully connected to a lead destination, select the **Validate** button. If successful, you'll have a test lead in the lead destination.

> **NOTE**
>
> You must finish configuring the rest of the offer and publish it before you can receive leads for the offer.

When leads are generated, Microsoft sends leads to the flow. The leads get routed to the CRM system or email address you configured.

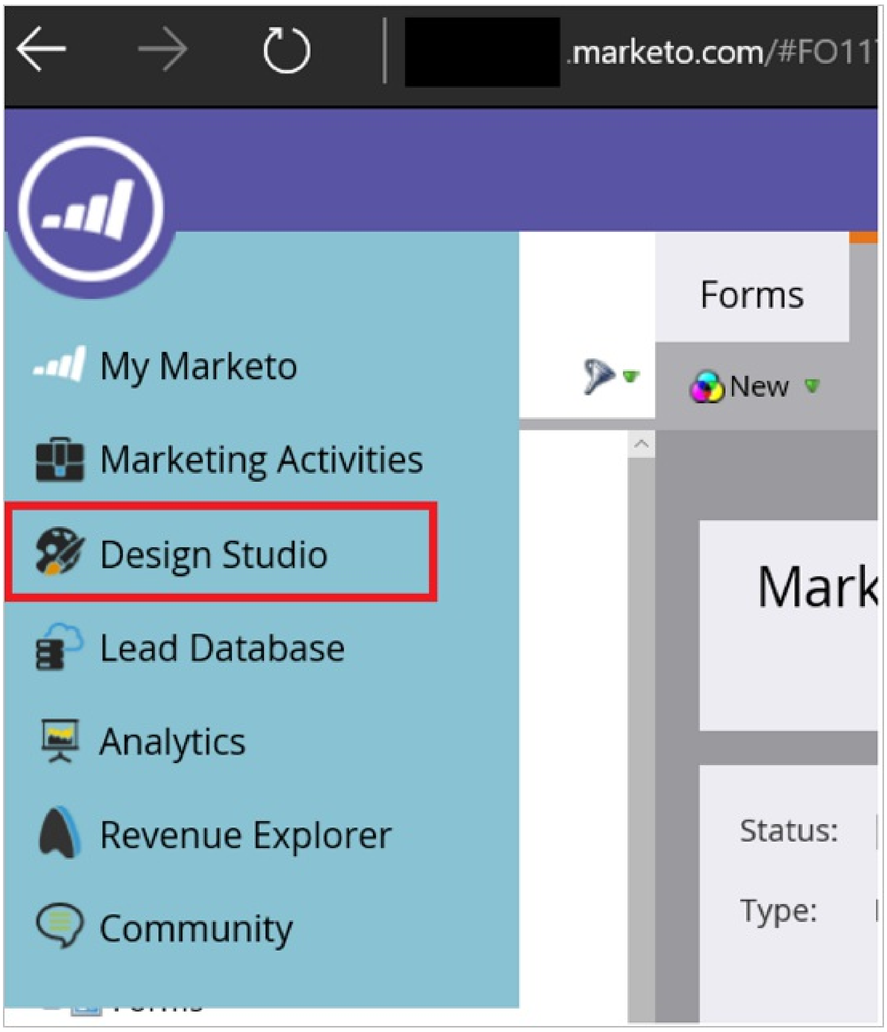
Use Marketo to manage commercial marketplace leads

11/22/2021 • 2 minutes to read • Edit Online

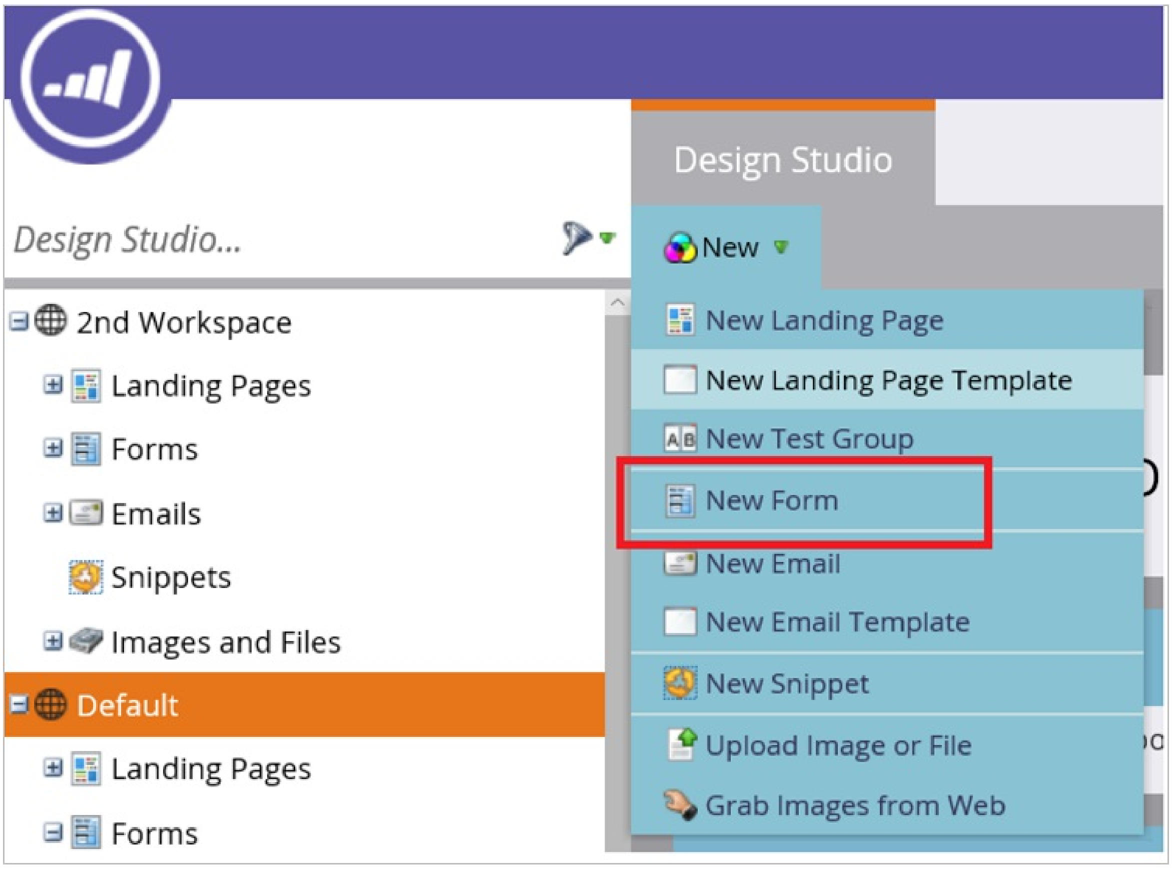
This article describes how to set up your Marketo CRM system to process sales leads from your offers in Microsoft AppSource and Azure Marketplace.

Set up your Marketo CRM system

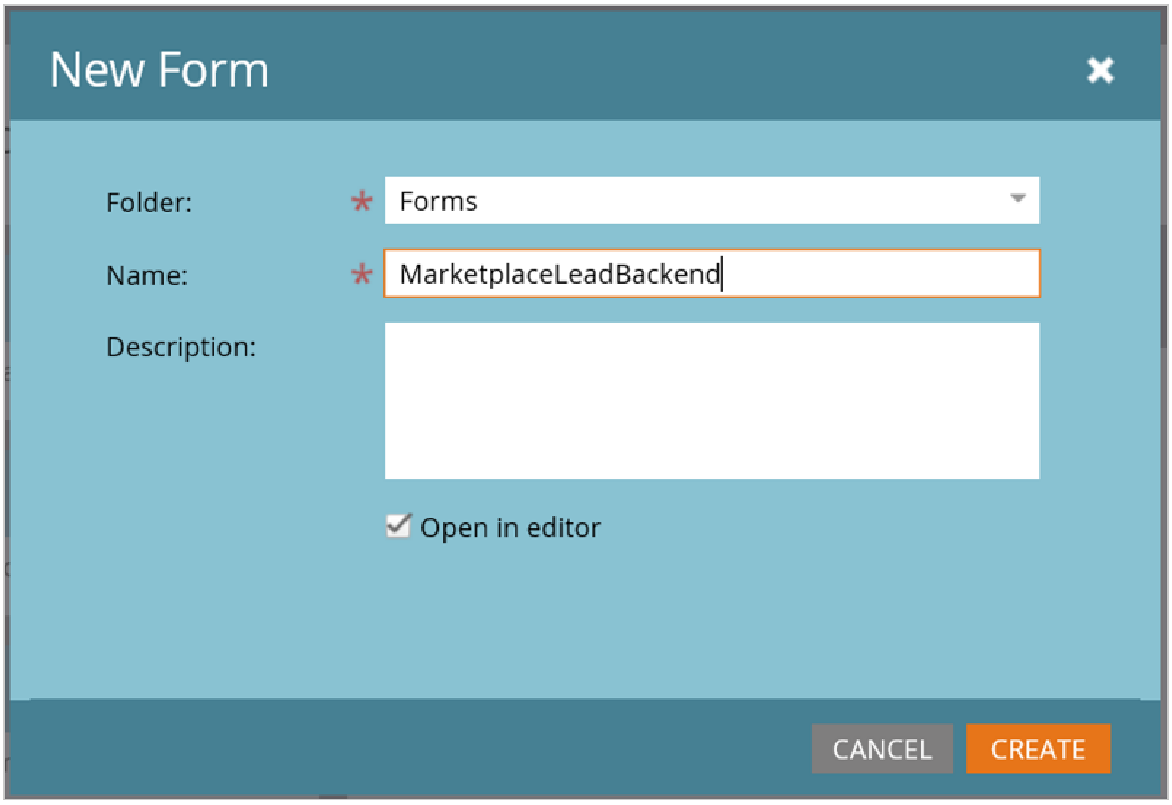
1. Sign in to Marketo.
2. Select **Design Studio**.



3. Select **New Form**.



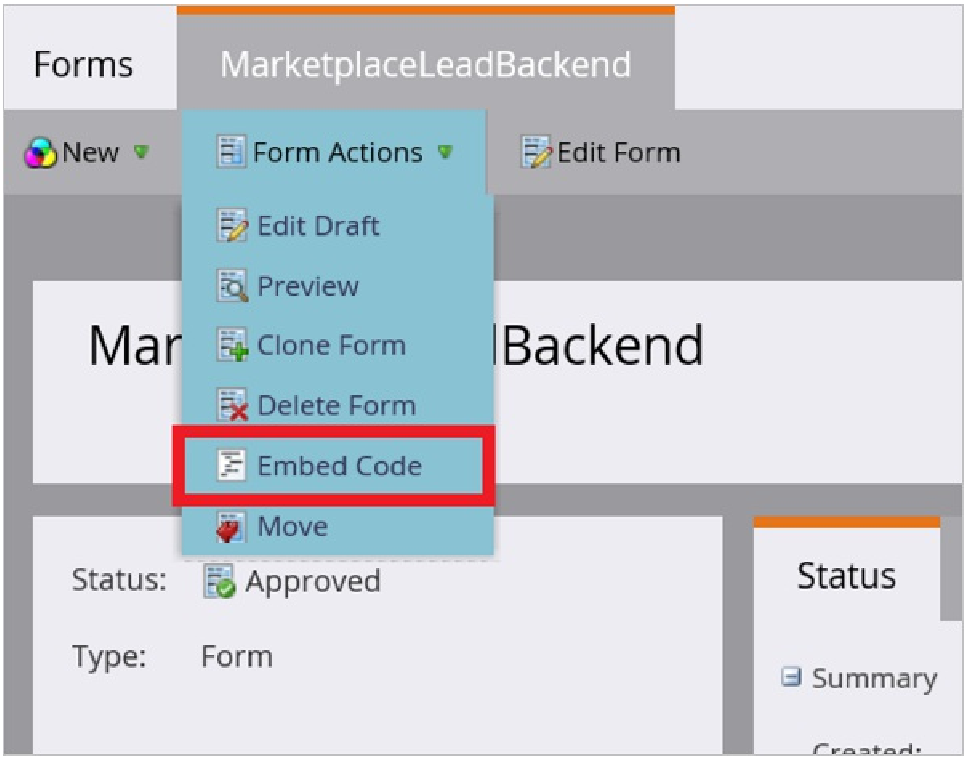
4. Fill in the required fields in the **New Form** dialog box, and then select **Create**.



5. On the **Field Details** page, select **Finish**.

6. Approve and close.

7. On the **MarketplaceLeadBackend** tab, select **Embed Code**.



8. Marketo Embed Code displays code similar to the following example.

```
<form id="mktoForm_1179"></form>
<script>MktoForms2.loadForm("("//app-ys12.marketo.com", "123-PQR-789", 1179);</script>
```

9. Copy the values for the following fields shown in the Embed Code form. You'll use these values to configure your offer to receive leads in the next step. Use the next example as a guide for getting the IDs you need from the Marketo Embed Code example.

   - Server ID = **ys12**
   - Munchkin ID = **123-PQR-789**
   - Form ID = **1179**

   Another way to figure out these values:

   - Server ID is found in the URL of your Marketo instance, for example, `serverID.marketo.com`.
   - Get your subscription's Munchkin ID by going to your **Admin** > **Munchkin** menu in the **Munchkin Account ID** field, or from the first part of your Marketo REST API host subdomain: `https://{Munchkin ID}.mktorest.com`.
   - Form ID is the ID of the Embed Code form you created in step 7 to route leads from the marketplace.

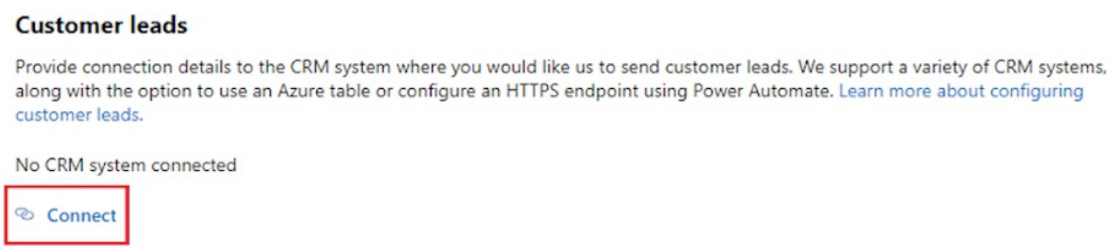
Configure your offer to send leads to Marketo

When you're ready to configure the lead management information for your offer in the publishing portal, follow these steps.

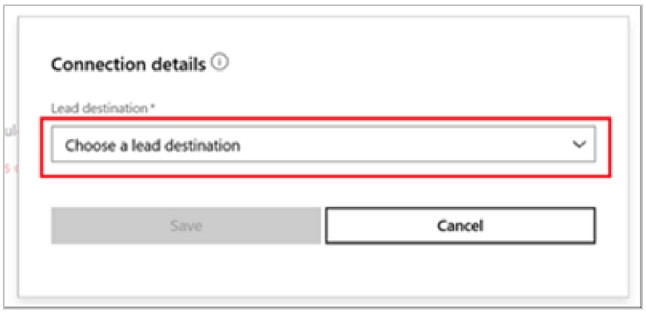
1. Sign in to Partner Center.

2. Select your offer, and go to the **Offer setup** tab.

3. Under the **Customer leads** section, select **Connect**.



4. On the **Connection details** pop-up window, select **Marketo** for the **Lead destination**.



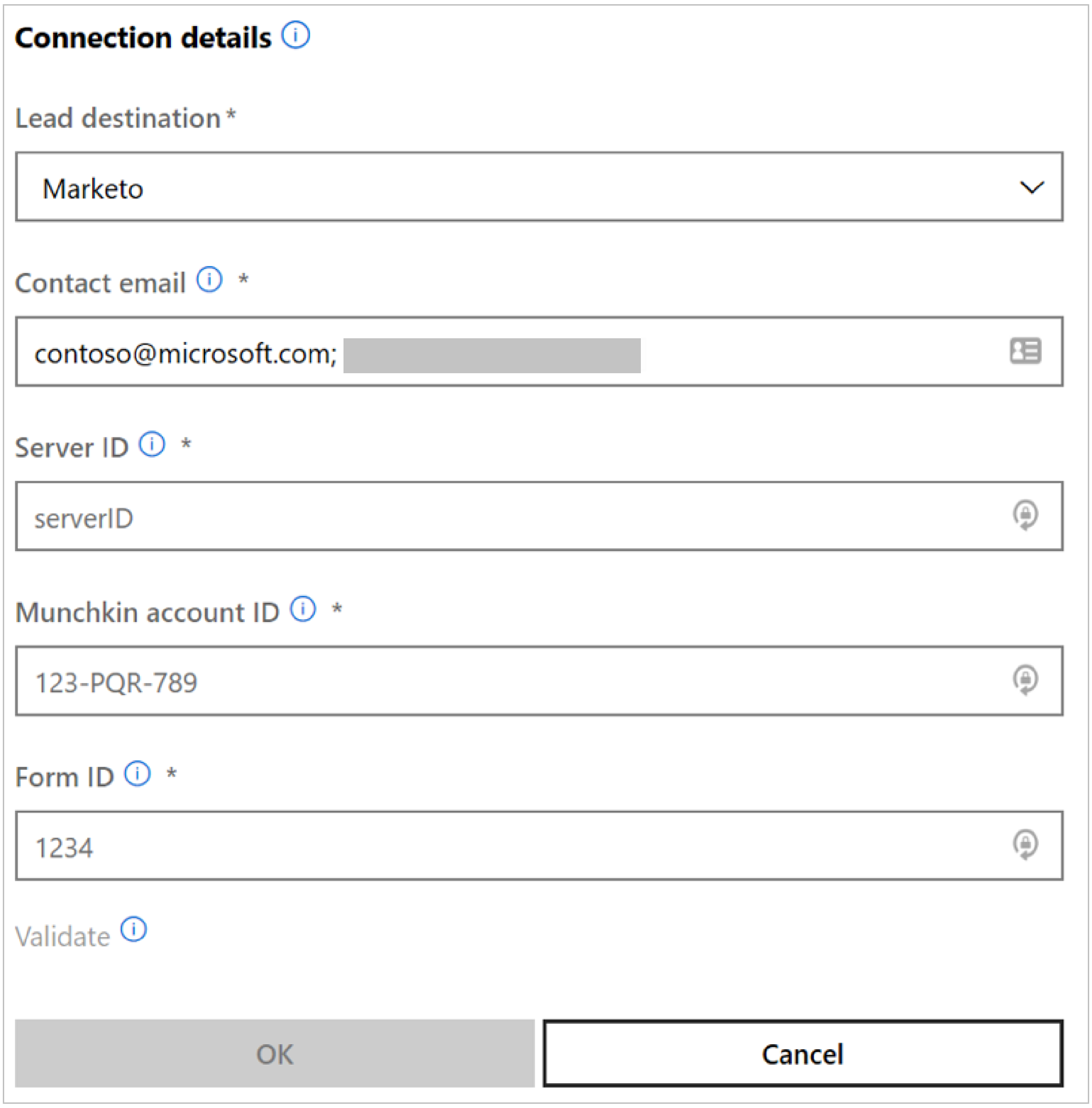
5. Provide the **Server ID**, **Munchkin account ID**, and **Form ID**.

> **NOTE**
>
> You must finish configuring the rest of the offer and publish it before you can receive leads for the offer.

6. Under **Contact email**, enter email addresses for people in your company who should receive email notifications when a new lead is received. You can provide multiple email addresses by separating them with a semicolon.

7. Select **OK**.

   To make sure you've successfully connected to a lead destination, select **Validate**. If successful, you'll have a test lead in the lead destination.


Connection details
Lead destination *
Marketo
Contact email *
contoso@microsoft.com;
Server ID *
serverID
Munchkin account ID *
123-PQR-789
Form ID *
1234
Validate
OK
Cancel

Configure lead management for Salesforce

11/22/2021 • 2 minutes to read • Edit Online

This article describes how to set up your Salesforce system to process sales leads from your offers in Microsoft AppSource and Azure Marketplace.

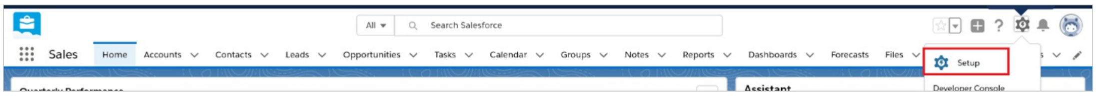
> **NOTE**
>
> Azure Marketplace doesn't support prepopulated lists, such as a list of values for the **Country** field. Make sure there are no lists set up before you continue. Alternatively, you can configure an HTTPS endpoint or an Azure table to receive leads.

Set up your Salesforce system

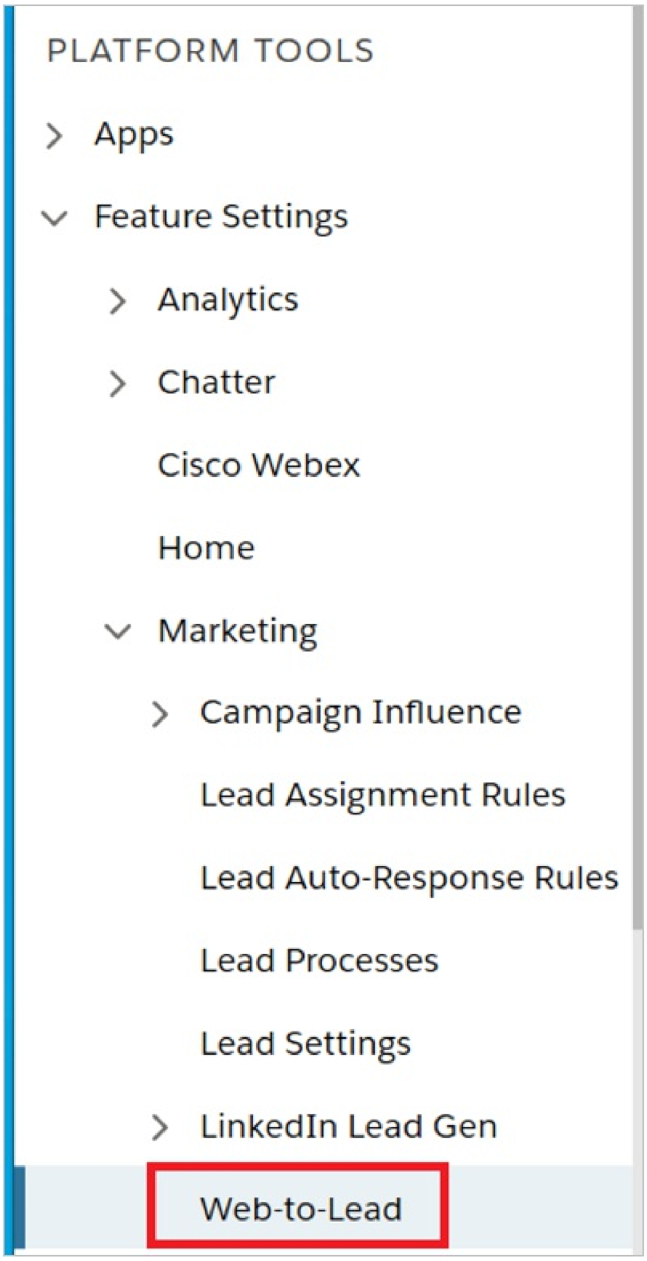
1. Sign in to Salesforce.
2. Navigate to the **Web-to-Lead** settings.

   If you're using the Salesforce lighting experience

   a. Select **Setup** on the Salesforce home page.

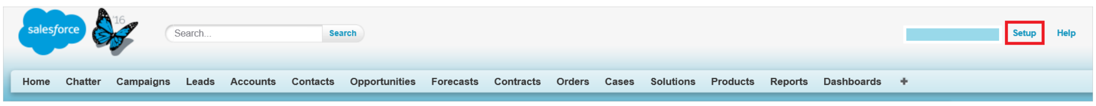
   

   b. On the **Setup** page, go to **Platform Tools** > **Feature Settings** > **Marketing** > **Web-to-Lead**.

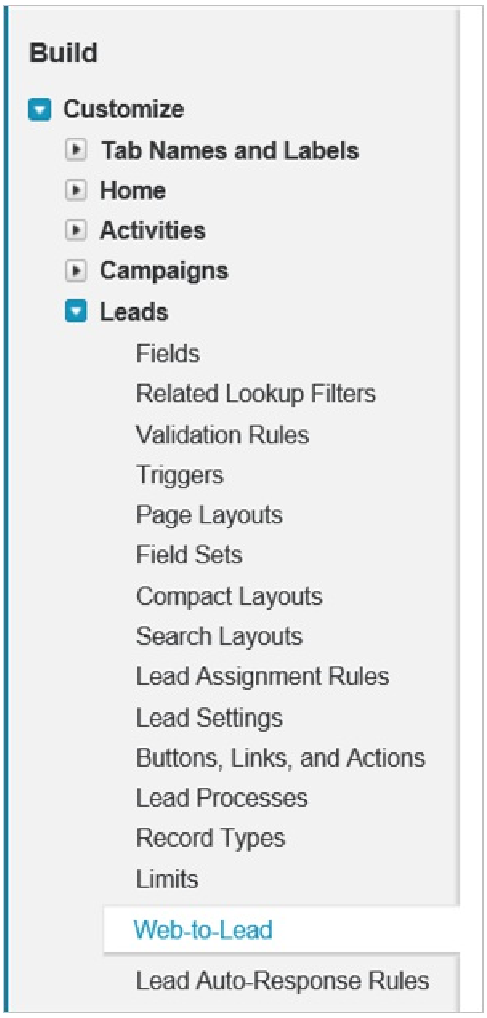


If you're using the Salesforce classic experience:

a. Select **Setup** on the Salesforce home page.



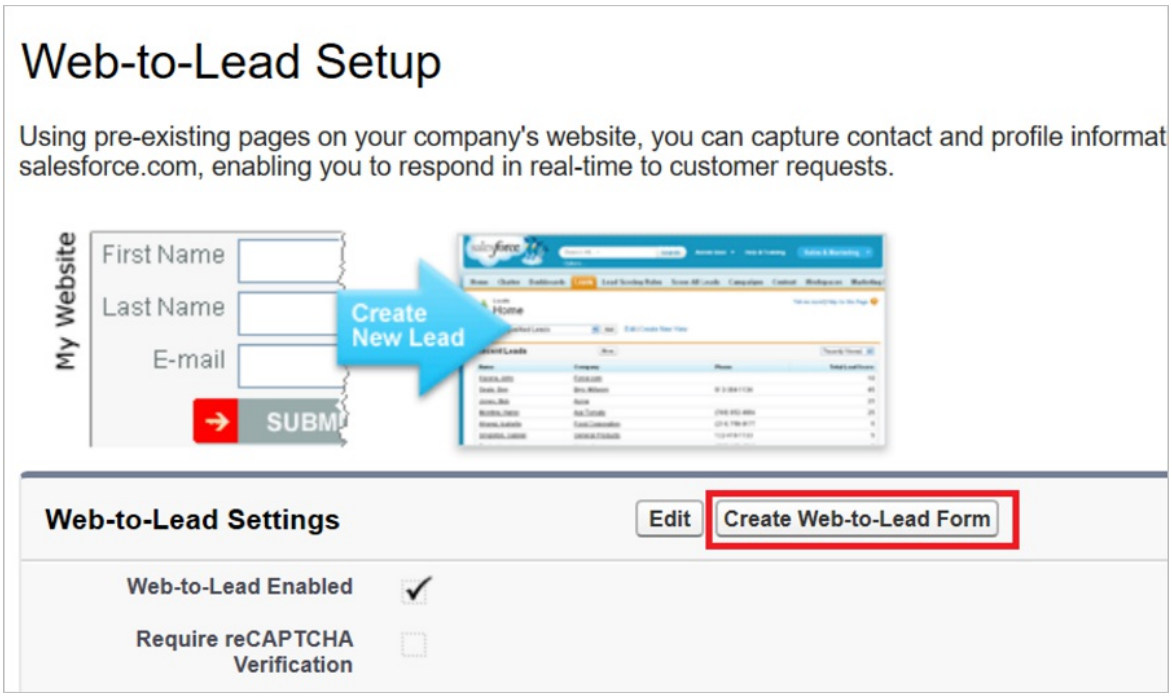
b. On the **Setup** page, select **Build** > **Customize** > **Leads** > **Web-to-Lead**.



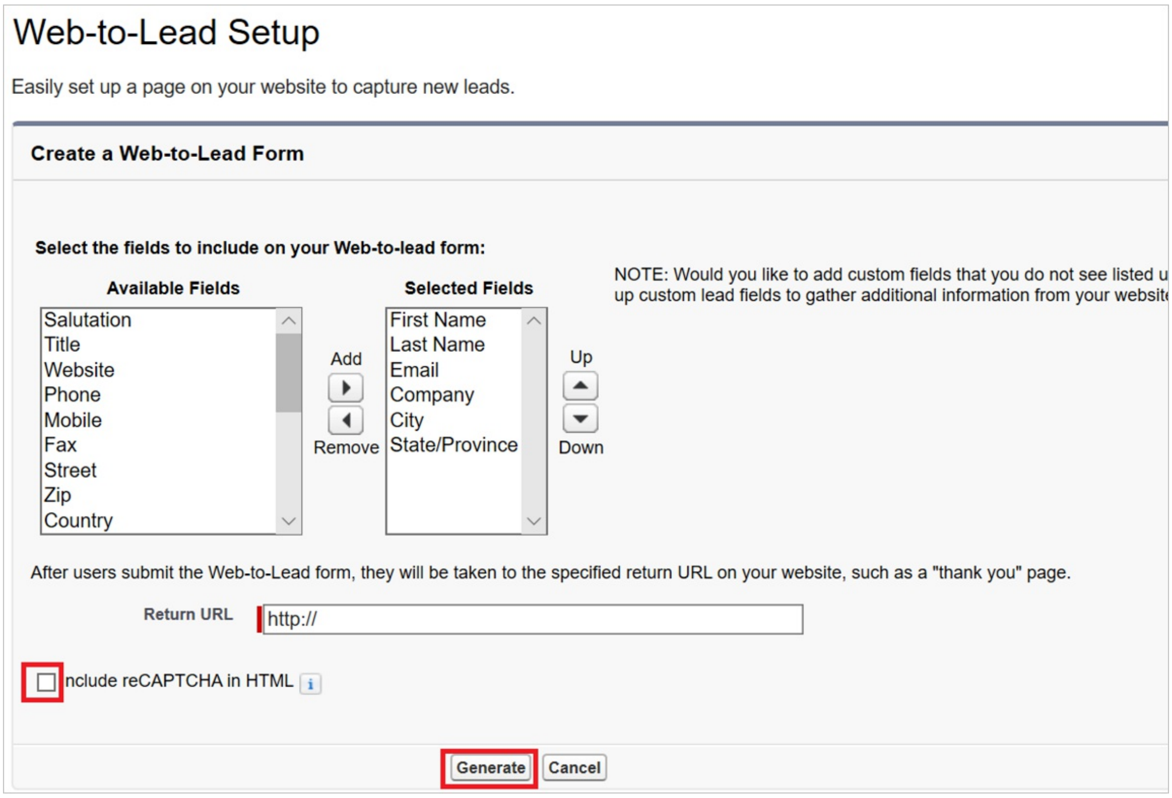
The remaining steps are the same for both Salesforce experiences.

3. On the **Web-to-Lead Setup** page, select the **Create Web-to-Lead Form** button.

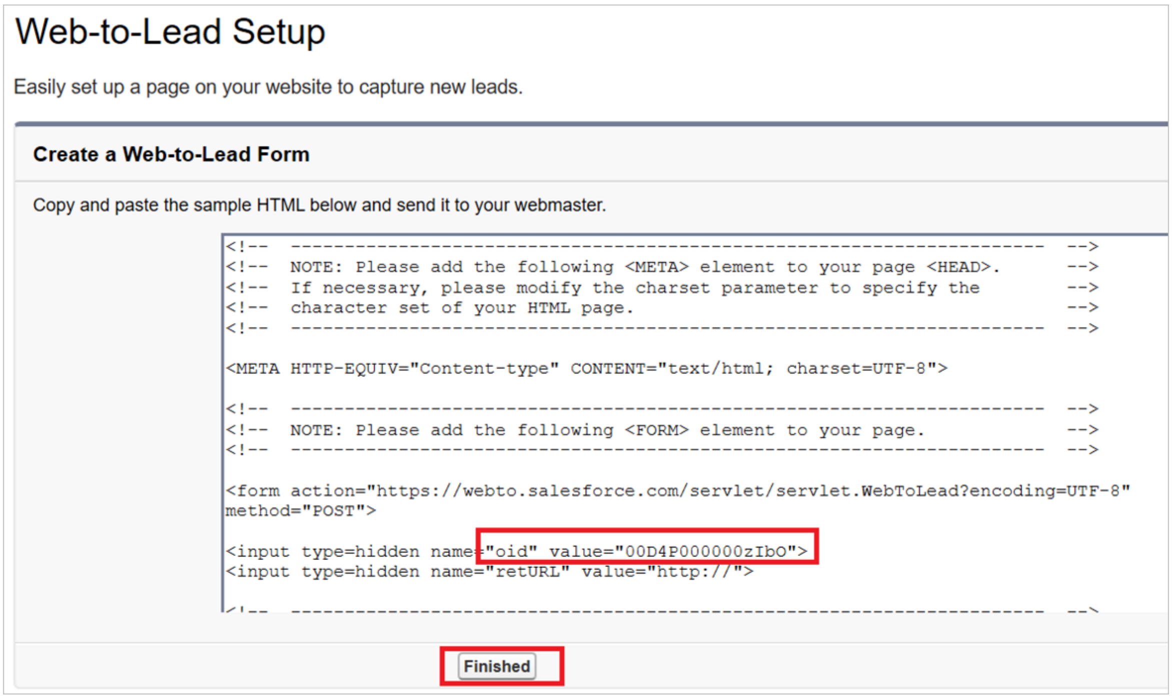
4. On **Web-to-Lead Setup**, select **Create a Web-to-Lead Form**.



5. On **Create a Web-to-Lead Form**, make sure the `Include reCAPTCHA in HTML` setting is cleared and select **Generate**.



6. You'll be presented with some HTML text. Search for the text "oid" and copy the **"oid" value** from the HTML text (only the text in between quotation marks) and save it. You'll paste this value in the **Organization Identifier** field on the publishing portal.



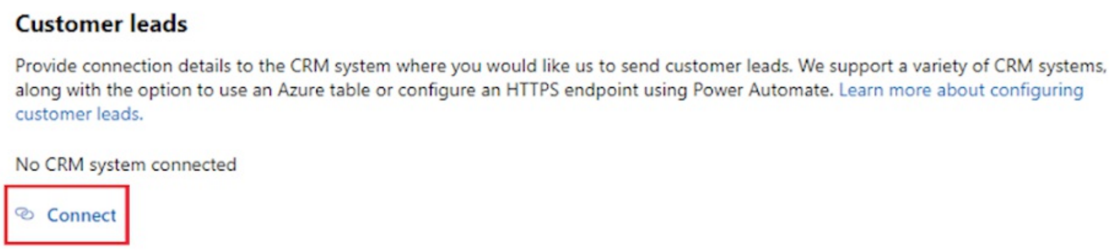
7. Select **Finished**.

Configure your offer to send leads to Salesforce

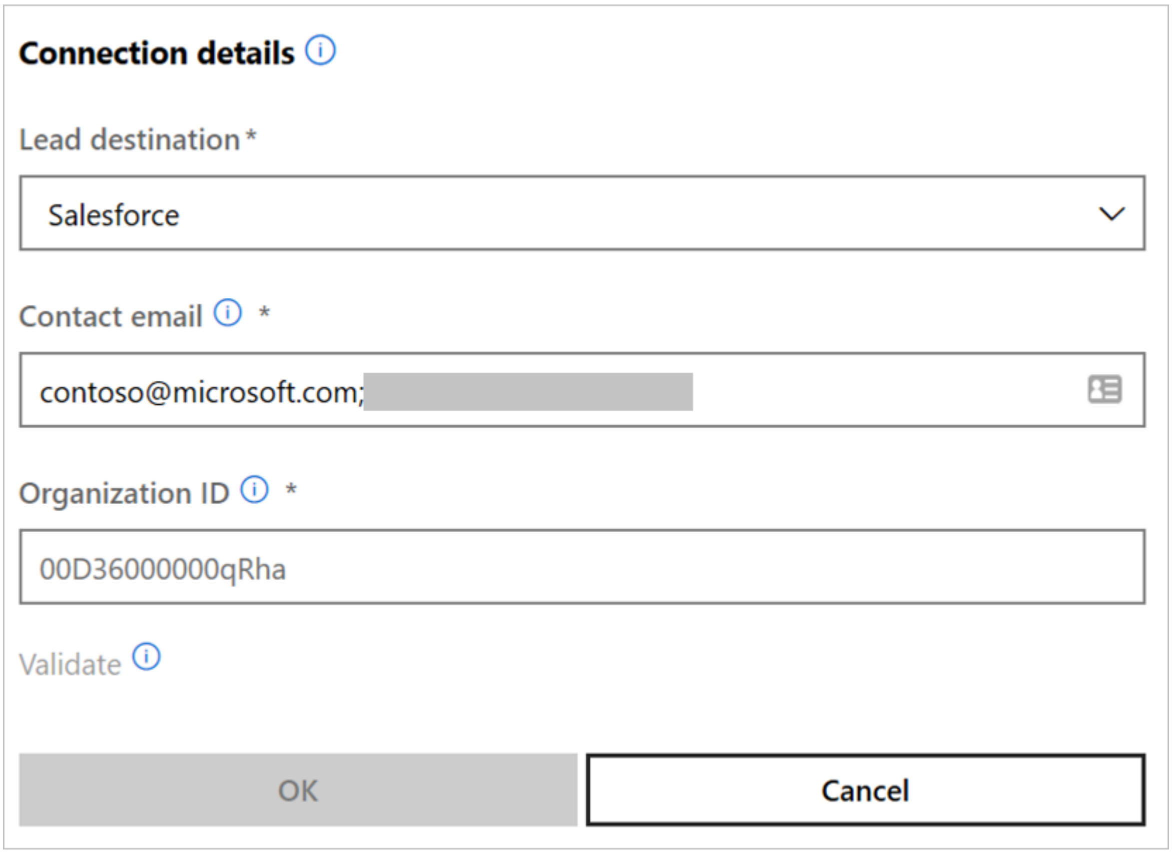
When you're ready to configure the lead management information for your offer in the publishing portal, follow these steps.

1. Sign in to Partner Center.
2. Select your offer, and go to the **Offer setup** tab.

3. Under the **Customer leads** section, select **Connect**.



4. On the **Connection details** pop-up window, select **Salesforce** for the **Lead destination** and paste the `oid` value from the Web-to-Lead Form you created into the **Organization identifier** field.



5. Under **Contact email**, enter email addresses for people in your company who should receive email notifications when a new lead is received. You can provide multiple emails by separating them with a semicolon.

6. Select **OK**.

To make sure you've successfully connected to a lead destination, select **Validate**. If successful, you'll have a test lead in the lead destination.

> **NOTE**
> You must finish configuring the rest of the offer and publish it before you can receive leads for the offer.

Access analytic reports for the commercial marketplace in Partner Center

11/22/2021 • 2 minutes to read • Edit Online

Learn how to access analytic reports in Microsoft Partner Center to monitor sales, evaluate performance, and optimize your offers in the marketplace. As a partner, you can monitor your offer listings using the data visualization and insight graphs supported by Partner Center and find ways to maximize your sales. The improved analytics tools enable you to act on performance results and maintain better relationships with your customers and resellers.

Partner Center analytics tools

To access the Partner Center analytics tools, go to the **Summary** dashboard.

> **NOTE**
> For detailed definitions of analytics terminology, see Frequently asked questions and terminology for commercial marketplace analytics.

Next steps

- For graphs, trends, and values of aggregate data that summarize marketplace activity for your offer, see Summary dashboard in commercial marketplace analytics.
- For information about your orders in a graphical and downloadable format, see Orders dashboard in commercial marketplace analytics.
- For Virtual Machine (VM) offers usage and metered billing metrics, see Usage dashboard in commercial marketplace analytics.
- For detailed information about your customers, including growth trends, see Customer dashboard in commercial marketplace analytics.
- For information about your licenses, see License dashboard in commercial marketplace analytics
- For a list of your download requests over the last 30 days, see Downloads dashboard in commercial marketplace analytics.
- To see a consolidated view of customer feedback for offers on Azure Marketplace and AppSource, see Ratings and reviews dashboard in commercial marketplace analytics.
- For frequently asked questions about commercial marketplace analytics and for a comprehensive dictionary of data terms, see Frequently asked questions and terminology for commercial marketplace analytics.

Summary dashboard in commercial marketplace analytics

11/22/2021 • 5 minutes to read • Edit Online

This article provides information on the Summary dashboard in Partner Center. This dashboard displays graphs, trends, and values of aggregate data that summarize marketplace activity for your offers.

NOTE

For detailed definitions of analytics terminology, see Commercial marketplace analytics terminology and common questions.

Summary dashboard

The Summary dashboard presents an overview of Azure Marketplace and Microsoft AppSource offers' business performance. The dashboard provides a broad overview of the following:

- Customers' orders
- Customers
- Customers' usage of the offers
- Customers' page visits in Azure Marketplace and AppSource

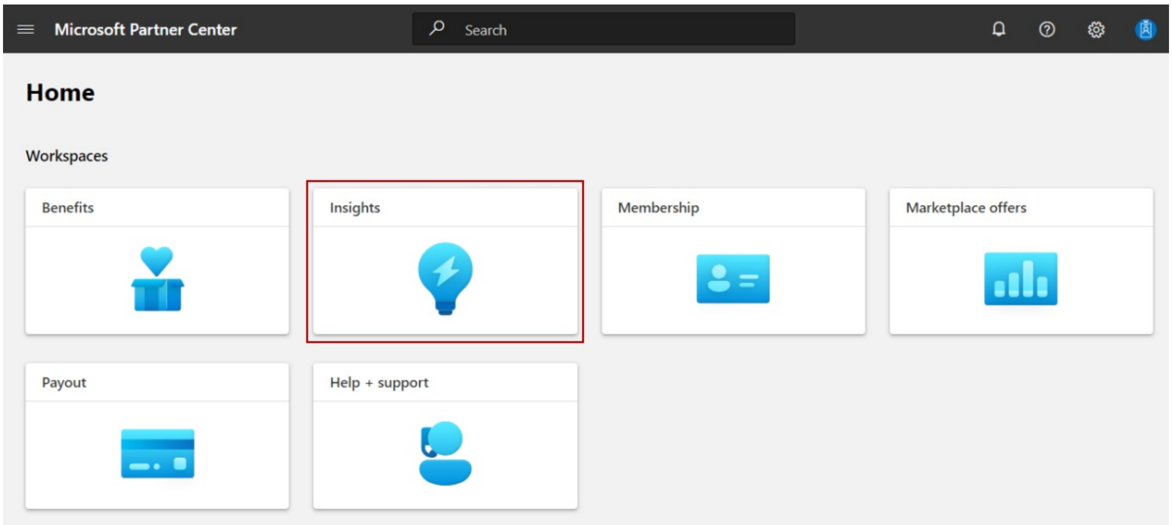
Access the Summary dashboard

NOTE

The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Summary**.

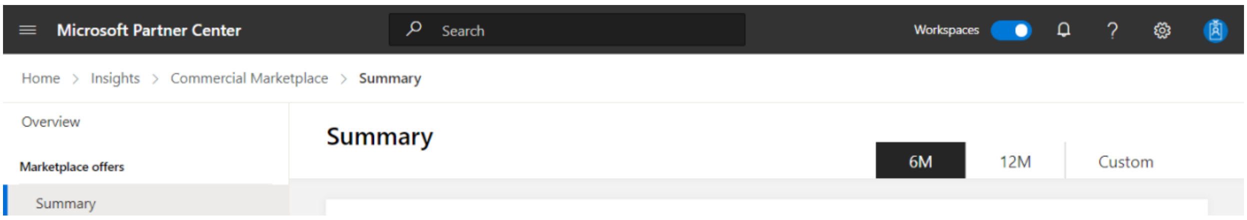
Elements of the Summary dashboard

The following sections describe how to use the summary dashboard and how to read the data.

Month range

- Workspaces view
- Current view

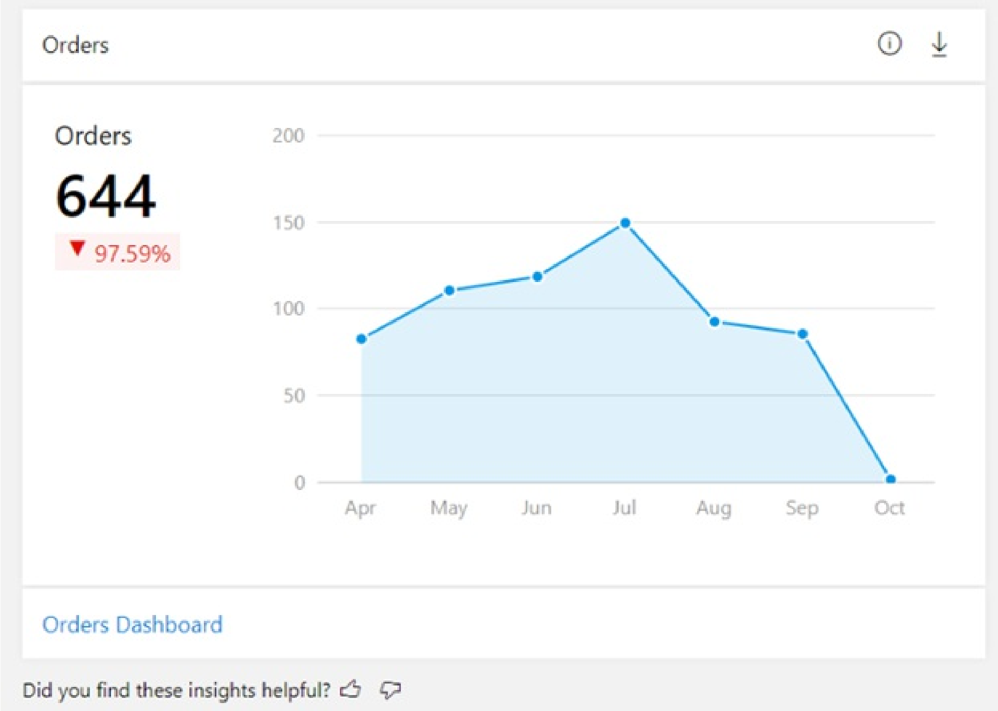
You can find a month range selection at the top-right corner of each page. Customize the output of the **Summary** page graphs by selecting a month range based on the past specified number of months, or by selecting a custom month range with a maximum duration of 12 months. The default month range (computation period) is six months.



> **NOTE**
>
> All metrics in the visualization widgets and export reports honor the computation period selected by the user.

Orders widget

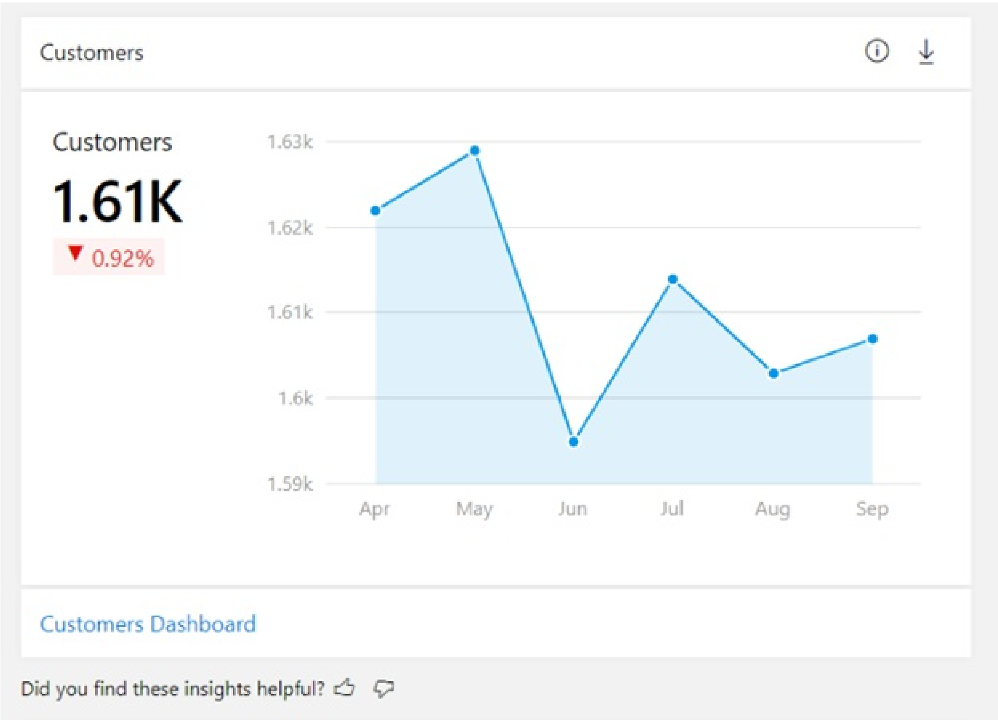
The Orders widget on the **Summary** dashboard displays the current orders for all your transact-based offers. The Orders widget displays a count and trend of all purchased orders (excluding canceled orders) for the selected computation period. The percentage value **Orders** represents the amount of growth during the selected computation period.



You can also go to the Orders report by selecting the **Orders Dashboard** link in the lower-left corner of the widget.

Customers widget

The **Customers** widget of the **Summary** dashboard displays the total number of customers who have acquired your offers for the selected computation period. The Customers widget displays a count and trend of total number of active (including new and existing) customers (excluding churned customers) for the selected computation period. The percentage value under **Customers** represents the amount of growth during the selected computation period.



You can also go to the detailed Customers report by selecting the **Customers dashboard** link in the lower-left corner of the widget.

Usage widget

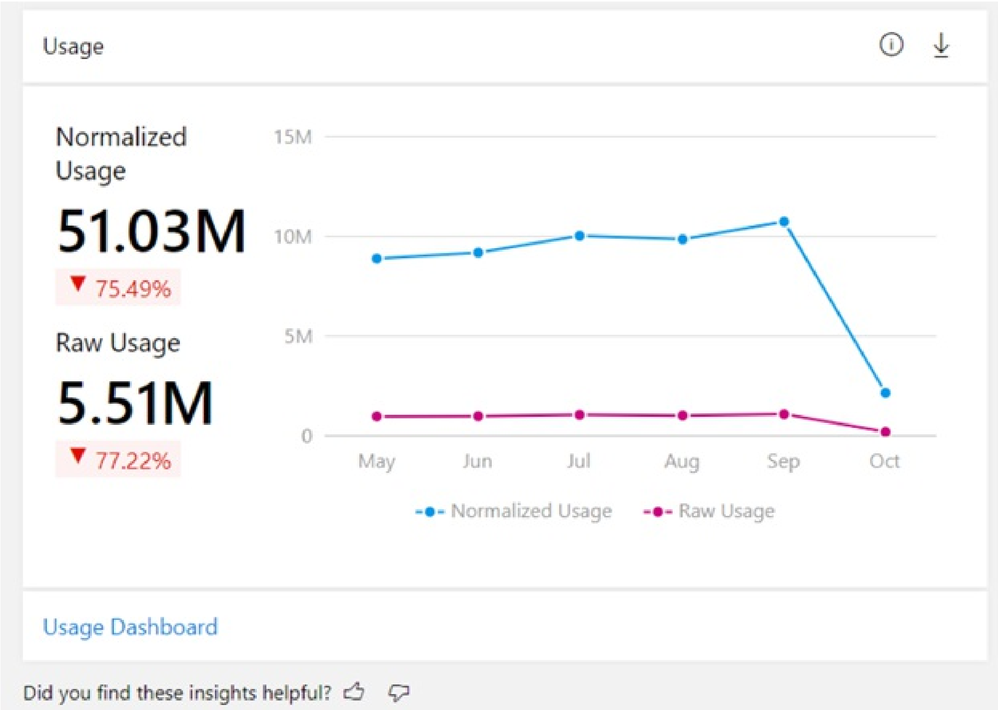
The **Usage** widget of the **Summary** dashboard represents the total normalized and raw usage hours for all

Azure Virtual Machine (VM) offers. The Usage widget displays a count and trend of total usage hours for the selected computation period.

The usage summary table displays the customer usage hours for all offers they have purchased.

- Normalized usage hours are defined as the usage hours normalized to account for the number of VM cores ([number of VM cores] x [hours of raw usage]). VMs designated as "SHAREDCORE" use 1/6 (or 0.1666) as the [number of VM cores] multiplier.
- Raw usage hours are defined as the amount of time VMs have been running in terms of hours.

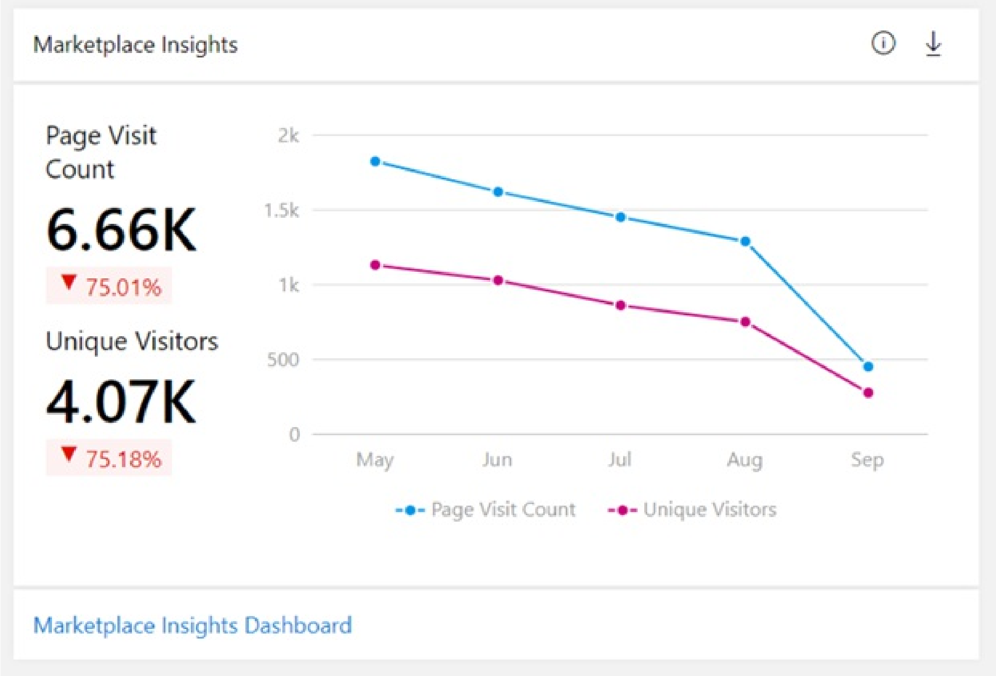
The percentage value below the total usage hours represents the amount of growth in usage hours during the selected computation period.



You can also go to the Usage report by selecting the **Usage dashboard** link in the lower-left corner of the widget.

Marketplace insights

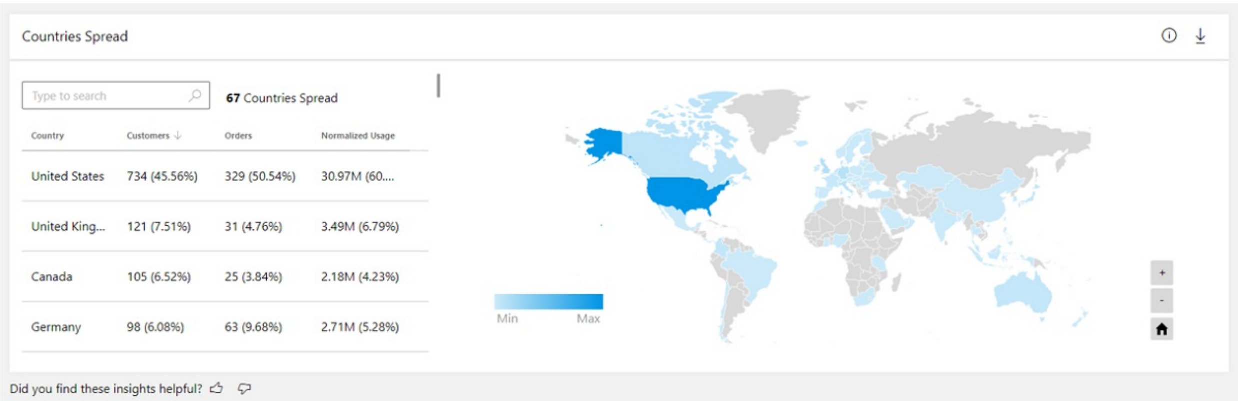
Marketplace Insights show the number of users who have visited your offers' pages in Azure Marketplace and AppSource. **Page visit count** shows a summary of commercial marketplace web analytics that enables publishers to measure customer engagement for their respective product detail pages listed on the commercial marketplace online stores: Microsoft AppSource and Azure Marketplace. This widget displays a count and trend of total page visits during the selected computation period.



You can also go to the Marketplace Insights report by selecting the **Marketplace insights dashboard** link in the lower-left corner of the widget.

Geographical spread

For the selected computation period, the heatmap displays the total number of customers, orders, and normalized usage hours against geography dimension.



Note the following:

- You can move the map to view the exact location.
- You can zoom into a specific location.
- The heatmap has a supplementary grid to view the details of customer count, order count, and normalized usage hours for the specific location.
- You can search and select a country/region in the grid to zoom to the location in the map. Revert to the original view by selecting the **Home** button in the map.

> **TIP**
>
> You can use the download icon in the upper-right corner of any widget to download the data. You can provide feedback on each of the widgets by selecting the “thumbs up” or “thumbs down” icon.

Next steps

- For an overview of analytics reports available in the commercial marketplace, see Access analytic reports for the commercial marketplace in Partner Center.

- For information about your orders in a graphical and downloadable format, see Orders Dashboard in commercial marketplace analytics.
- For Virtual Machine (VM) offers usage and metered billing metrics, see Usage Dashboard in commercial marketplace analytics.
- For detailed information about your customers, including growth trends, see Customer Dashboard in commercial marketplace analytics.
- For a list of your download requests over the last 30 days, see Downloads Dashboard in commercial marketplace analytics.
- To see a consolidated view of customer feedback for offers on Azure Marketplace and AppSource, see Ratings & Reviews analytics dashboard in Partner Center.
- For frequently asked questions about commercial marketplace analytics and for a comprehensive dictionary of data terms, see Commercial marketplace analytics terminology and common questions.

Orders dashboard in commercial marketplace analytics

11/22/2021 • 10 minutes to read • Edit Online

This article provides information on the Orders dashboard in Partner Center. This dashboard displays information about your orders, including growth trends, presented in a graphical and downloadable format.

> **NOTE**
> For detailed definitions of analytics terminology, see Commercial marketplace analytics terminology and common questions.

Orders dashboard

The Orders dashboard displays the current orders for all your software as a service (SaaS) offers. You can view graphical representations of the following items:

- Orders trend
- Orders per seat and site trend
- Orders by offers and SKUs
- Orders by geography
- Detailed orders table
- Orders page filters

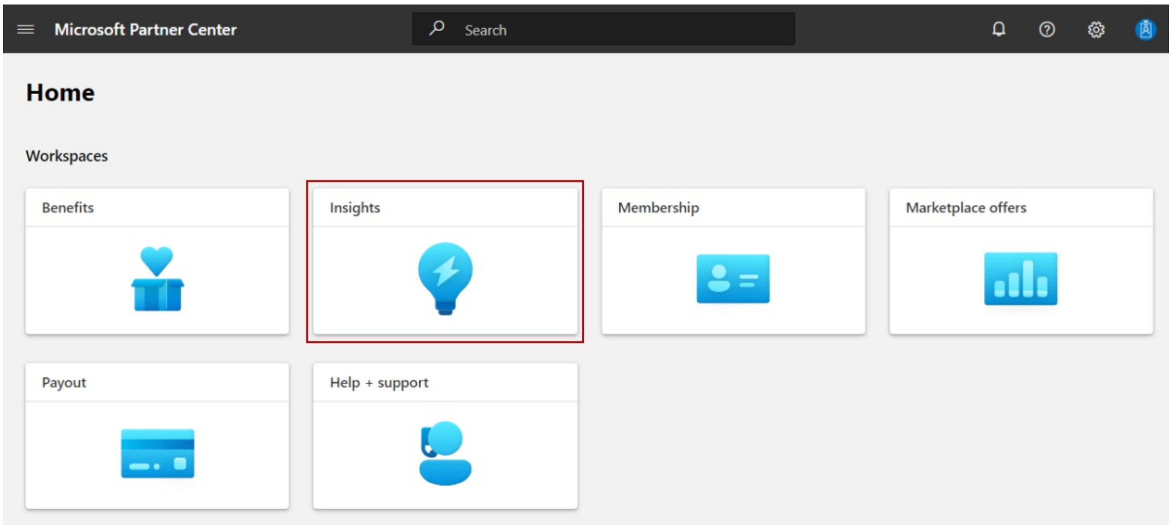
> **NOTE**
> The maximum latency between customer acquisition and reporting in Partner Center is 48 hours.

Access the Orders dashboard

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Orders**.

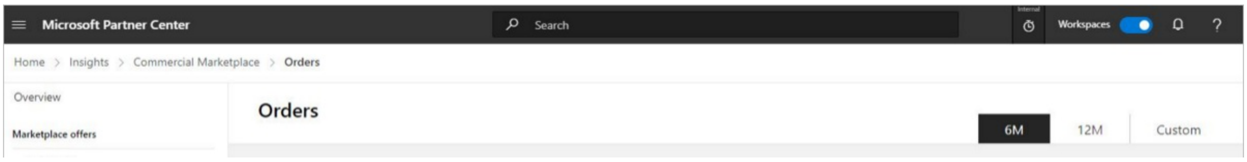
Elements of the Orders dashboard

The following sections describe how to use the Orders dashboard and how to read the data.

Month range

- Workspaces view
- Current view

You can find a month range selection at the top-right corner of each page. Customize the output of the **Orders** page graphs by selecting a month range based on the past 6 or 12 months, or by selecting a custom month range with a maximum duration of 12 months. The default month range (computation period) is six months.



> **NOTE**
>
> All metrics in the visualization widgets and export reports honor the computation period selected by the user.

Orders trend

In this section, you will find the **Orders** chart that shows the trend of your active and canceled orders for the selected computation period. Metrics and growth trends are represented by a line chart and will display the value for each month by hovering over the line on the chart. The percentage value below the Orders metrics in the widget represents the amount of growth or decline during the selected computation period.

There are two Orders counters: *Active* and *Canceled*.

- **Active** equals the number of orders that are currently in use by customers during the selected date range.
- **Canceled** equals the number of orders that were previously purchased and then canceled during the selected date range.

Orders by per seat and site trend

The **Orders by per seat and site-based** line chart represents the metric and trend of per-site SaaS and per-seat SaaS orders purchased by customers (this chart includes canceled orders).

SaaS offers can use one of two pricing models with each plan: either flat rate (site-based) or per user (seat-based).

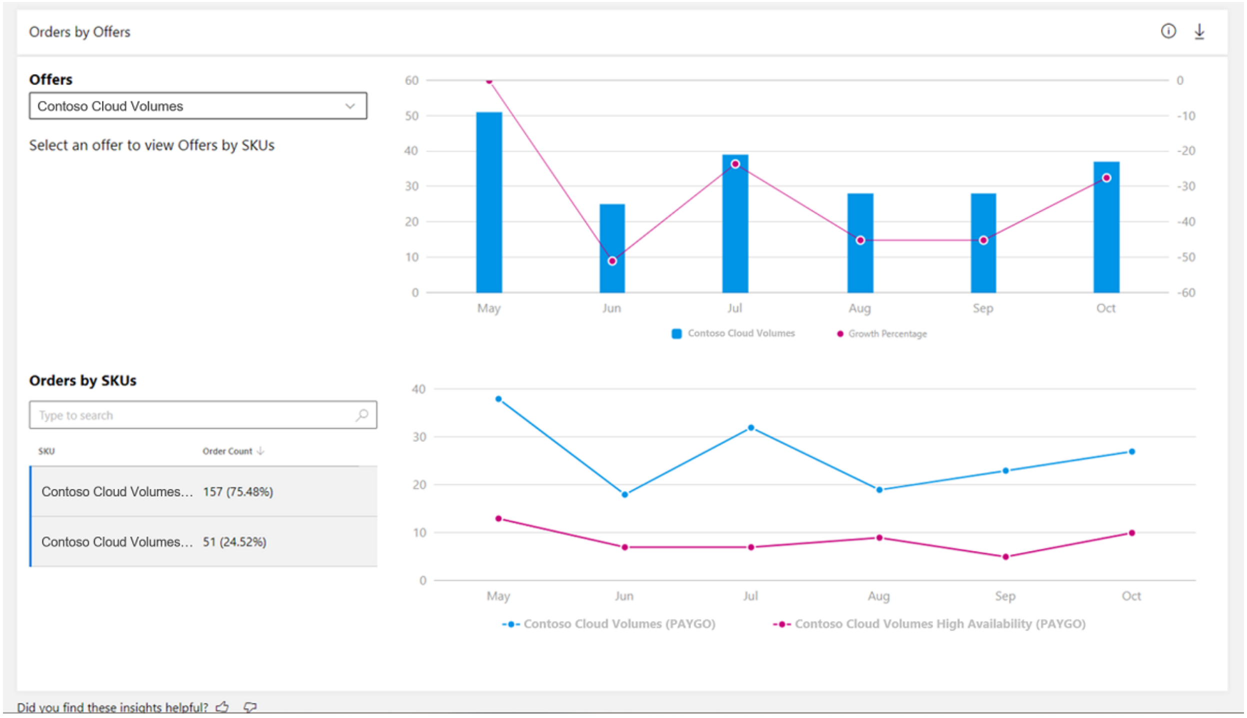
- **Flat rate**: Enable access to your offer with a single monthly or annual flat rate price. This is sometimes referred to as site-based pricing.
- **Per user**: Enable access to your offer with a price based on the number of users who can access the offer or occupy seats. With this usage-based model, you can set the minimum and maximum number of users supported by the plan. You can create multiple plans to configure different price points based on the number of users. These fields are optional. If left unselected, the number of users will be interpreted as not having a limit (min of 1 and max of as many as your service can support). These fields can be edited as part of an update to your plan.
- **Metered Billing**: On top of Flat Rate pricing. With this pricing model, you can optionally define metered plans that use the marketplace metering service API to charge customers for usage that isn't covered by the flat rate.

For more details on seat, site, and metered based billing, see How to plan a SaaS offer for the commercial marketplace.

Orders by offers and SKUs

The Orders by Offers and SKU chart shows the measures and trends of all Offers:

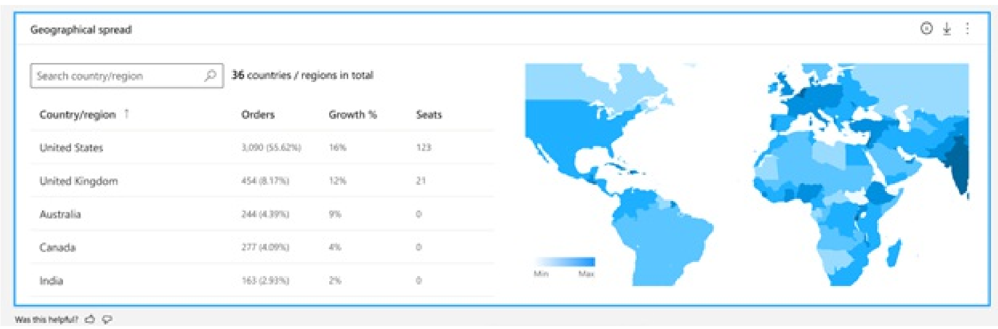
- The top offers are displayed in the graph and the rest of the offers are grouped as **Rest All**.
- You can select specific offers in the legend to display only that offer and the associated SKUs in the graph.
- Hovering over a slice in the graph displays the number of orders and percentage of that offer compared to your total number of orders across all offers.
- The **orders by offers trend** displays month-by-month growth trends. The month column represents the number of orders by offer name. The line chart displays the growth percentage trend plotted on a z-axis.



You can select any offer and a maximum of three SKUs of that offer to view the month-over-month trend for the offer, SKUs, and seats.

Orders by geography

For the selected computation period, the heatmap displays the total number of orders, and the growth percentage of newly added orders against a geography. The light to dark color on the map represents the low to high value of the customer count. Select a record in the table to zoom in on a specific country or region.



Note the following:

- You can move the map to view the exact location.
- You can zoom into a specific location.
- The heatmap has a supplementary grid to view the details of customer count, order count, and normalized usage hours for the specific location.
- You can search and select a country/region in the grid to zoom to the location in the map. Revert to the original view by selecting the **Home** button in the map.

Orders details table

The Order details table displays a numbered list of the 1,000 top orders sorted by date of acquisition.

- Each column in the grid is sortable.
- The data can be extracted to a .CSV or .TSV file if the count of the records is less than 1,000.
- If records number over 1,000, exported data will be asynchronously placed in a downloads page for the next 30 days.
- Apply filters to the **Order details** table to display only the data you're interested in. Filter by Country/Region, Azure license type, commercial marketplace license type, Offer type, Order status, Free trails, commercial marketplace subscription ID, Customer ID, and Company name.
- When an order is purchased by a protected customer, information in **Orders Detailed Data** is masked (************).

Table 1: Dictionary of data terms

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Marketplace Subscription ID	Marketplace Subscription ID	The unique identifier associated with the Azure subscription the customer used to purchase your commercial marketplace offer. For infrastructure offers, this is the customer's Azure subscription GUID. For SaaS offers, this is shown as zeros since SaaS purchases do not require an Azure subscription.	Marketplace Subscription ID
MonthStartDate	Month Start Date	Month Start Date represents month of Purchase. The format is yyyy-mm-dd.	MonthStartDate
Offer Type	Offer Type	The type of commercial marketplace offering.	OfferType
Azure License Type	Azure License Type	The type of licensing agreement used by customers to purchase Azure. Also known as Channel. The possible values are: • Cloud Solution Provider • Enterprise • Enterprise through Reseller • Pay as You Go • GTM	AzureLicenseType

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Marketplace License Type	Marketplace License Type	The billing method of the commercial marketplace offer. The different values are: • Cloud Solution Provider (CSP) • Enterprise (EA) • Enterprise through reseller • Pay as You Go • Go to market (GTM)	MarketplaceLicenseType
SKU	SKU	The plan associated with the offer	SKU
Customer Country	Customer Country/Region	The country/region name provided by the customer. Country/region could be different than the country/region in a customer's Azure subscription.	CustomerCountry
Is Preview SKU	Is Preview SKU	The value will let you know if you have tagged the SKU as "preview". Value will be "Yes" if the SKU has been tagged accordingly, and only Azure subscriptions authorized by you can deploy and use this image. Value will be "No" if the SKU has not been identified as "preview".	IsPreviewSKU
Order ID	Order ID	The unique identifier of the customer order for your commercial marketplace service. Virtual Machine usage-based offers are not associated with an order.	OrderId
Order Quantity	Order Quantity	Number of assets associated with the order ID for active orders	OrderQuantity
Cloud Instance Name	Cloud Instance Name	The Microsoft Cloud in which a VM deployment occurred.	CloudInstanceName

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Is New Customer	Is New Customer	The value identifies whether a new customer acquired one or more of your offers for the first time. Value will be "Yes" if within the same calendar month for "Date Acquired". Value will be "No" if the customer has purchased any of your offers prior to the calendar month reported.	IsNewCustomer
Order Status	Order Status	The status of a commercial marketplace order at the time the data was last refreshed.	OrderStatus
Order Cancel Date	Order Cancel Date	The date the commercial marketplace order was canceled.	OrderCancelDate
Customer Company Name	Customer Company Name	The company name provided by the customer. Name could be different than the city in a customer's Azure subscription.	CustomerCompanyName
Order Purchase Date	Order Purchase Date	The date the commercial marketplace order was created. The format is yyyy-mm-dd.	OrderPurchaseDate
Offer Name	Offer Name	The name of the commercial marketplace offering.	OfferName
Trial End Date	Trial End Date	The date the trial period for this order will end or has ended.	TrialEndDate
Customer ID	Customer ID	The unique identifier assigned to a customer. A customer may have zero or more Azure Marketplace subscriptions.	CustomerId
Billing Account ID	Billing Account ID	The identifier of the account on which billing is generated. Map **Billing Account ID** to **customerID** to connect your Payout Transaction Report with the Customer, Order, and Usage Reports.	BillingAccountId

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
AssetCount	Asset Count	The number of assets associated with the order ID.	Deprecated
Not available *	TermStartDate	Indicates the start date of a term for an order.	TermStartDate
Not available *	TermEndDate	Indicates the end date of a term for an order.	TermEndDate
Not available *	purchaseRecordId	The identifier of the purchase record related to an order.	purchaseRecordId
Not available *	purchaseRecordLineItemId	The identifier of the purchase record line item related to this order.	purchaseRecordLineItemId
Not available *	EstimatedCharges	The price the customer will be charged for all order units before taxation. In tax inclusive countries, this price includes the tax, otherwise it does not.	EstimatedCharges
Not available *	Currency	BillingCurrency for the offer	Currency
Not available *	HasTrial	Represents whether an offer has trial period enabled.	HasTrial

`*` These new fields are currently provided in the ISVOrderV2 dataset and can be accessed programmatically.

Orders page filters

The **Orders** page filters are applied at the Orders page level. You can select one or multiple filters to render the chart for the criteria you choose to view and the data you want to see in 'Detailed orders data' grid / export. Filters are applied on the data extracted for the month range that you have selected on the top-right corner of the orders page.

> **TIP**
>
> You can use the download icon in the upper-right corner of any widget to download the data. You can provide feedback on each of the widgets by clicking on the “thumbs up” or “thumbs down” icon.

Next steps

- For an overview of analytics reports available in the commercial marketplace, see Access analytic reports for the commercial marketplace in Partner Center.
- For graphs, trends, and values of aggregate data that summarize marketplace activity for your offer, see Summary dashboard in commercial marketplace analytics.
- For information about your orders in a graphical and downloadable format, see Orders Dashboard in

commercial marketplace analytics.

- For Virtual Machine (VM) offers usage and metered billing metrics, see Usage dashboard in commercial marketplace analytics.
- For a list of your download requests over the last 30 days, see Downloads dashboard in commercial marketplace analytics.
- To see a consolidated view of customer feedback for offers on Azure Marketplace and AppSource, see Ratings & Reviews analytics dashboard in Partner Center.
- For frequently asked questions about commercial marketplace analytics and for a comprehensive dictionary of data terms, see Commercial marketplace analytics terminology and common questions.

Usage dashboard in commercial marketplace analytics

11/22/2021 • 14 minutes to read • Edit Online

This article provides information on the Usage dashboard in Partner Center. This dashboard displays all virtual machine (VM) offers normalized usage, raw usage, and metered billing metrics in three separate tabs: VM Normalized usage, VM Raw usage, and metered billing usage.

NOTE

For detailed definitions of analytics terminology, see Commercial marketplace analytics terminology and common questions.

Usage dashboard

The Usage dashboard displays the current orders for all your software as a service (SaaS) offers. You can view graphical representations of the following items:

- Usage trend
- Normalized usage by offers
- Normalized usage by other dimensions: VM Size, Sales Channels, and Offer Types
- Usage by geography
- Detailed usage table
- Orders page filters

NOTE

The maximum latency between usage event generation and reporting in Partner Center is 48 hours.

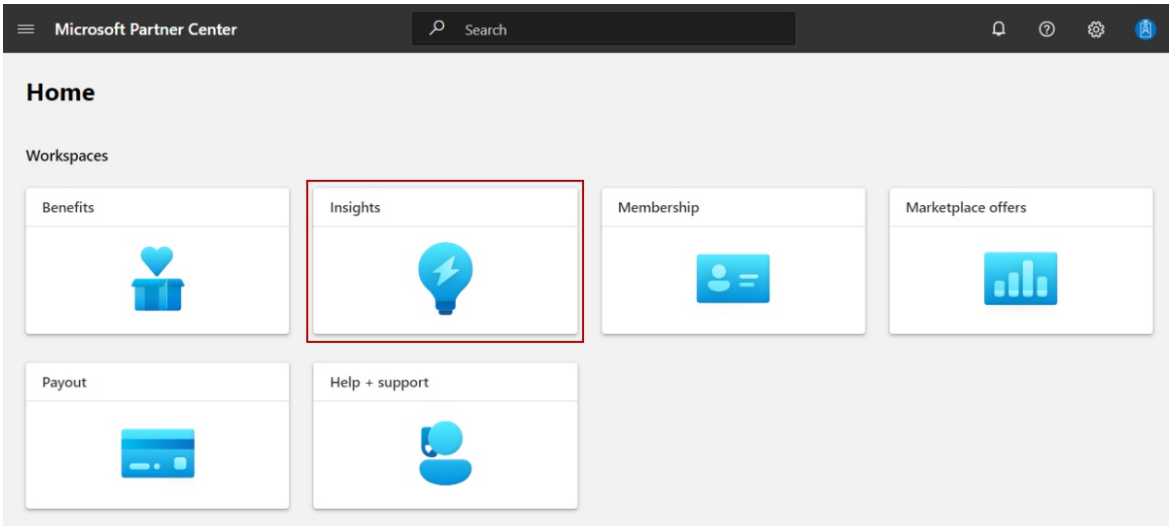
Access the Usage dashboard

NOTE

The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Usage**.

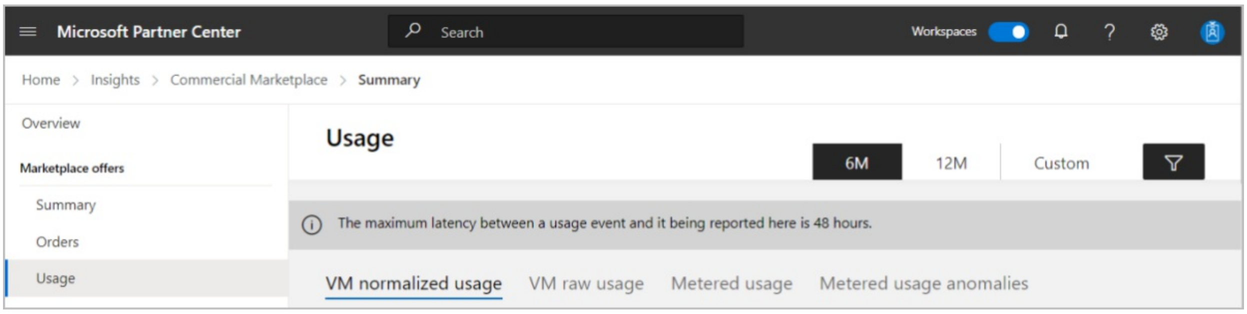
Elements of the Usage dashboard

The following sections describe how to use the Usage dashboard and how to read the data.

Month range

- Workspaces view
- Current view

You can find a month range selection at the top-right corner of each page. Customize the output of the **Usage** page graphs by selecting a month range based on the past 6 or 12 months, or by selecting a custom month range with a maximum duration of 12 months. The default month range (computation period) is six months.

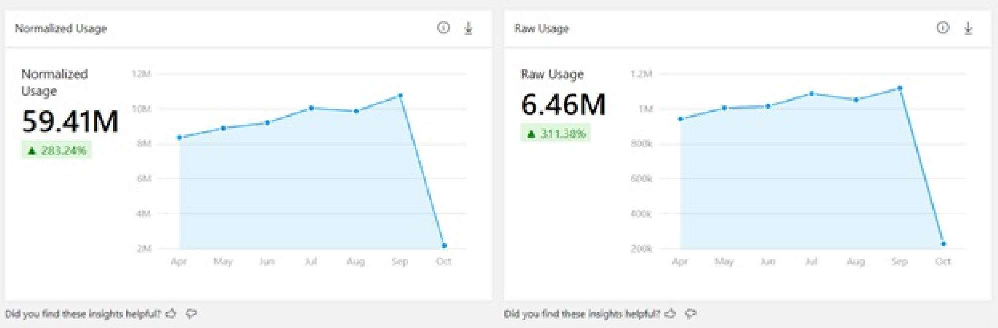


Usage trend

In this section, you will find total usage hours and trend for all your offers that are consumed by your customers during the selected computation period. Metrics and growth trends are represented by a line chart. Show the value for each month by hovering over the line on the chart. The percentage value below the usage metrics in the widget represents the amount of growth or decline during the selected computation period.

There are two representations of usage hours: VM normalized usage and VM raw usage.

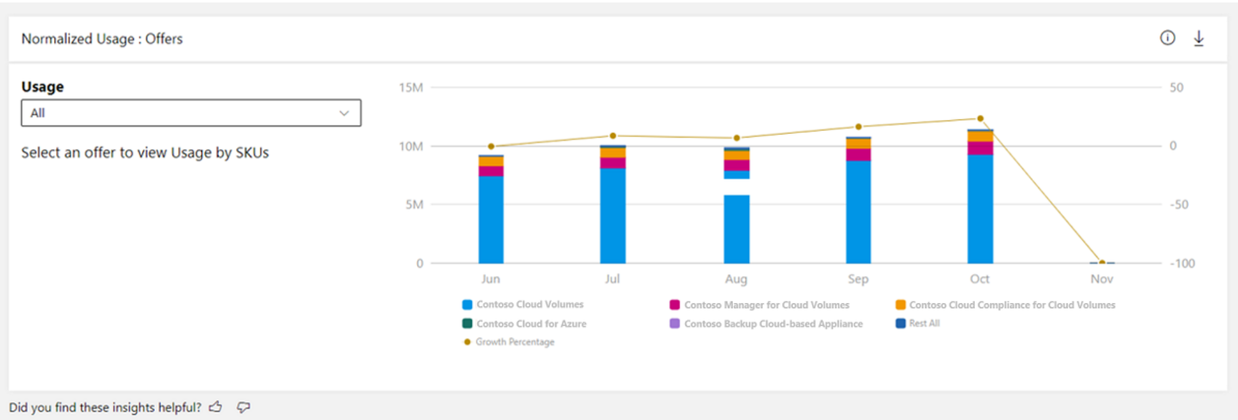
- Normalized usage hours are defined as the usage hours normalized to account for the number of VM cores ([number of VM cores] x [hours of raw usage]). VMs designated as "SHAREDCORE" use 1/6 (or 0.1666) as the [number of VM cores] multiplier.
- Raw usage hours are defined as the amount of time VMs have been running in terms of hours.



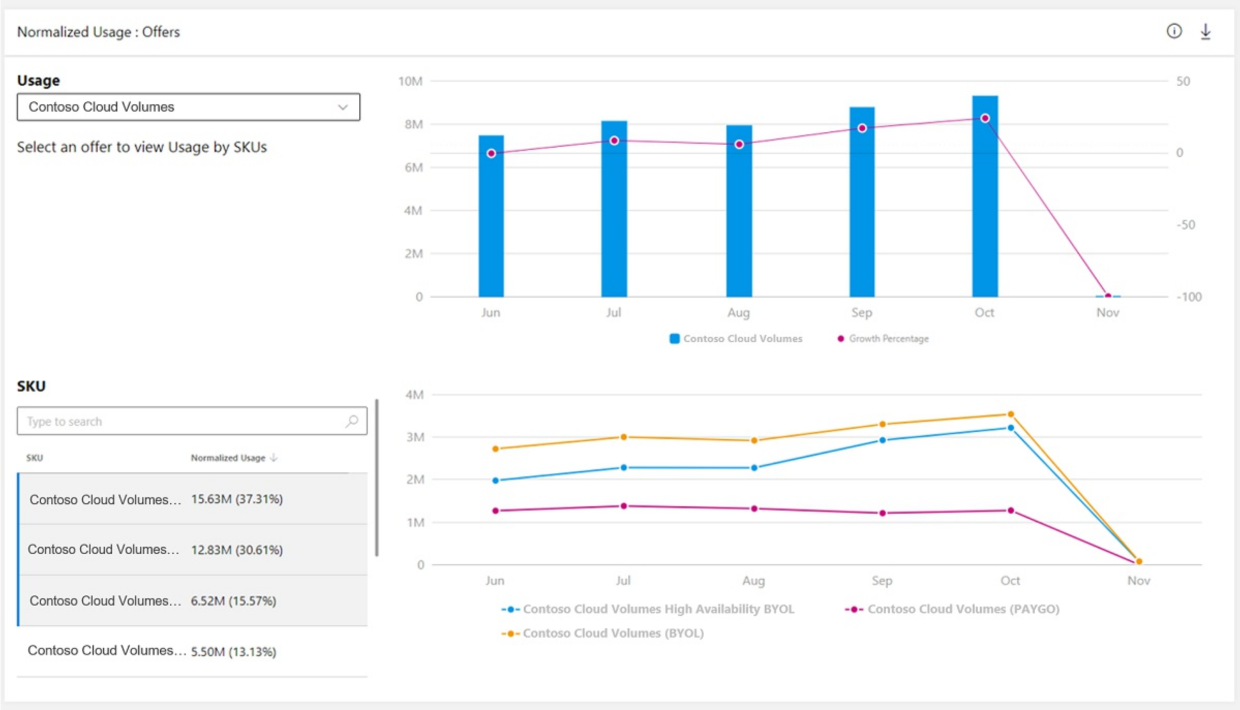
Normalized usage by offers

This section provides the total usage hours and trend for your usage-based offers in Azure Marketplace. The Normalized usage by offers chart is described below.

- The **normalized usage by offers** stacked column chart displays a breakdown of normalized usage hours for the top five offers according to the selected computation period. The top five offers are displayed in a graph, while the rest are grouped in the **Rest All** category.
- The stacked column chart depicts a month-by-month growth trend for the selected date range. The month columns represent usage hours from the offers with the highest usage hours for the respective month. The line chart depicts the growth percentage trend plotted on the secondary Y-axis.
- You can select specific offers in the legend to display only those offers in the graph.



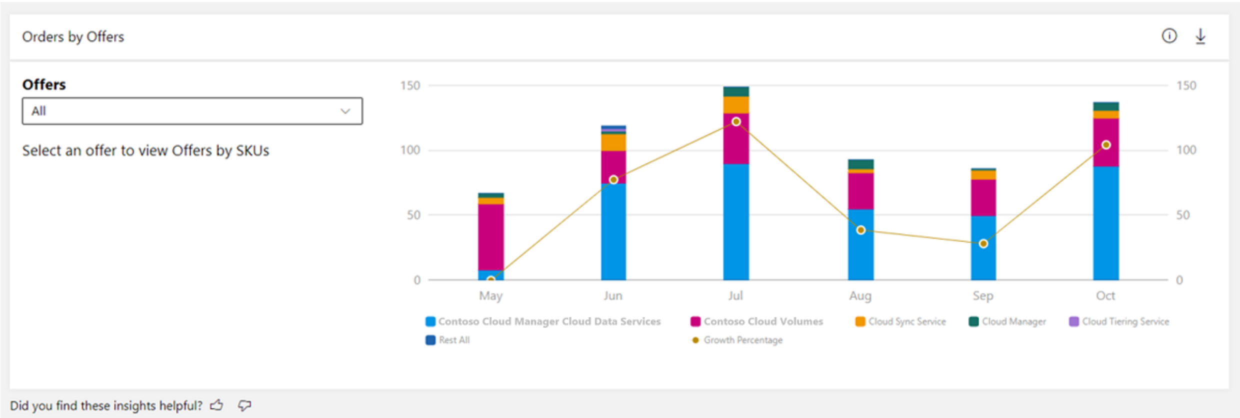
You can select any offer and a maximum of three SKUs of that offer to view the month-over-month usage trend for the offer and the selected SKUs.



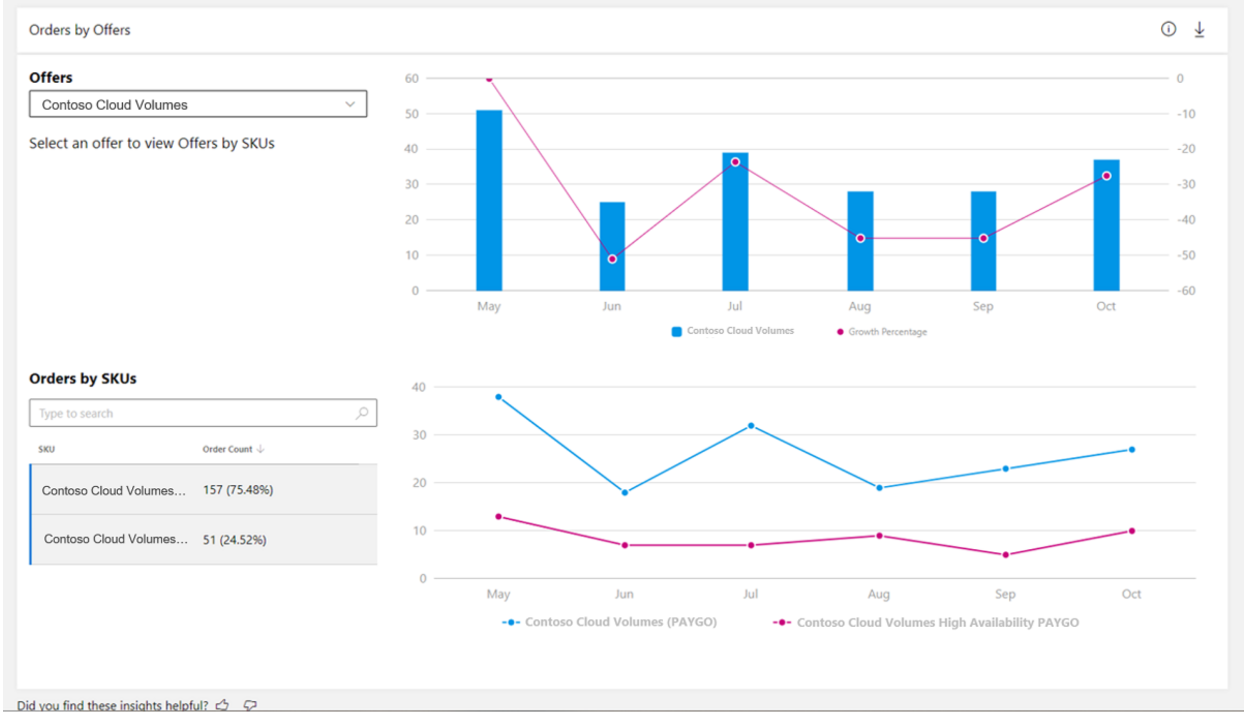
Orders by offers and SKUs

The **Orders by Offers and SKU** chart shows the measures and trends of all offers. Note the following:

- The top offers are displayed in the graph and the rest of the offers are grouped as **Rest All**.
- You can select specific offers in the legend to display only those offers in the graph.
- Hovering over a slice in the graph displays the number of orders and percentage of that offer compared to your total number of orders across all offers.
- The **orders by offers trend** displays month-by-month growth trends. The month column represents the number of orders by offer name. The line chart displays the growth percentage trend plotted on the z-axis.

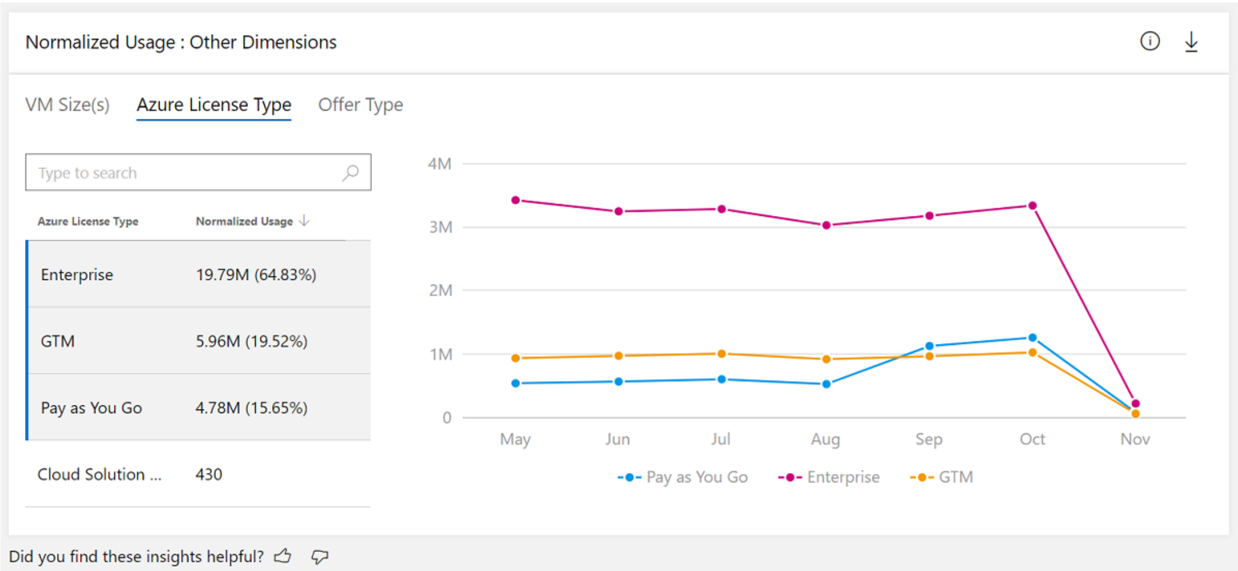


You can select any offer and a maximum of three SKUs of that offer to view the month-over-month trend for the offer, SKUs, and seats.



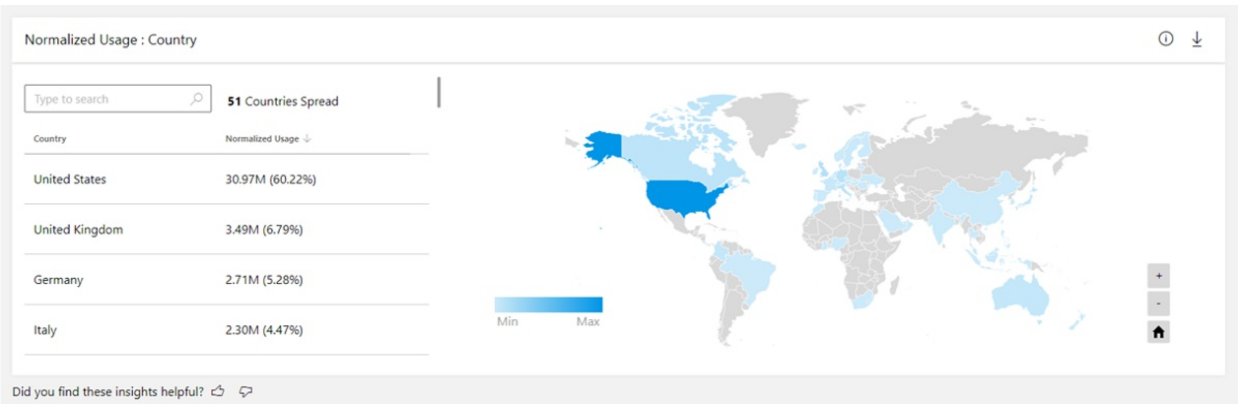
Normalized usage by other dimensions: VM size, Sales channels, and Offer type

There are three tabs for the dimensions: VM size, Sales channels, and Offer type. You can see the usage metrics and month-over-month trend against each of these dimensions.



Usage by geography

For the selected computation period, the heatmap displays the total usage against geography dimension. The light to dark color on the map represents the low to high value of the customer count. Select a record in the table to zoom in on a country/region.



Note the following:

- You can move the map to view the exact location.
- You can zoom into a specific location.
- The heatmap has a supplementary grid to view the details of customer count, order count, and normalized usage hours in the specific location.
- You can search and select a country/region in the grid to zoom to the location in the map. Revert to the original view by selecting the **Home** button in the map.

Usage details table

The **usage details** table displays a numbered list of the top 1,000 usage records sorted by usage. Note the following:

- Each column in the grid is sortable.
- The data can be extracted to a .TSV or .CSV file if the count of the records is less than 1,000.
- If records count is over 1,000, export data will be asynchronously placed in a downloads page that will be available for the next 30 days.
- Apply filters to **detailed usage data** to display only the data you are interested in. Filter data by country/region, sales channel, Marketplace license type, usage type, offer name, offer type, free trials, Marketplace subscription ID, customer ID, and company name.

Table 1: Dictionary of data terms

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Marketplace Subscription ID	Marketplace Subscription ID	The unique identifier associated with the Azure subscription the customer used to purchase your commercial marketplace offer. ID was formerly the Azure Subscription GUID.	MarketplaceSubscriptionId
MonthStartDate	Month Start Date	Month Start Date represents the month of Purchase.	MonthStartDate
Offer Type	Offer Type	The type of commercial marketplace offering.	OfferType
Azure License Type	Azure License Type	The type of licensing agreement used by customers to purchase Azure. Also known as the Channel. The possible values are: • Cloud Solution Provider • Enterprise • Enterprise through Reseller • Pay as You Go	AzureLicenseType

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Marketplace License Type	Marketplace License Type	The billing method of the commercial marketplace offer. The possible values are: • Billed Through Azure • Bring Your Own License • Free • Microsoft as Reseller	MarketplaceLicenseType
SKU	SKU	The plan associated with the offer.	SKU
Customer Country	Customer Country/Region	The country/region name provided by the customer. Country/region could be different than the country/region in a customer's Azure subscription.	CustomerCountry
Is Preview SKU	Is Preview SKU	The value shows if you have tagged the SKU as "preview". Value will be "Yes" if the SKU has been tagged accordingly, and only Azure subscriptions authorized by you can deploy and use this image. Value will be "No" if the SKU has not been identified as "preview".	IsPreviewSKU
SKU Billing Type	SKU Billing Type	The Billing type associated with each SKU in the offer. The possible values are: • Free • Paid	SKUBillingType
IsInternal	Deprecated	Deprecated	Deprecated
VM Size	Virtual Machine Size	For VM-based offer types, this entity signifies the size of the VM associated with the SKU of the offer.	VMSize
Cloud Instance Name	Cloud Instance Name	The Microsoft Cloud in which a VM deployment occurred.	CloudInstanceName
ServicePlanName	Deprecated	Deprecated (Same definition as SKU)	ServicePlanName

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Offer Name	Offer Name	The name of the commercial marketplace offering.	OfferName
DeploymentMethod	Deprecated	Deprecated (Same definition as Offer type)	DeploymentMethod
Customer Company Name	Customer Company Name	The company name provided by the customer. The name could be different than the name in a customer's Azure subscription.	CustomerCompanyName
Usage Date	Usage Date	The date of usage event generation for usage-based assets.	UsageDate
IsMultisolution	Is Multisolution	Signifies whether the offer is a Multisolution offer type.	IsMultisolution
Is New Customer	Deprecated	Deprecated	IsNewCustomer
Core Size	Core Size	Number of cores associated with the VM-based offer.	CoreSize
Usage Type	Usage Type	Signifies whether the usage event associated with the offer is one of the following: • Normalized usage • Raw usage • Metered usage	UsageType
Trial End Date	Trial End Date	The date the trial period for this order will end or has ended.	TrialEndDate
Customer Currency (CC)	Customer Currency	The currency used by the customer for the commercial marketplace transaction.	CustomerCurrencyCC
Price (CC)	Price	Unit price of the SKU shown in customer currency.	PriceCC
Payout Currency (PC)	Payout Currency	Publisher is paid for the usage events associated with the asset in the currency configured by the publisher.	PayoutCurrencyPC

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Estimated Price (PC)	Estimated Price	Unit price of the SKU in the currency configured by the publisher.	EstimatedPricePC
Usage Reference	Usage Reference	A concatenated GUID that is used to connect the Usage Report (in commercial marketplace analytics) with the Payout transaction report. Usage Reference is connected with OrderId and LineItemId in the Payout transaction report.	UsageReference
Usage Unit	Usage Unit	Unit of consumption associated with the SKU.	UsageUnit
Customer ID	Customer ID	The unique identifier assigned to a customer. A customer may have zero or more Azure Marketplace subscriptions.	CustomerId
Billing Account ID	Billing Account ID	The identifier of the account on which billing is generated. Map **Billing Account ID** to **customerID** to connect your Payout Transaction Report with the Customer, Order, and Usage Reports.	BillingAccountId
Usage Quantity	Usage Quantity	The total usage units consumed by the asset that is deployed by the customer. This is based on Usage type item. For example, if the Usage Type is Normalized usage, then Usage Quantity is for Normalized Usage.	UsageQuantity
NormalizedUsage	Normalized Usage	The total normalized usage units consumed by the asset that is deployed by the customer. Normalized usage hours are defined as the usage hours normalized to account for the number of VM cores ([number of VM cores] x [hours of raw usage]). VMs designated as "SHAREDCORE" use 1/6 (or 0.1666) as the [number of VM cores] multiplier.	NormalizedUsage

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
MeteredUsage	Metered Usage	The total usage units consumed by the meters that are configured with the offer that is deployed by the customer.	MeteredUsage
RawUsage	Raw Usage	The total raw usage units consumed by the asset that is deployed by the customer. Raw usage hours are defined as the amount of time VMs have been running in terms of usage units.	RawUsage
Estimated Extended Charge (CC)	Estimated Extended Charge in Customer Currency	Signifies the charges associated with the usage. The column is the product of Price (CC) and Usage Quantity.	EstimatedExtendedChargeCC
Estimated Extended Charge (PC)	Estimated Extended Charge in Payout Currency	Signifies the charges associated with the usage. The column is the product of Estimated Price (PC) and Usage Quantity.	EstimatedExtended ChargePC
Meter Id	Meter Id	Signifies the meter ID for the offer.	MeterId
Partner Center Detected Anomaly	Partner Center Detected Anomaly	**Applicable for offers with custom meter dimensions**. Signifies whether the publisher reported overage usage for the offer's custom meter dimension that was is flagged as an anomaly by Partner Center.The possible values are: • 0 (Not an anomaly) • 1 (Anomaly) *If the publisher doesn't have offers with custom meter dimensions, and exports this column through programmatic access, then the value will be null.*	PartnerCenterDetectedAnomaly

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Publisher Marked Anomaly	Publisher Marked Anomaly	**Applicable for offers with custom meter dimensions**. Signifies whether the publisher acknowledged the overage usage by the customer for the offer's custom meter dimension as genuine or false. The possible values are: • 0 (Publisher has marked it as not an anomaly) • 1 (Publisher has marked it as an anomaly) *If the publisher doesn't have offers with custom meter dimensions, and exports this column through programmatic access, then the value will be null.*	PublisherMarkedAnomaly
New Reported Usage	New Reported Usage	**Applicable for offers with custom meter dimensions**. For overage usage by the customer for the offer's custom meter dimension identified as anomalous by the publisher. This field specifies the new overage usage reported by the publisher. *If the publisher doesn't have offers with custom meter dimensions, and exports this column through programmatic access, then the value will be null.*	NewReportedUsage

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Action Taken At	Action Taken At	**Applicable for offers with custom meter dimensions**. Specifies the time when the publisher acknowledged the overage usage by the customer for the offer's custom meter dimension as genuine or false. *If the publisher doesn't have offers with custom meter dimensions, and exports this column through programmatic access, then the value will be null.*	ActionTakenAt
Action Taken By	Action Taken By	**Applicable for offers with custom meter dimensions**. Specifies the person who acknowledged the overage usage by the customer for the offer's custom meter dimension as genuine or false. *If the publisher doesn't have offers with custom meter dimensions, and exports this column through programmatic access, then the value will be null.*	ActionTakenBy
Estimated Financial Impact (USD)	Estimated Financial Impact in USD	**Applicable for offers with custom meter dimensions**. When Partner Center flags an overage usage by the customer for the offer's custom meter dimension as anomalous, the field specifies the estimated financial impact (in USD) of the anomalous overage usage. *If the publisher doesn't have offers with custom meter dimensions, and exports this column through programmatic means, then the value will be null.*	EstimatedFinancialImpactUSD

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Asset Id	Asset Id	The unique identifier of the customer order for your commercial marketplace service. Virtual machine usage-based offers are not associated with an order.	Asset Id
N/A	Resource Id	The fully qualified ID of the resource, including the resource name and resource type. Note that this is a data field available in download reports only. Use the format: /subscriptions/{guid}/resourceGroups/{resource-group-name}/{resource-provider-namespace}/{resource-type}/{resource-name} **Note**: This field will be deprecated on 10/20/2021.	N/A

Usage page filters

The **Usage** page filters are applied at the Orders page level. You can select one or multiple filters to render the chart for the criteria you choose to view and the data you want to see in the Usage orders data' grid / export. Filters are applied on the data extracted for the month range that you selected on the top-right corner of the Usage page.

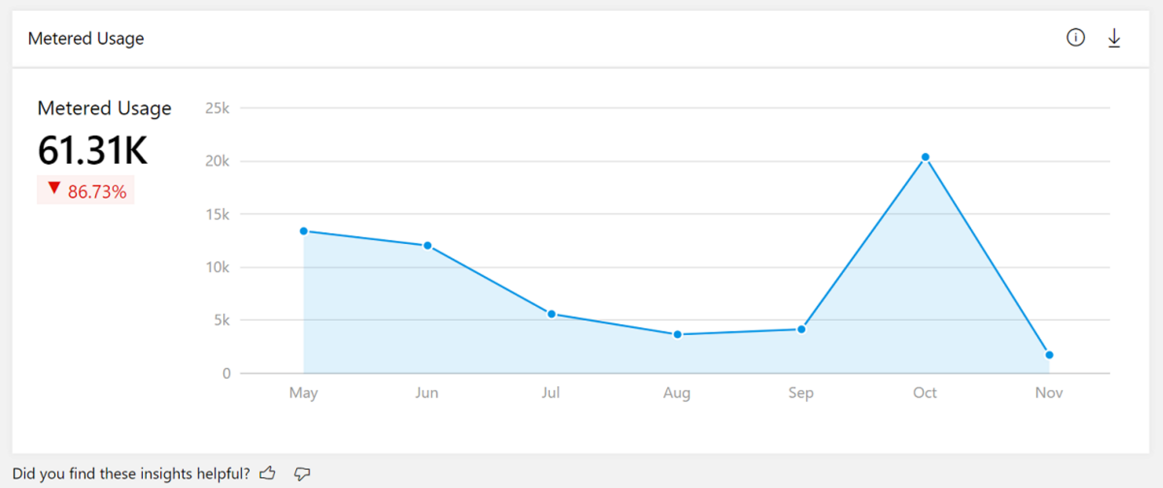
The widgets and export report for VM Raw usage are similar to VM Normalized usage with the following distinctions:

- Normalized usage hours are defined as the usage hours normalized to account for the number of VM cores ([number of VM cores] x [hours of raw usage]). VMs designated as "SHAREDCORE" use 1/6 (or 0.1666) as the [number of VM cores] multiplier.
- Raw usage hours are defined as the amount of time VMs have been running in terms of usage units.

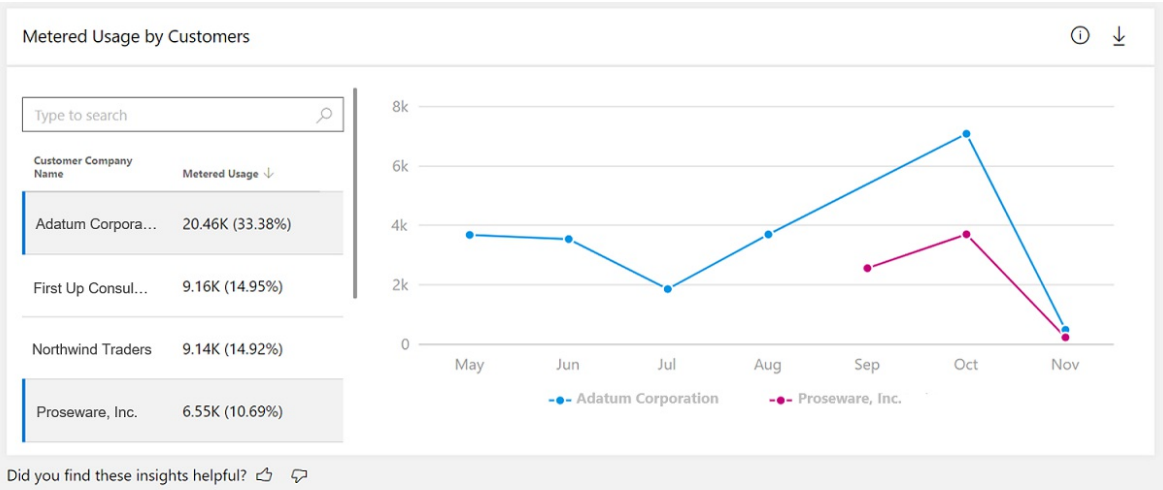
Metered billing usage

The **Metered Usage** tab shows usage information for offer types where usage is measured by the per meter dimension. SaaS offer type overage is presented currently. The tab presents graphical representations of overage trends for SaaS metered billing usage:

- **Overage trend by meter dimension**: Displays the monthly overage trend for the selected meter dimension of an offer. The X-Axis represents the month and the Y-Axis represents the overage usage quantity. The unit of measurement of the custom meter is also displayed on the Y-Axis.



- **Overage trend by SKU**: Represents the trend of usage quantity of the selected meter dimension by SKU/plans. The top five plans with the highest amount of usage for the selected offer are displayed.
- **Overage trend by Customers**: The customer leader board represents a stacked listing of customers with the highest usage hours and are displayed on a *leader board*, ranked by the highest usage of the custom meter. Select a customer in the leader board to view the overage usage trend of a selected meter dimension.



If you have multiple offers that use custom meters, the metered billing usage report shows usage information for all your offers, according to their custom meter dimensions.

> **TIP**
>
> You can use the download icon in the upper-right corner of any widget to download the data. You can provide feedback on each of the widgets by clicking on the “thumbs up” or “thumbs down” icon.

Next steps

- For an overview of analytics reports available in the commercial marketplace, see Access analytic reports for the commercial marketplace in Partner Center.
- For graphs, trends, and values of aggregate data that summarize marketplace activity for your offer, see Summary Dashboard in commercial marketplace analytics.
- For information about your orders in a graphical and downloadable format, see Orders Dashboard in commercial marketplace analytics
- For virtual machine (VM) offers usage and metered billing metrics, see Usage Dashboard in commercial marketplace analytics.

- For a list of your download requests over the last 30 days, see Downloads dashboard in commercial marketplace analytics.
- To see a consolidated view of customer feedback for offers on Azure Marketplace and Microsoft AppSource, see Ratings & Reviews analytics dashboard in Partner Center.
- For frequently asked questions about commercial marketplace analytics and for a comprehensive dictionary of data terms, see Commercial marketplace analytics terminology and common questions.

Customers dashboard in commercial marketplace analytics

11/22/2021 • 11 minutes to read • Edit Online

This article provides information on the Customers dashboard in Partner Center. This dashboard displays information about your customers, including growth trends, presented in a graphical and downloadable format.

> **NOTE**
>
> For detailed definitions of analytics terminology, see Commercial marketplace analytics terminology and common questions.

Customers dashboard

The Customers dashboard displays data for customers who have acquired your offers. You can view graphical representations of the following items:

- Active and churned customers' trend
- Customer growth trend including existing, new, and churned customers
- Customers by orders and usage
- Customers percentile
- Customer type by orders and usage
- Customers by geography
- Customers details table
- Customers page filters

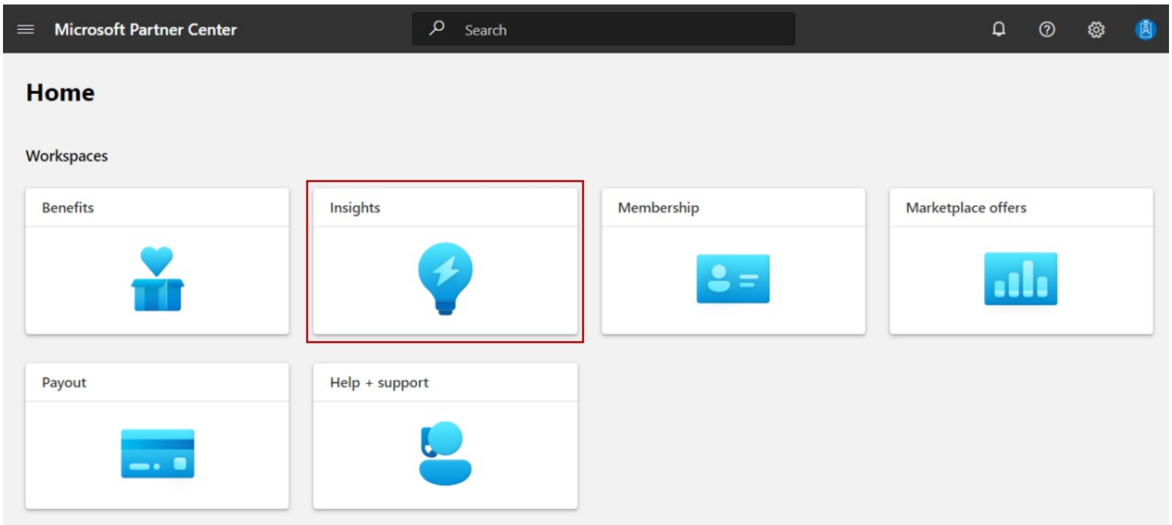
> **NOTE**
>
> The maximum latency between customer acquisition and reporting in Partner Center is 48 hours.

Access the Customers dashboard

> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Customers**.

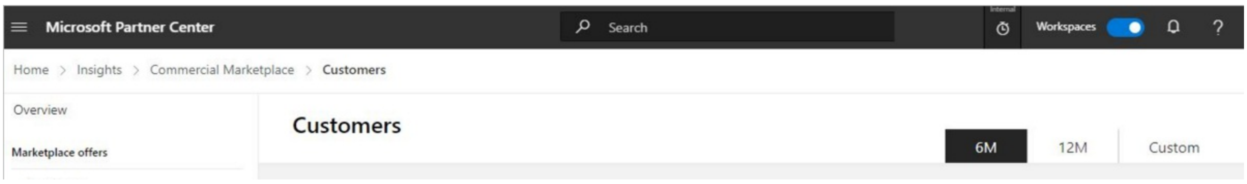
Elements of the Customers dashboard

The following sections describe how to use the Customers dashboard and how to read the data.

Month range

- Workspaces view
- Current view

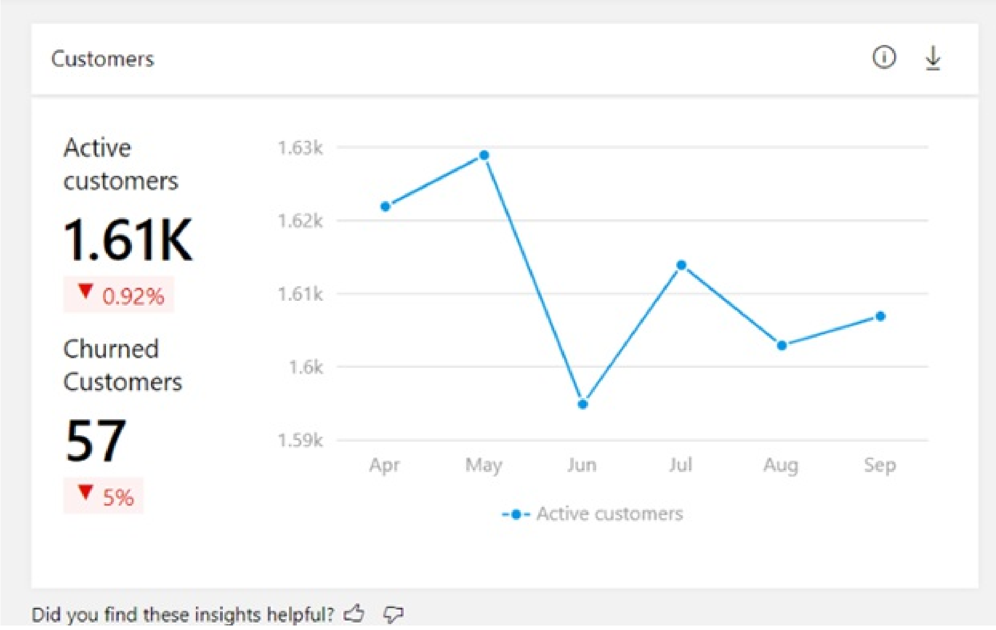
You can find a month range selection at the top-right corner of each page. Customize the output of the **Customers** page graphs by selecting a month range based on the past 6, or 12 months, or by selecting a custom month range with a maximum duration of 12 months. The default month range (computation period) is six months.



> **NOTE**
>
> All metrics in the visualization widgets and export reports honor the computation period selected by the user.

Active and churned customers' trend

In this section, you will find your customers growth trend for the selected computation period. Metrics and growth trends are represented by a line chart and displays the value for each month by hovering over the line on the chart. The percentage value below **Active customers** in the widget represents the amount of growth during the selected computation period. For example, the following screenshot shows a growth of 0.92% for the selected computation period.



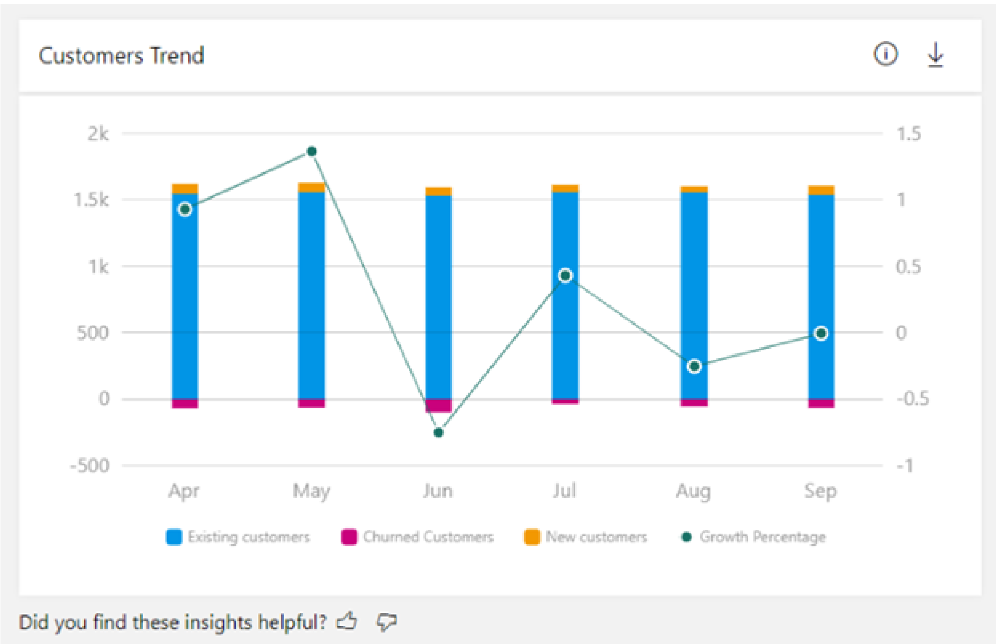
There are three *customer types*: new, existing, and churned.

- A new customer has acquired one or more of your offers for the first time within the selected month.
- An existing customer has acquired one or more of your offers prior to the month selected.
- A churned customer has canceled all offers previously purchased. Churned customers are represented in the negative axis in the Trend widget.

Customer growth trend including existing, new, and churned customers

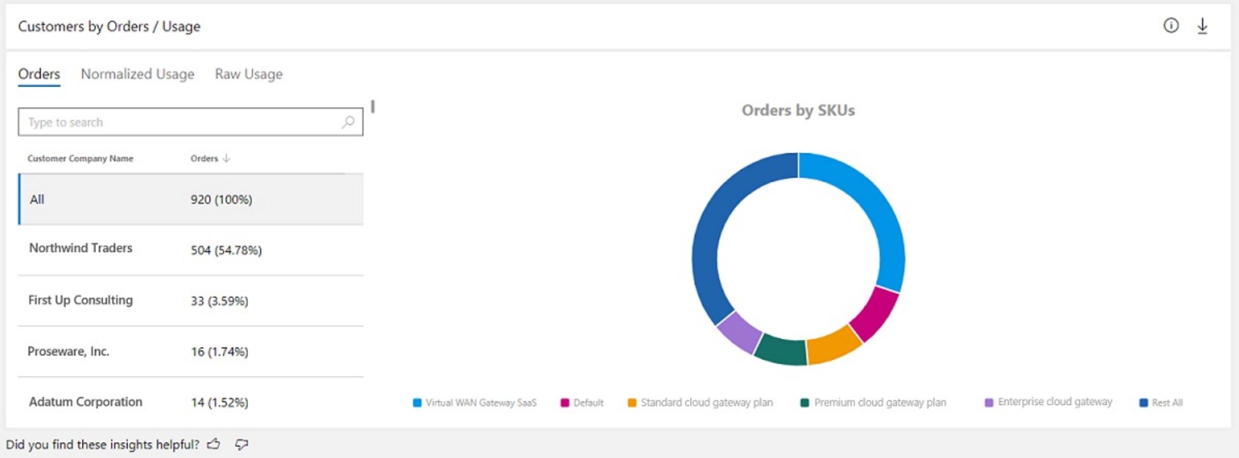
In this section, you will find trend and count of all customers, including new, existing, and churned, with a month-by-month growth trend.

- The line chart represents the overall customer growth percentages.
- The month column represents the count of customers stacked by new, existing, and churned customers.
- The churned customer count is displayed on the negative direction of the X-Axis.
- You can select specific legend items to display more detailed views. For example, select new customers from the legend to display only new customers.
- Hovering over a column in the chart displays details for that month only.



Customers by orders/usage

The **Customers by orders/usage** chart has three tabs: Orders, Normalized usage, and Raw usage. Select the **Orders** tab to show order details.



Note the following:

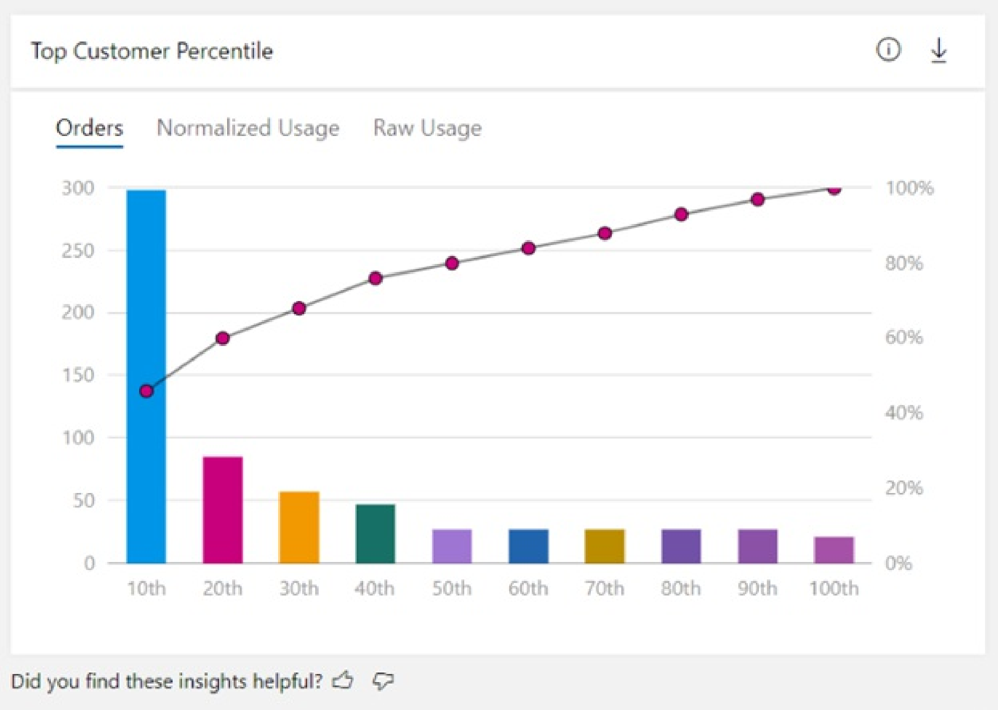
- The Leader board presents details of the customers ranked by order count. After selecting a customer, the customer details are presented in the adjoining “Details”, “Orders by SKUs” and “SKUs by Seats” sections.
- The Customer profile details are displayed in this space when publishers are signed in with an owner role. If publishers are signed in with a contributor role, the details in this section will not be available.
- The **Orders by SKUs** donut chart displays the breakdown of orders purchased for plans. The top five plans with the highest order count are displayed, while the rest of the orders are grouped under **Rest all**.
- The **SKUs by Seats** donut chart displays the breakdown of seats ordered for plans. The top five plans with the highest seats are displayed, while the rest of the orders are grouped under **Rest All**.

You can also select the **Normalized usage** or **Raw usage** tab to view usage details.

- The Leader board presents details of the customers ranked by usage hours count. After selecting a customer, the details of the customer are presented in the adjoining “Details”, “Normalized Usage by offers” and “Normalized Usage by virtual machine (VM) Size(s)” section.
- The Customer profile details are displayed in this space when publishers are logged in with an owner role. If publishers are logged in with a contributor role, the details in this section will not be available.
- The **Normalized usage by Offers** donut chart displays the breakdown of usage consumed by the offers. The top five plans with the highest usage count are displayed, while the rest of the offers are grouped under **Rest All**.
- The **Normalized usage by VM Size(s)** donut chart displays the breakdown of usage consumed by different VM Size(s). The top five VM Sizes with the highest normalized usage are displayed, while the rest of the usage is grouped under **Rest All**.

Top customers percentile

The **Top customers percentile** chart has three tabs, "Orders," "Normalized usage," and "Raw usage." The *top customer percentile* is displayed along the x-axis, as determined by the number of orders. The y-axis displays the customer's order count. The secondary y-axis (line graph) displays the cumulative percentage of the total number of orders. You can display details by hovering over points along the line chart.

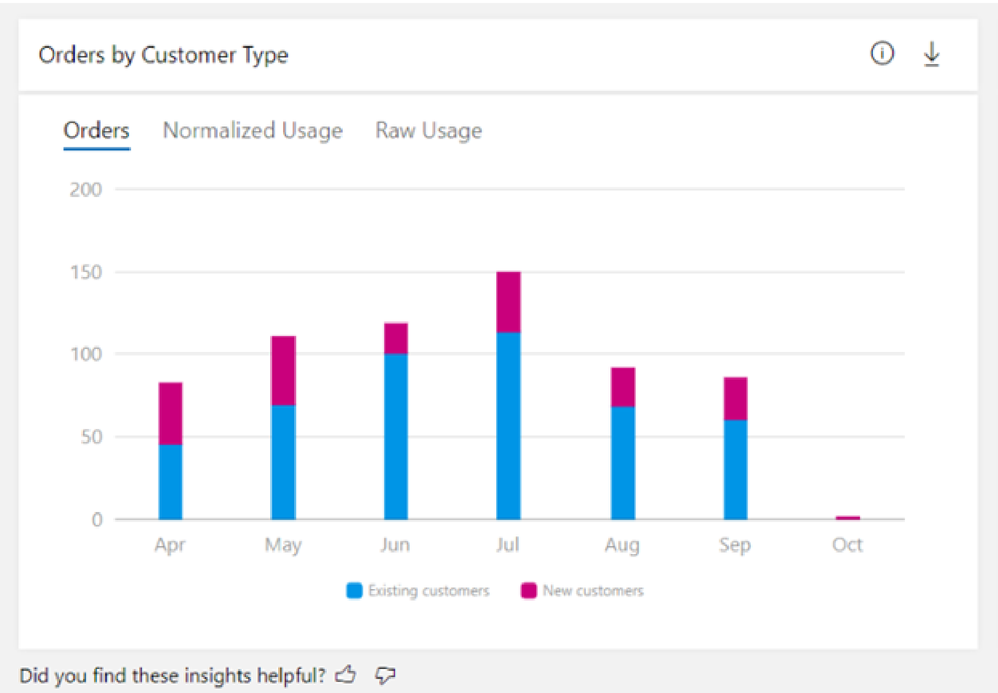


Customer type by orders and usage

The **Orders/usage by customer type** chart displays the number of orders, normalized usage, and raw usage hours split between new customers and existing customers; based on the selection of orders, normalized, and raw usage respectively in the chart.

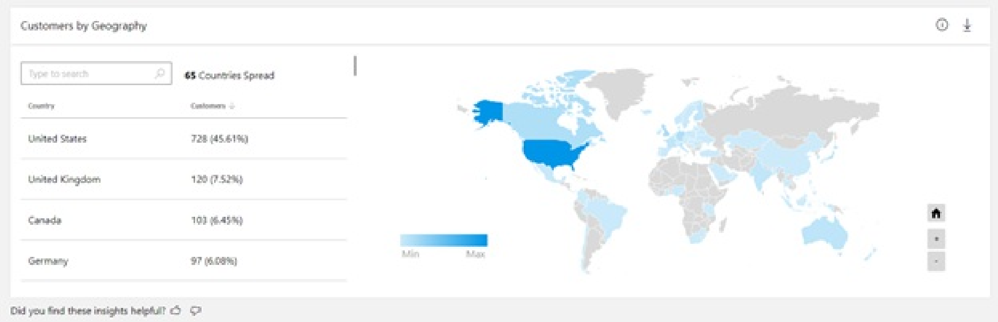
This chart shows the following:

- A new customer has acquired one or more of your offers or reported usage for the first time within the same calendar month (y-axis).
- An existing customer has previously acquired an offer from you or reported usage prior to the calendar month reported (on the y-axis).



Customers by geography

For the selected computation period, the heatmap displays the total number of customers, and the percentage of newly added customers against geography dimension. The light to dark color on the map represents the low to high value of the customer count. Select a record in the table to zoom in on a country or region.



Note the following:

- You can move the map to view the exact location.
- You can zoom into a specific location.
- The heatmap has a supplementary grid to view the details of customer count, order count, normalized usage hours in the specific location.
- You can search and select a country/region in the grid to zoom to the location in the map. Revert to the original view by selecting the **Home** button in the map.

Customer details table

The **Customer details** table displays a numbered list of the top 1,000 customers sorted by the date they first acquired one of your offers. You can expand a section by selecting the expansion icon in the details ribbon.

Note the following:

- Customer personal information will only be available if the customer has provided consent. You can only view this information if you have signed in with an owner role level of permissions.
- Each column in the grid is sortable.
- The data can be extracted to a .CSV or .TSV file if the count of the records is less than 1,000.
- If records number is more than 1,000, exported data will be asynchronously placed in a downloads page for the next 30 days.
- Apply filters to the table to display only the data you are interested in. Filter data by Company name, Customer ID, Marketplace Subscription ID, Azure License Type, Date Acquired, Date Lost, Customer Email, Customer Country/Region/State/City/Zip, Customer Language, and so on.
- When an offer is purchased by a protected customer, information in **Customer Detailed Data** will be masked (************).
- Customer dimension details such as Company Name, Customer Name, and Customer Email are at an organization ID level, not at Azure Marketplace or Microsoft AppSource transaction level.

Table 1: Dictionary of data terms

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Marketplace Subscription ID	Marketplace Subscription ID	The unique identifier associated with the Azure subscription the customer used to purchase your commercial marketplace offer. For infrastructure offers, this is the customer's Azure subscription GUID. For SaaS offers, this is shown as zeros since SaaS purchases do not require an Azure subscription.	MarketplaceSubscriptionId
DateAcquired	Date Acquired	The first date the customer purchased any offer you published.	DateAcquired
DateLost	Date Lost	The last date the customer canceled the last of all previously purchased offers.	DateLost
Provider Name	Provider Name	The name of the provider involved in the relationship between Microsoft and the customer. If the customer is an Enterprise through Reseller, this will be the reseller. If a Cloud Solution Provider (CSP) is involved, this will be the CSP.	ProviderName
Provider Email	Provider Email	The email address of the provider involved in the relationship between Microsoft and the customer. If the customer is an Enterprise through Reseller, this will be the reseller. If a Cloud Solution Provider (CSP) is involved, this will be the CSP.	ProviderEmail
FirstName	Customer First Name	The first name provided by the customer. Name could be different than the name provided in a customer's Azure subscription.	FirstName
LastName	Customer Last Name	The last name provided by the customer. Name could be different than the name provided in a customer's Azure subscription.	LastName

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Email	Customer Email	The e-mail address provided by the end customer. Email could be different than the e-mail address in a customer's Azure subscription.	Email
Customer Company Name	Customer Company Name	The company name provided by the customer. Name could be different than the city in a customer's Azure subscription.	CustomerCompany Name
CustomerCity	Customer City	The city name provided by the customer. City could be different than the city in a customer's Azure subscription.	CustomerCity
Customer Postal Code	Customer Postal Code	The postal code provided by the customer. Code could be different than the postal code provided in a customer's Azure subscription.	CustomerPostal Code
CustomerCommunicationCulture	Customer Communication Language	The language preferred by the customer for communication.	CustomerCommunicationCulture
CustomerCountryRegion	Customer Country/Region	The country/region name provided by the customer. Country/region could be different than the country/region in a customer's Azure subscription.	CustomerCountryRegion
AzureLicenseType	Azure License Type	The type of licensing agreement used by customers to purchase Azure. Also known as the *channel*. The possible values are: • Cloud Solution Provider • Enterprise • Enterprise through Reseller • Pay as You Go	AzureLicenseType

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
PromotionalCustomers	Is Promotional Contact Opt In	The value will let you know if the customer proactively opted in for promotional contact from publishers. At this time, we are not presenting the option to customers, so we have indicated "No" across the board. After this feature is deployed, we will start updating accordingly.	PromotionalCustomers
CustomerState	Customer State	The state of residence provided by the customer. State could be different than the state provided in a customer's Azure subscription.	CustomerState
CommerceRootCustomer	Commerce Root Customer	One Billing Account ID can be associated with multiple Customer IDs. One combination of a Billing Account ID and a Customer ID can be associated with multiple commercial marketplace subscriptions. The Commerce Root Customer signifies the name of the subscription’s customer.	CommerceRootCustomer
Customer ID	Customer ID	The unique identifier assigned to a customer. A customer may have zero or more Azure Marketplace subscriptions.	CustomerId
Billing Account ID	Billing Account ID	The identifier of the account on which billing is generated. Map **Billing Account ID** to **customerID** to connect your Payout Transaction Report with the Customer, Order, and Usage Reports.	BillingAccountId
Customer Type	Customer Type	The value of this field signifies the type of the customer. The possible values are: • individual • organization	CustomerType

Customers page filters

The Customers page filters are applied at the Customers page level. You can select multiple filters to render the chart for the criteria you choose to view and the data you want to see in the “Detailed orders data” grid / export. Filters are applied on the data extracted for the month range that you selected on the upper-right corner of the Customers page.

> **TIP**
>
> You can use the download icon in the upper-right corner of any widget to download the data. You can provide feedback on each of the widgets by clicking on the “thumbs up” or “thumbs down” icon.

Next steps

- For an overview of analytics reports available in the commercial marketplace, see Access analytic reports for the commercial marketplace in Partner Center.
- For graphs, trends, and values of aggregate data that summarize marketplace activity for your offer, see Summary dashboard in commercial marketplace analytics.
- For information about your orders in a graphical and downloadable format, see Orders dashboard in commercial marketplace analytics.
- For virtual machine (VM) offers usage and metered billing metrics, see Usage Dashboard in commercial marketplace analytics.
- For a list of your download requests over the last 30 days, see Downloads dashboard in commercial marketplace analytics.
- To see a consolidated view of customer feedback for offers on Azure Marketplace and Microsoft AppSource, see Ratings & Reviews analytics dashboard in Partner Center.
- For frequently asked questions about commercial marketplace analytics and for a comprehensive dictionary of data terms, see Commercial marketplace analytics terminology and common questions.

Marketplace Insights dashboard in commercial marketplace analytics

11/22/2021 • 7 minutes to read • Edit Online

This article provides information on the Marketplace Insights dashboard in Partner Center. This dashboard displays a summary of commercial marketplace web analytics that enables publishers to measure customer engagement for their respective product detail pages listed in the commercial marketplace online stores: Microsoft AppSource and Azure Marketplace.

For detailed definitions of analytics terminology, see Commercial marketplace analytics terminology and common questions.

Marketplace Insights dashboard

The Marketplace Insights dashboard presents an overview of Azure Marketplace and AppSource offers' business performance. This dashboard provides a broad overview of the following:

- Page visits trend
- Call to actions trend
- Page visits and Call to actions against offers, referral domains, and campaign IDs
- Marketplace Insights by geography
- Marketplace Insights details table

The Marketplace Insights dashboard provides clickstream data, which shouldn't be correlated with leads generated in the lead destination endpoint.

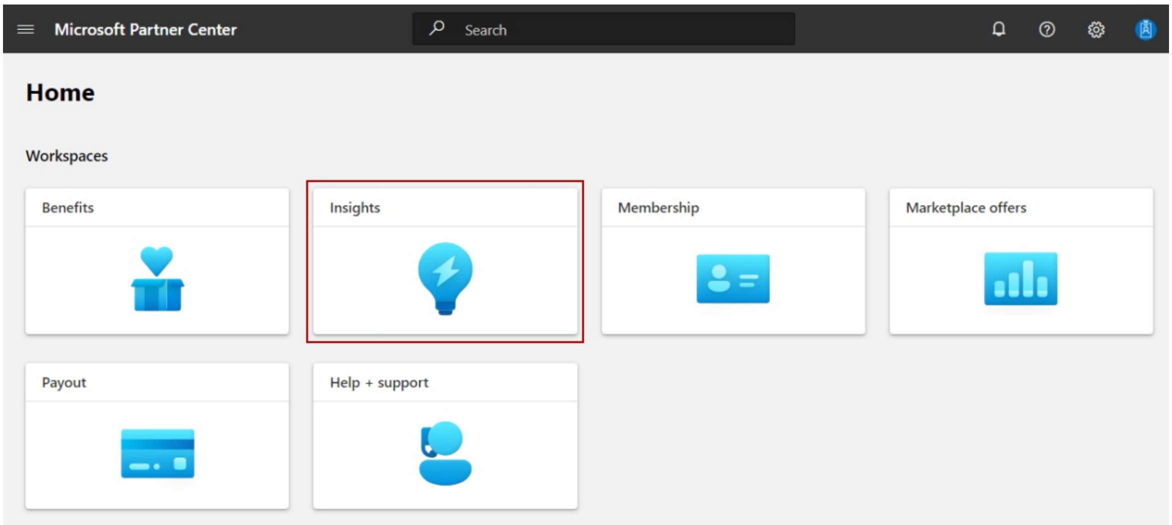
> **NOTE**
> The maximum latency between users visiting offers on Azure Marketplace or AppSource and reporting in Partner Center is 48 hours.

Access the Marketplace insights dashboard

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Marketplace insights**.

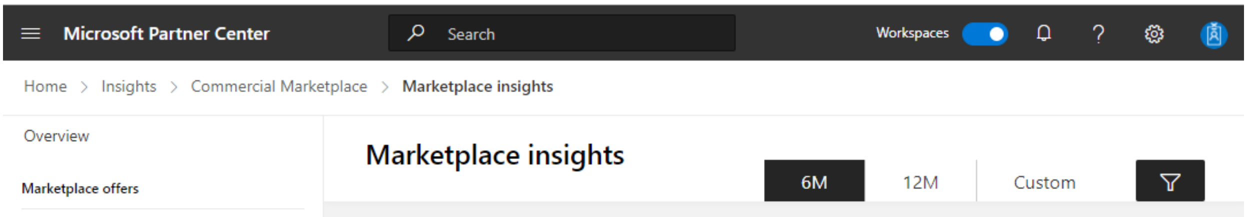
Elements of the Marketplace Insights dashboard

The Marketplace Insights dashboard displays web telemetry details for Azure Marketplace and AppSource in two separate tabs. The following sections describe how to use the Marketplace Insights dashboard and how to read the data.

Month range

- Workspaces view
- Current view

You can find a month range selection at the top-right corner of each page. Customize the output of the **Marketplace Insights** page graphs by selecting a month range based on the past 6 or 12 months, or by selecting a custom month range with a maximum duration of 12 months. The default month range (computation period) is six months.



NOTE

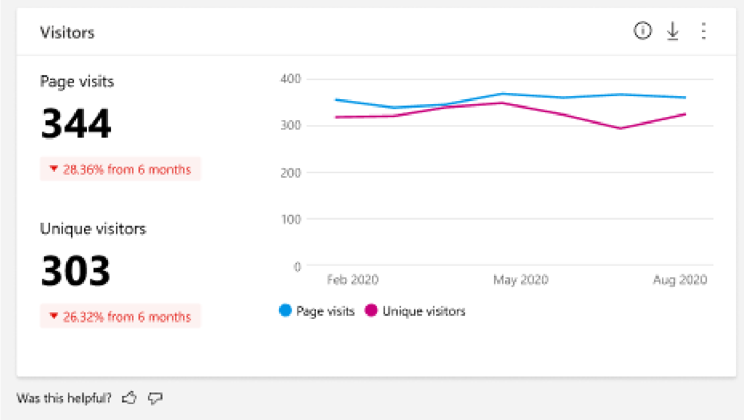
All metrics in the visualization widgets and export reports honor the computation period selected by the user.

Page visits trends

The Marketplace Insights **Visitors** chart displays a count of *Page visits* and *Unique visitors* for the selected computation period.

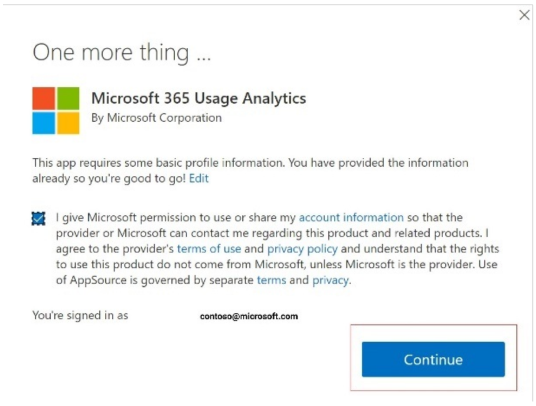
Page visits: This number represents the count of distinct user sessions on the offer listing page (product detail page) for a selected computation period. The red and green percentage indicators represent the growth percentage of page visits. The trend chart represents the month-to-month count of page visits.

Unique visitors: This number represents the distinct visitor count during the selected computation period for the offer(s) in Azure Marketplace and AppSource. A visitor who has visited one or more product detail pages will be counted as one unique visitor.

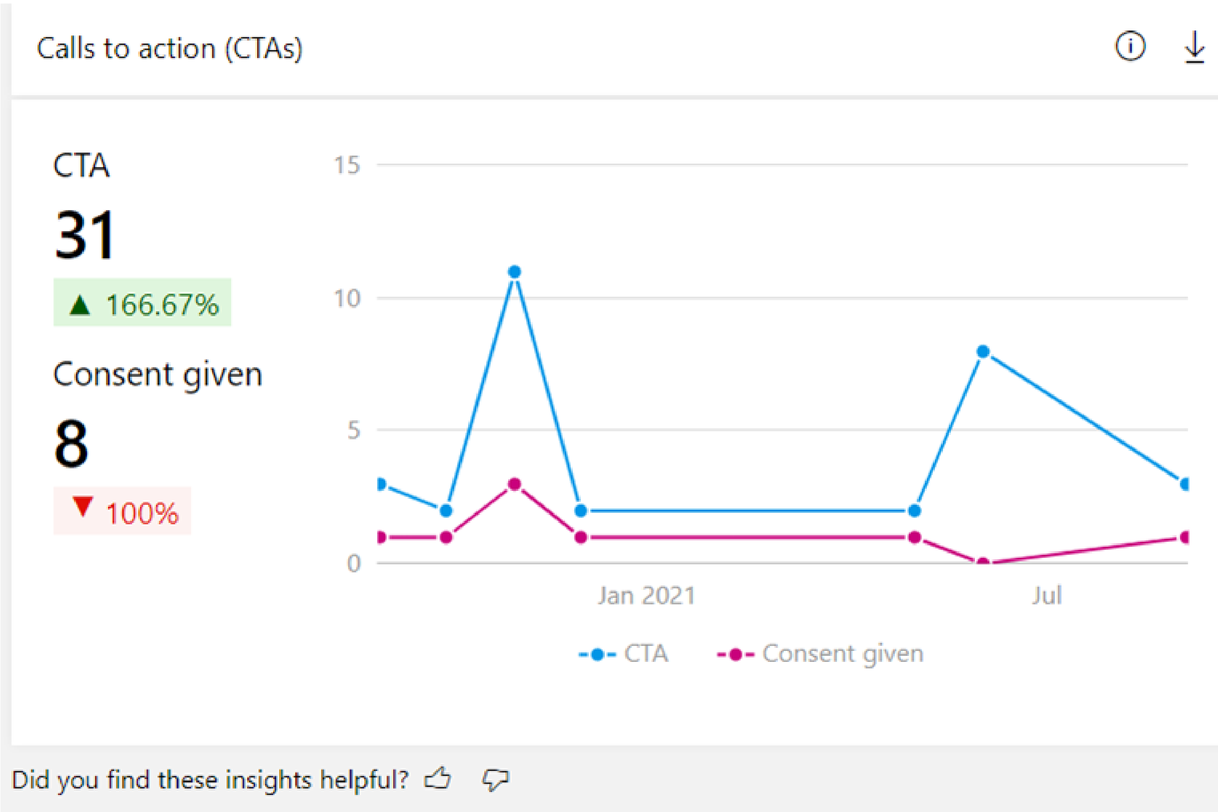


Call to actions trend

This number represents the count of **Call to Action** button clicks completed on the offer listing page (product detail page). *Calls to action* are counted when users select the **Get It Now**, **Free Trial**, **Contact Me**, or **Test Drive** buttons. *Consent given* represents the total count of clicks for customer-provided consent to Microsoft or the partner, and equals the number of customers acquired for your offers. The following two examples show where *Consent given* clicks appear:



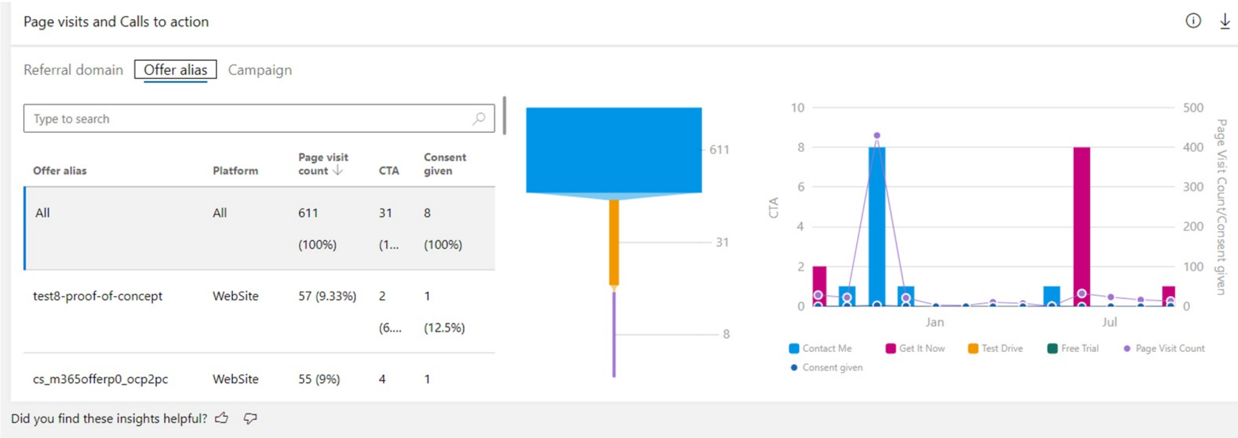
The following graph shows the *CTA* vs. *Consent given* metric:



Page visits and Call to actions against offers, referral domains, and campaign IDs

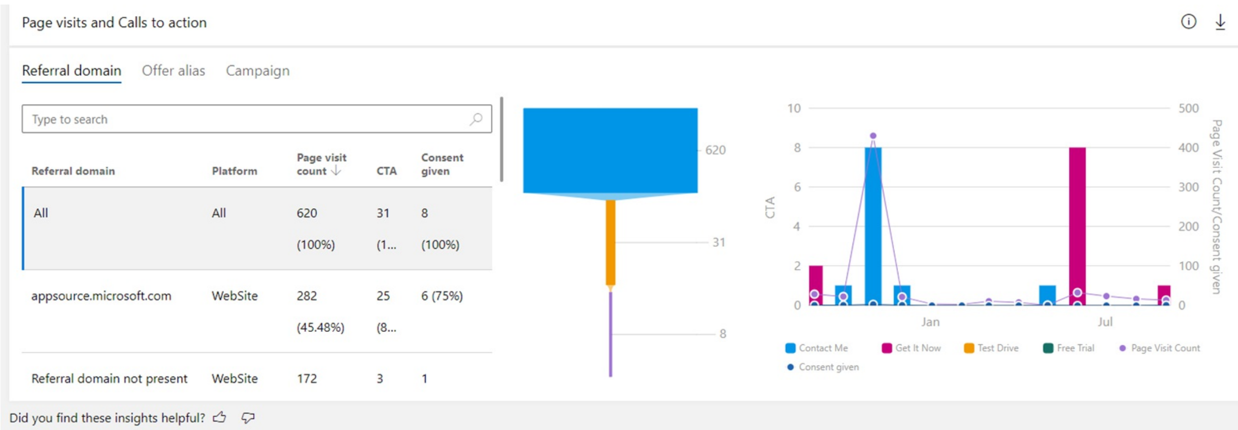
Offers

Select a specific offer to see the monthly trend of page visits, calls to action, and consent-given clicks on the chart.



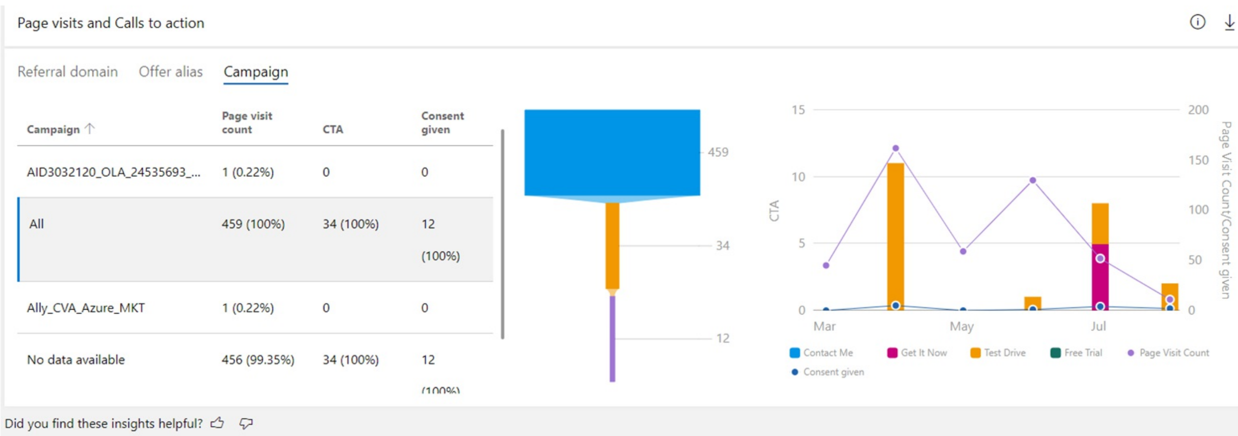
Referral domains

Selecting a specific referral domain shows the monthly trend of page visits, calls to action, and consent clicks on the chart to the right. Additionally, there is a column for Platform – website and client, displays for AppSource offers only. The funnel view depicts the conversions rates among page views, calls to action, and consent-given clicks on the chart.



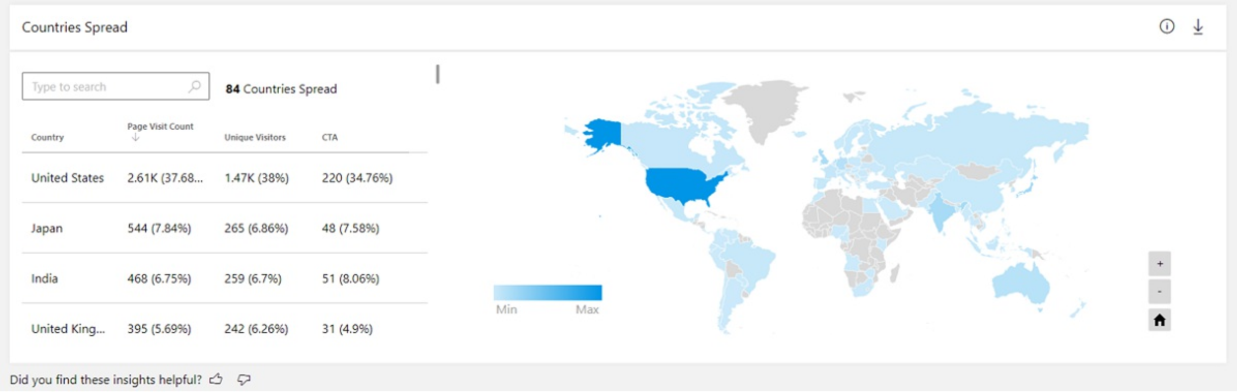
Campaign IDs

By selecting a specific campaign ID, you should be able to understand the success of the campaign. For each campaign, you should be able to see the monthly trend of page visits, calls to action, and consent-given clicks on the chart.



Marketplace Insights by geography

For the selected computation period, the heatmap displays the count of page visits, unique visitors, and calls to action (CTA). The light to dark color on the map represents the low to high value of the unique visitors. Select a record in the table to zoom in on a country/region.



Note the following:

- You can move the map to view the exact location.
- You can zoom into a specific location.
- The heatmap has a supplementary grid to view the details of customer count, order count, and normalized usage hours in the specific location.
- You can search and select a country/region in the grid to zoom to the location in the map. Revert to the original view by selecting the **Home** button in the map.

Marketplace Insights details table

This table provides a list view of the page visits and the calls to action of your selected offers' pages sorted by date.

- The data can be extracted to a .TSV or .CSV file if the count of records is less than 1,000.
- If the count of records is over 1,000, exported data will be asynchronously placed in a downloads page for the next 30 days.
- Filter data by Offer names and Campaign names to display the data you are interested in.

> **TIP**
>
> You can use the download icon in the upper-right corner of any widget to download the data. You can provide feedback on each of the widgets by clicking on the “thumbs up” or “thumbs down” icon.

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Date	Date of Visit	The date of page visit and/or CTA click event generation on the offer’s page in Azure Marketplace and/or AppSource.	Date
Offer Name	Offer Name	The name of the commercial marketplace offering.	OfferName

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
Referral Domain	Referral Domain	The name of the referral domain from where the page visit happened. If there are no referral domains captured for the page visit, then the corresponding entry is “Referral domain not present”.	ReferralDomain
Country Name	Country Name	The name of the country from where the page visit has happened.	CountryName
Page Visits	Page Visits	The number of page visits associated with the Offer Name for a particular date.	PageVisits
Get It Now	Get It Now	The number of clicks to the “Get It Now” CTA on the offer’s page for a particular date.	GetItNow
Contact Me	Contact Me	The number of clicks to the “Contact Me” CTA on the offer’s page for a particular date.	ContactMe
Test Drive	Test Drive	The number of clicks to the “Test Drive” CTA on the offer’s page for a particular date.	TestDrive
Free Trial	Free Trial	The number of clicks to the “Free Trial” CTA on the offer’s page for a particular date.	FreeTrial
Campaign	Name of the Campaign	Ability to understand web telemetry (page visit and CTA clicks) against the campaign name.	Campaign
Consent given	Consent given	Total count of clicks for customer-provided consent to Microsoft or the partner	consentGivenCount
Platform	Platform	Indicates website or client (in-product store) as the source for page view, CTA, or consent clicks	platforms

COLUMN NAME IN USER INTERFACE	ATTRIBUTE NAME	DEFINITION	COLUMN NAME IN PROGRAMMATIC ACCESS REPORTS
n/a	Site	The name of the storefront from which the page visit or CTA click occurred. The possible values are: • AZUREMARKETPLACE • APPSOURCE	Site

Next steps

- For an overview of analytics reports available in the commercial marketplace, see Access analytic reports for the commercial marketplace in Partner Center.
- For information about your orders in a graphical and downloadable format, see Orders dashboard in commercial marketplace analytics.
- For virtual machine (VM) offers usage and metered billing metrics, see Usage dashboard in commercial marketplace analytics.
- For detailed information about your customers, including growth trends, see Customer dashboard in commercial marketplace analytics.
- For a list of your download requests over the last 30 days, see Downloads dashboard in commercial marketplace analytics.
- To see a consolidated view of customer feedback for offers on Azure Marketplace and AppSource, see Ratings & Reviews analytics dashboard in Partner Center.
- For frequently asked questions about commercial marketplace analytics and for a comprehensive dictionary of data terms, see Commercial marketplace analytics terminology and common questions.

License dashboard in commercial marketplace analytics

11/22/2021 • 2 minutes to read • Edit Online

This article provides information about the License dashboard in the commercial marketplace program in Partner Center. The License dashboard shows the following information:

- Number of customers who purchased licenses
- Total number of licenses purchased
- Total number of licenses deployed
- Number of licenses purchased and deployed by the customer
- Distribution of licenses across countries and regions

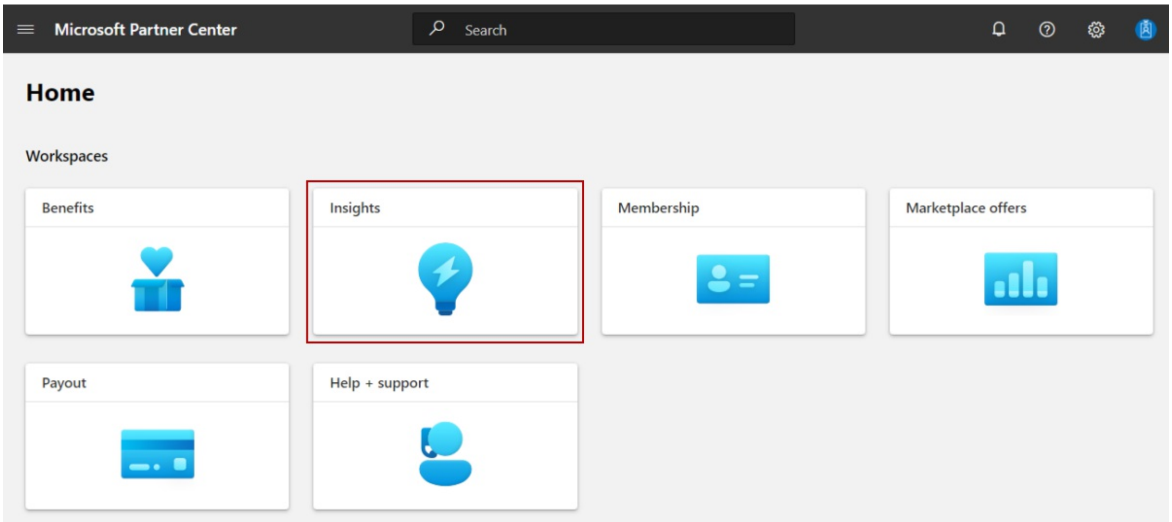
Check license usage

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

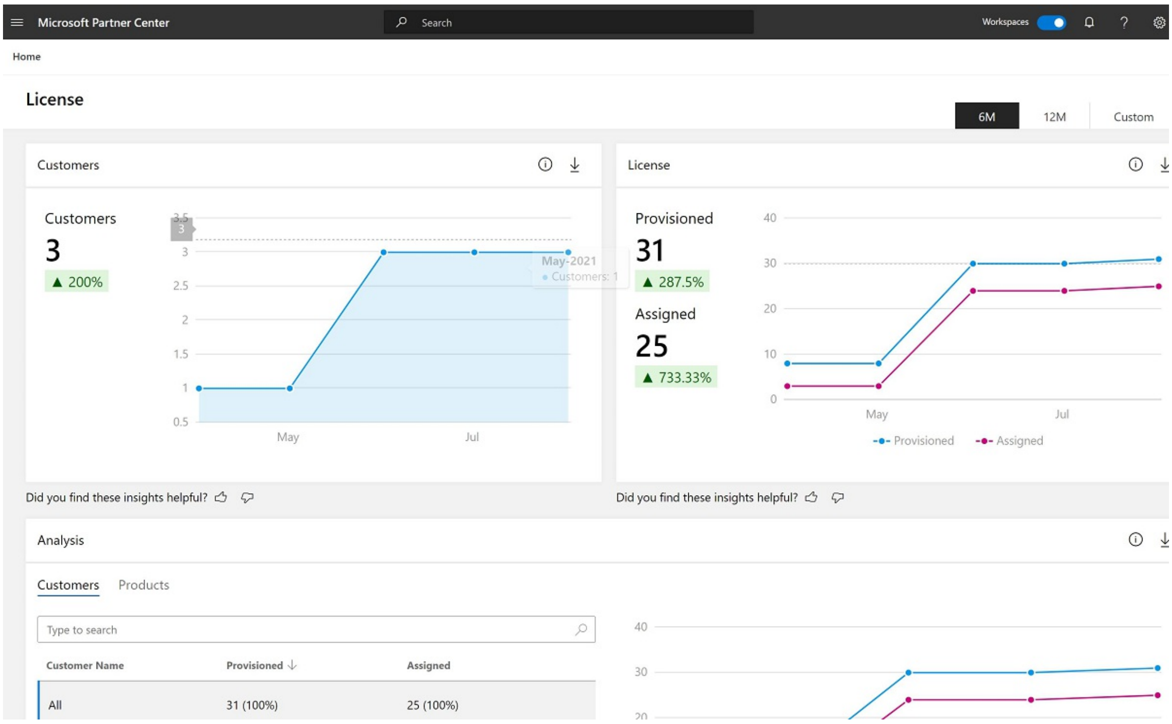
- Workspaces view
- Current view

To check license usage of ISV apps in Partner Center, do the following:

1. Sign in to Partner Center.
2. On the Home page, select the **Insights** tile.



3. In the left menu, select **License**.



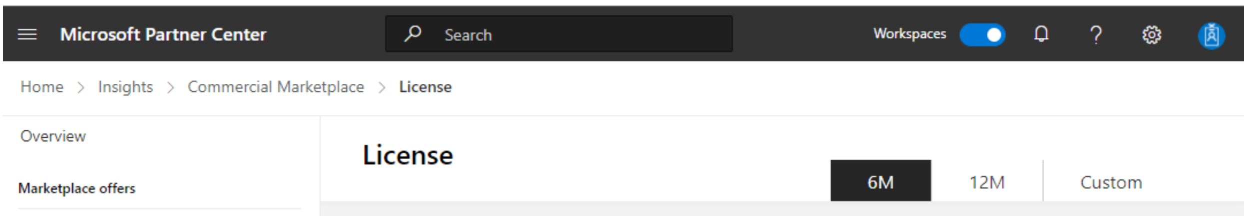
Elements of the License dashboard

The following sections describe how to use the License dashboard and how to read the data.

Month range

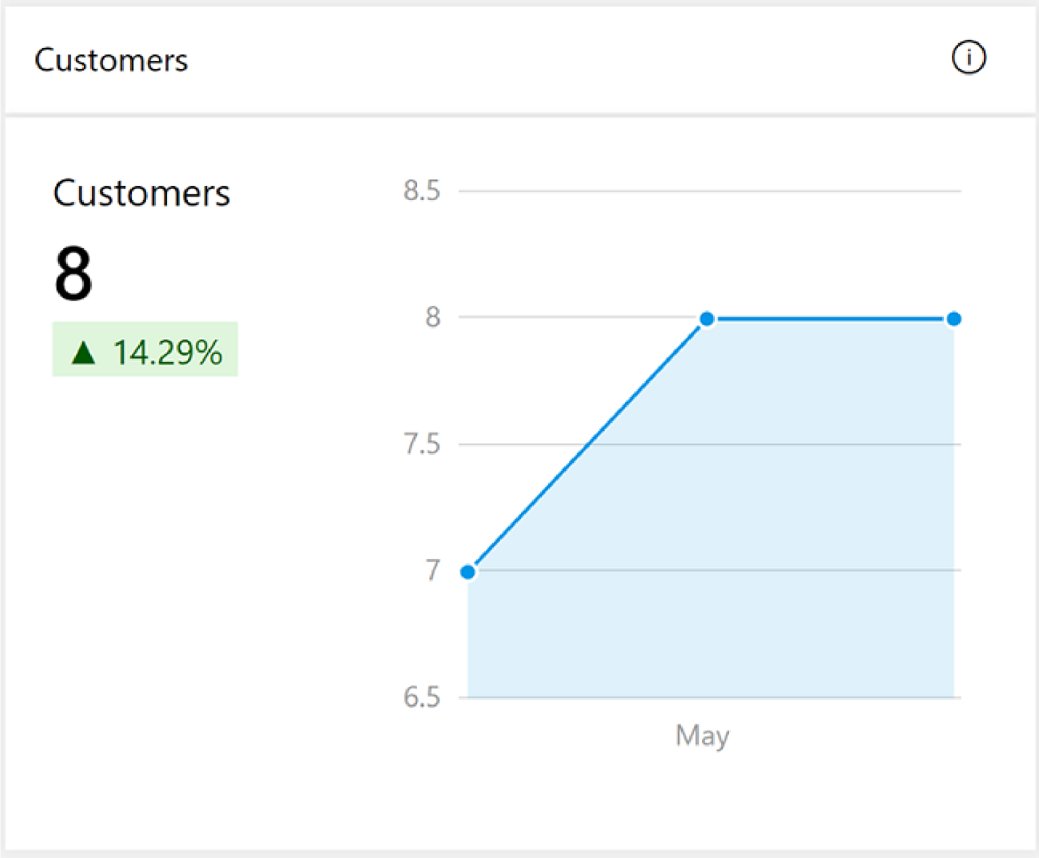
You can find a month range selection at the top-right corner of the page. Customize the output of the widgets on the page by selecting a month range based on the past 6 or 12 months, or by selecting a custom month range with a maximum duration of 12 months. The default month range (computation period) is six months.

- Workspaces view
- Current view



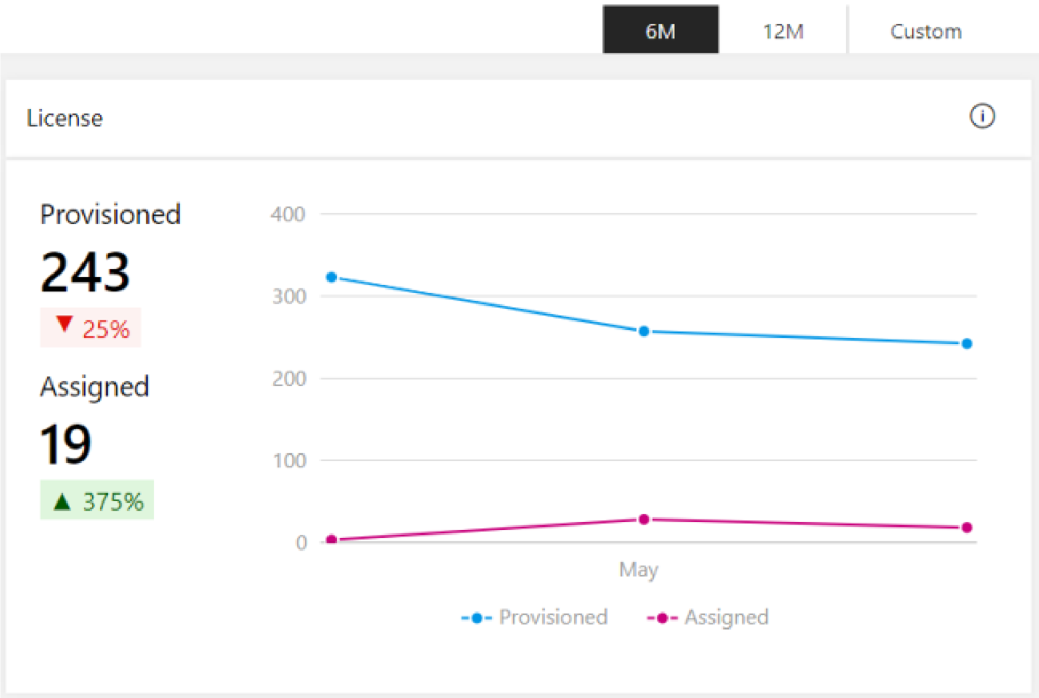
Customers widget

The *Customers widget* shows the current number of customers. The trend chart shows the month-over-month number of customers.



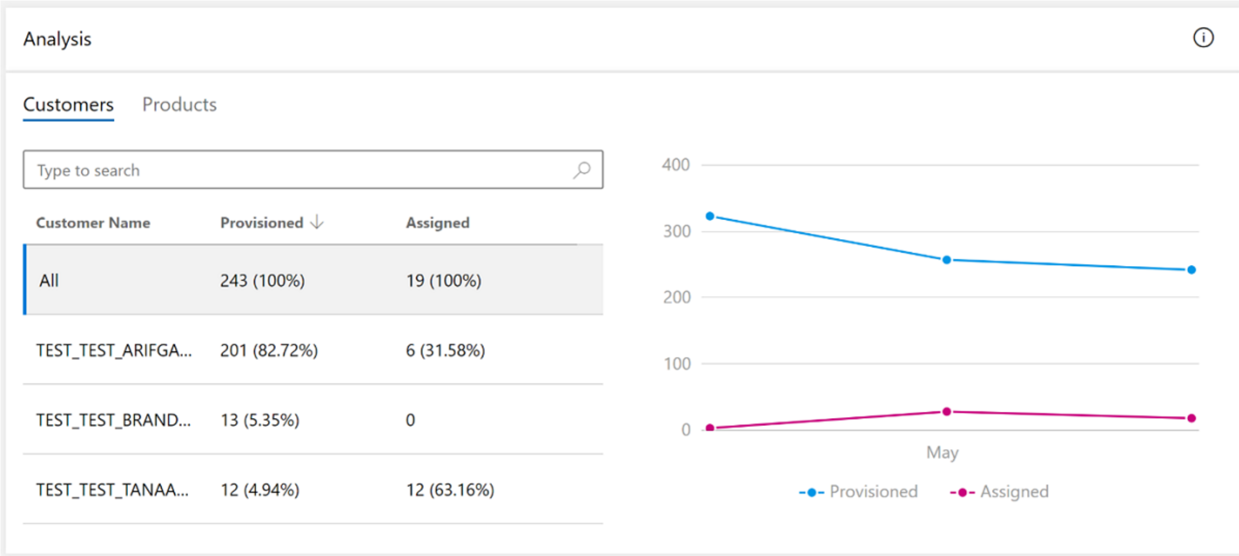
License widget

The *License widget* shows the current number of provisioned and assigned licenses. The trend chart shows the month-over-month number of provisioned and assigned licenses. You can view the data for the last 6 months or 12 months. You can also choose a custom date range by selecting on the **Custom** link in the upper right of the page.



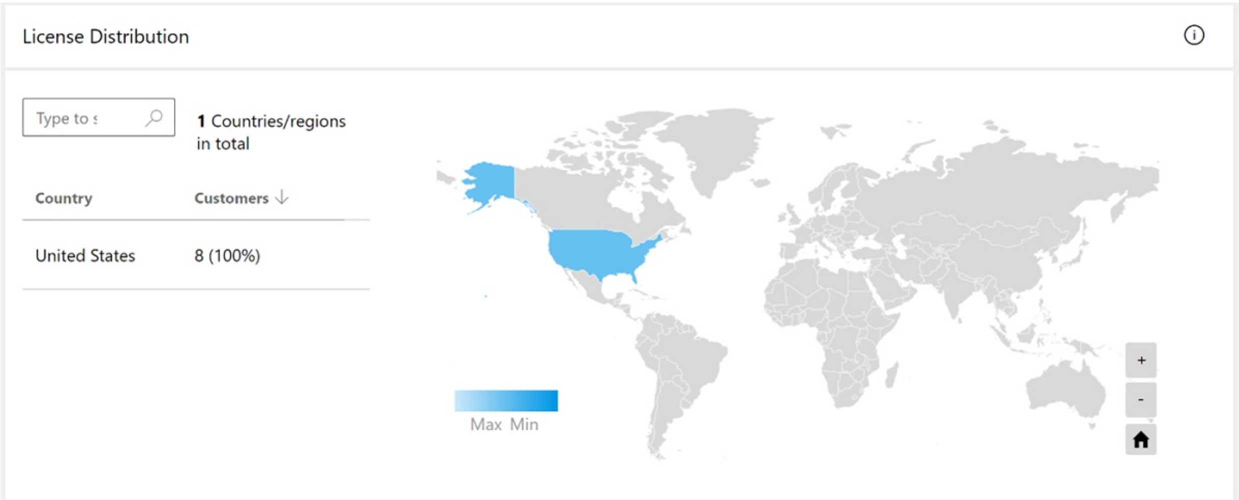
Analysis widget

The *Analysis widget* shows the number and percentage of provisioned and assigned licenses per offer and plan. The trend chart shows the month-over-month number of provisioned and assigned licenses. Using this widget, you can filter the data by Customers or Products.



License Distribution widget

The *License Distribution* widget shows the distribution of licenses across different countries and regions. The colored regions show where the user licenses are distributed. To revert to the default view, select the **Reset zoom** button (Home icon) in the widget.



Data terms in License report downloads

You can use the download icon in the upper-right corner of any widget to download the data.

ATTRIBUTE NAME	DEFINITION
Customer Country	Customer's billing country
Customer Country Code	Customer's billing country code
Customer Name	Customer name
Activation Date	Date when licenses were activated
Product Display Name	Offer title as shown in AppSource

ATTRIBUTE NAME	DEFINITION
Product ID	Product ID
Licenses Provisioned	Number of licenses activated into the customer's account
Licenses Assigned	Number of licenses customer has assigned to their users
SKU Name	Name of the plan in the offer
Tenant ID	Unique ID of the tenant
License State	License state
Service ID	Unique identifier used in the package to map the plan with the license checks

Next steps

- For an overview of analytics reports available in the commercial marketplace, see Access analytic reports for the commercial marketplace in Partner Center.

Quality of service (QoS) dashboard

11/22/2021 • 9 minutes to read • Edit Online

This dashboard displays the quality of deployments for all your offers. A higher offer deployment success signifies higher quality of service offered to your customers.

View graphical representations of the following items:

- Quality by offers
- Quality by deployment duration
- Deployment count
- Deployment count by status
- Deployment errors codes and resources
- Deployment errors by offer plan
- Deployment reliability by location

Additionally, view offer deployment details in tabular form.

> **IMPORTANT**
>
> This dashboard is currently only available for **Azure application** offers available to all (not private offers).

This feature is currently applicable to all partners performing deployment of Azure application offers using Azure Resource Manager (ARM) templates (but not for private offers). This report will not show data for other marketplace offers.

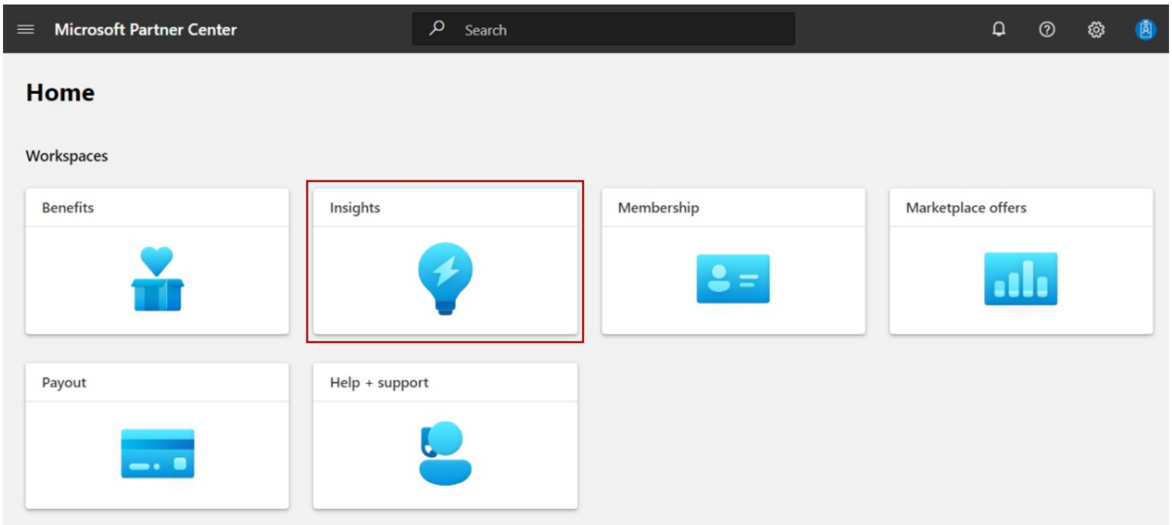
Access the Quality of service dashboard

> **NOTE**
>
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

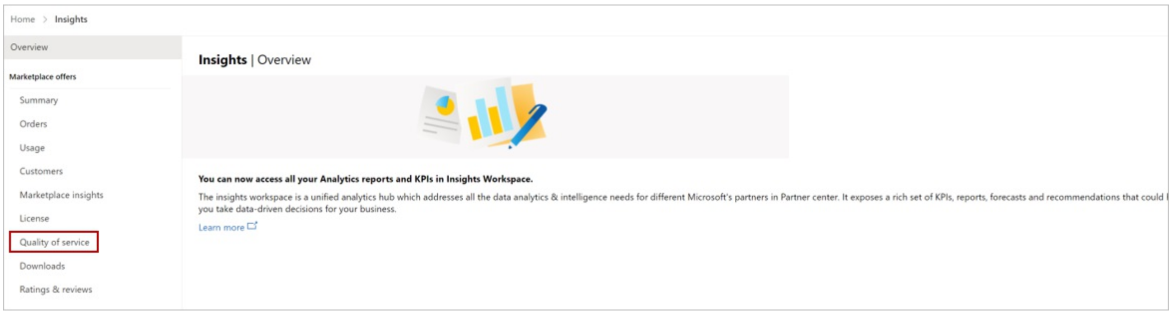
- Workspaces view
- Current view

1. Sign in to Partner Center

2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Quality of Service**.



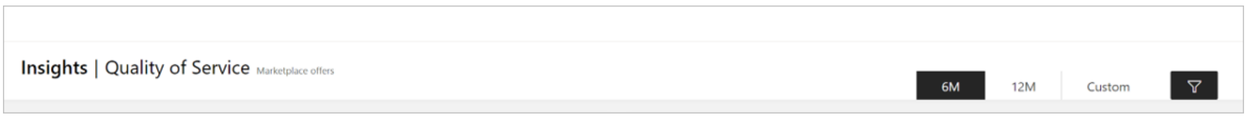
Elements of the Quality of service dashboard

The following sections describe how to use the Quality-of-Service (QoS) dashboard and how to read the data.

Month range

- Workspaces view
- Current view

There is a month range selection at the top-right corner of each page. Customize the output of the **Quality-of-Service** page graphs by selecting a month range based on the past 6 or 12 months, or by selecting a custom month range with a maximum duration of 12 months. The default month range (selection period) is six months.



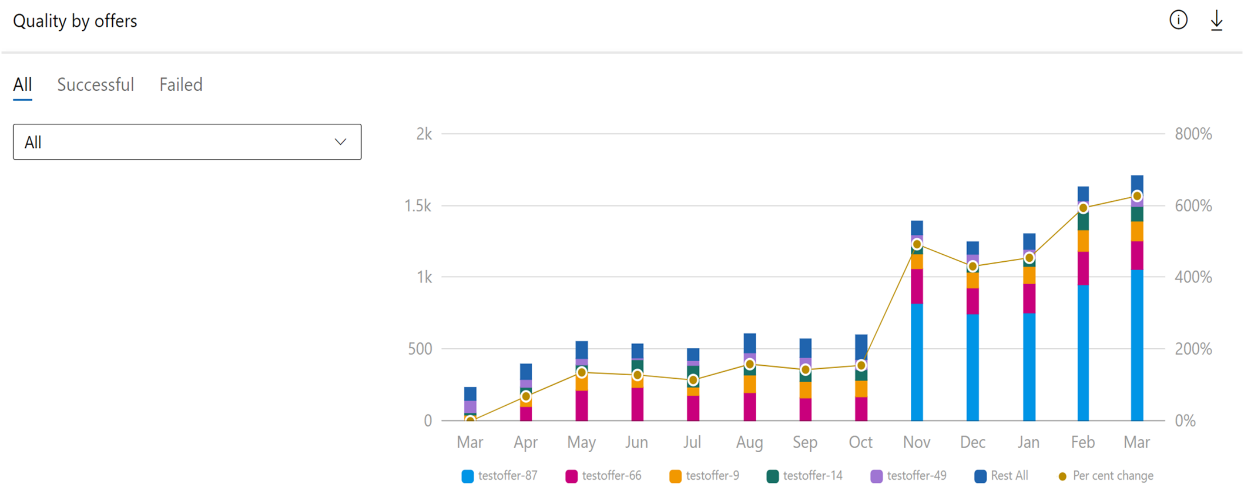
Quality by offers

This graph shows quality-of-service by offers and their corresponding SKUs. It provides metrics and trends for **Total**, **Successful**, and **Failed** offer deployments on a monthly basis. The bar chart represents the count of deployments.

The line chart represents the percentage change in:

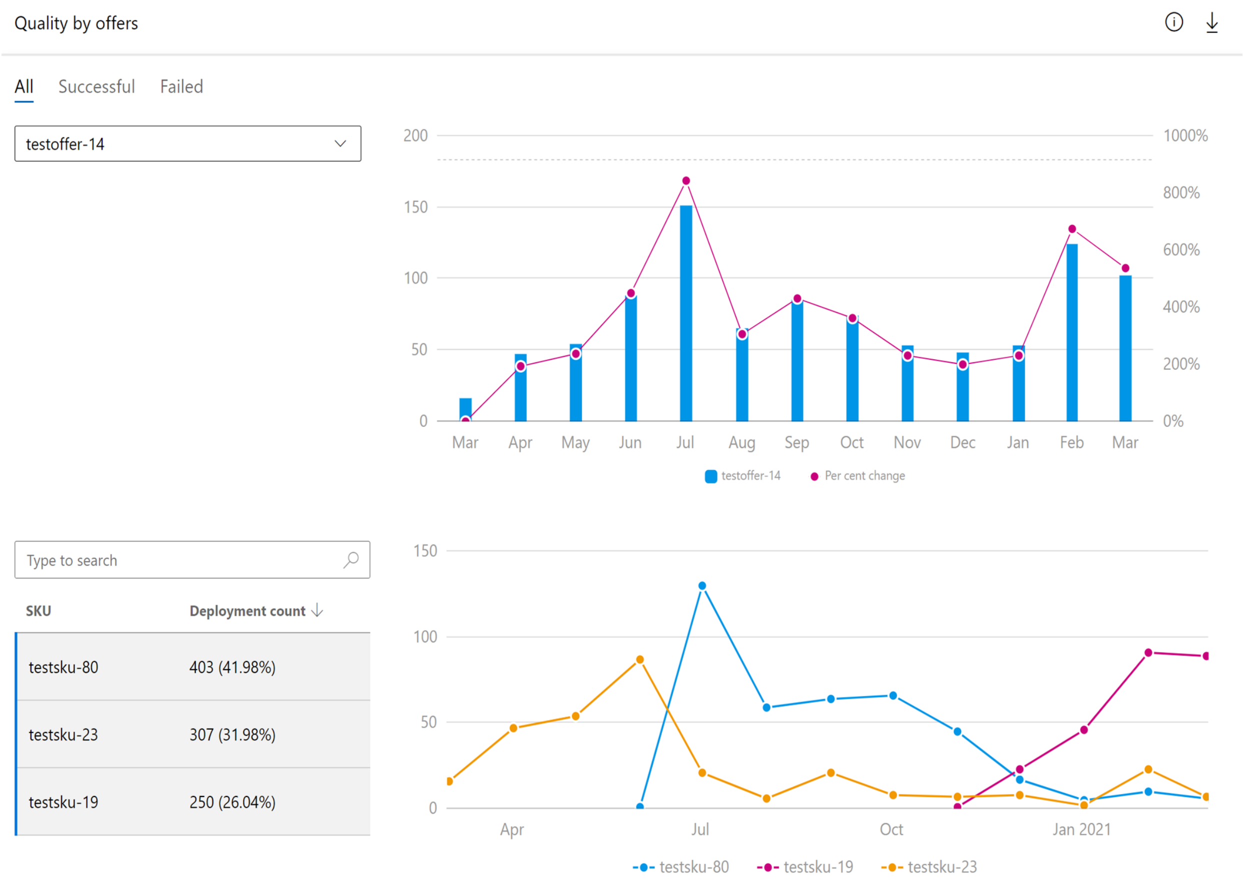
- Total deployments (the **All** tab)
- Success deployments (the **Successful** tab)
- Failed deployments (the **Failure** tab).

The chart shows the metric and trends of all offers. The top offers are displayed in the graph and the rest of the offers are grouped as **Rest All**.



About this graph:

- Select specific offers in the legend to display only that offer and the associated SKUs in the graph.
- Hover over a slice in the graph to display the number of deployments and percentage of that offer compared to total number of deployments across all offers.
- The Quality by offers trend displays month-by-month growth or decline trends.



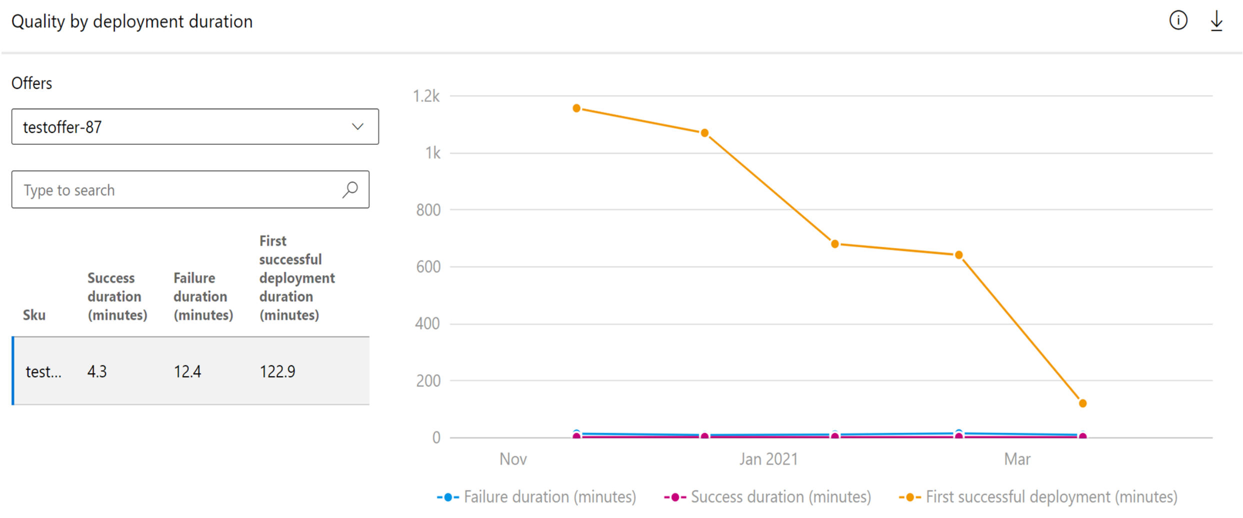
About this graph:

- Select specific offers and associated SKUs in the legend to be displayed.
- The Quality by offers trend displays month-by-month metrics.
- When viewing a month-over-month trend for an offer, select a maximum of three SKUs of that offer.
- The line chart represents the same percentage changes as noted for the prior graph.

Quality by deployment duration

This graph shows the metric and trend for the average time duration for a successful and failed deployment. View the metrics by selecting an offer in the drop-down menu. Select a SKU in the tabular view or enter it in the search bar. Following are different mean deployments durations (in minutes):

- **Success duration** – Mean time of deployment duration with offer deployments status marked as Success. This aggregated metric is calculated using the time duration between start and end timestamps of deployments marked with successful status.
- **Failure duration** – Mean time of deployments duration with offer deployment status marked as Failure. This aggregated metric is calculated using the time duration between start and end timestamps of deployments marked with Failure status.
- **First Successful deployment duration** – Mean time of deployment duration with offer deployment status marked as Success. This aggregated metric is calculated using the time duration between start timestamp of first deployment and end timestamp of the final deployment marked with Successful status. It is calculated for each deployment marked for a specific Offer SKU and Customer.



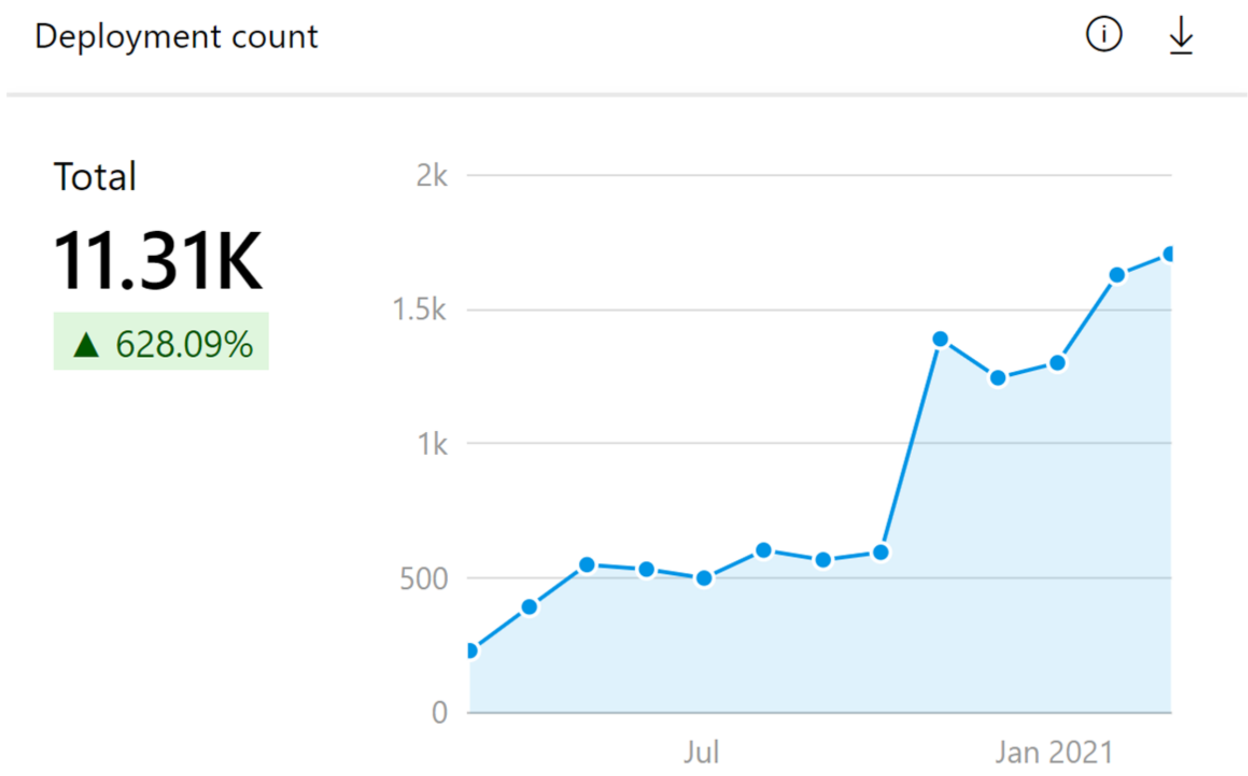
About this graph:

- Select Failure, Success, or First successful deployment duration in the legend to be displayed.
- The line graph presents the Mean duration of deployments marked as successful, failed, and successful deployments with failed prior attempts.
- Mean time for first deployment factors the time spent on failure attempts before the deployment is marked as successful.

Deployment count

This graph shows the total deployment of offers. Metrics and growth trends are represented by a line chart. View value for each month by hovering over the line chart.

The percentage value below the Deployments metrics represents the amount of growth or decline during the selected month range.

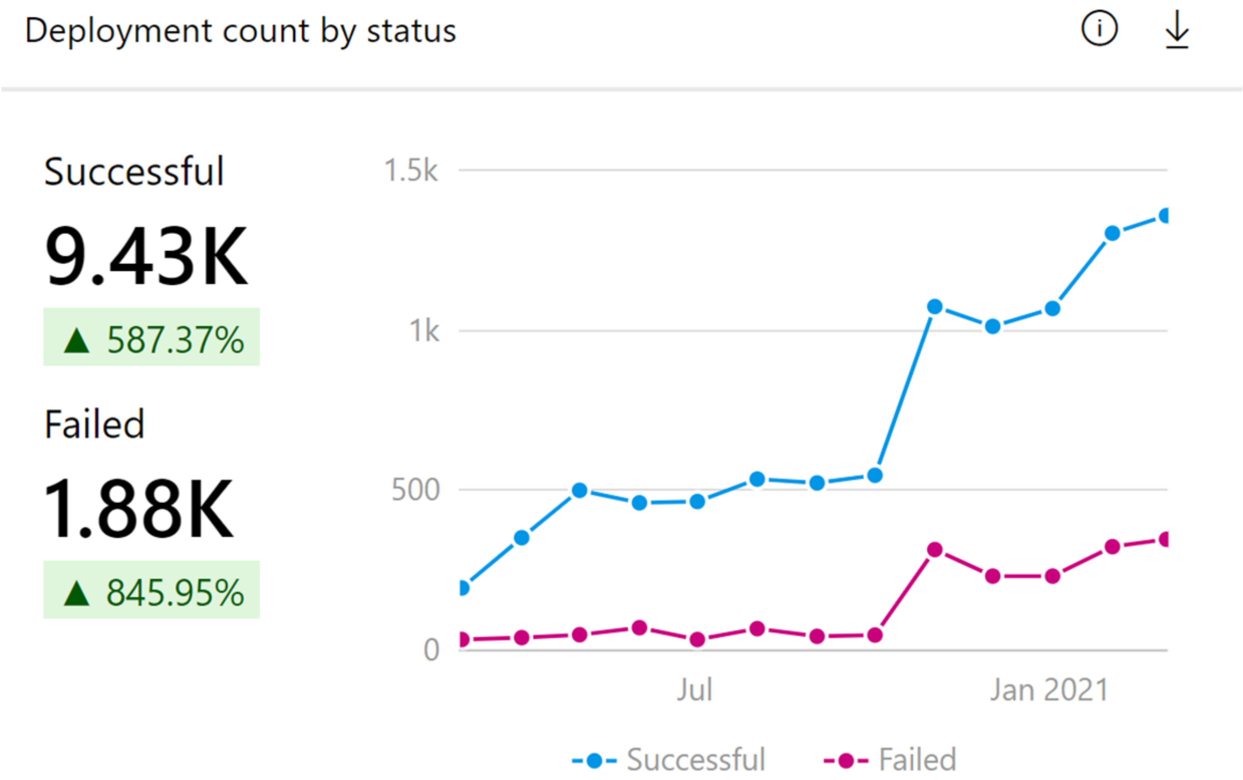


About this graph:

- Total count of offer deployments for the selected date range.
- Change in percentage of offer deployments during the selected date range.
- Month over month trend of total count for offer deployments.

Deployment count by status

This graph shows the metric and trend of successful and failed offer deployments by customers for the selected month range. Offer deployments can have two statuses: **Successful** or **Failed**.



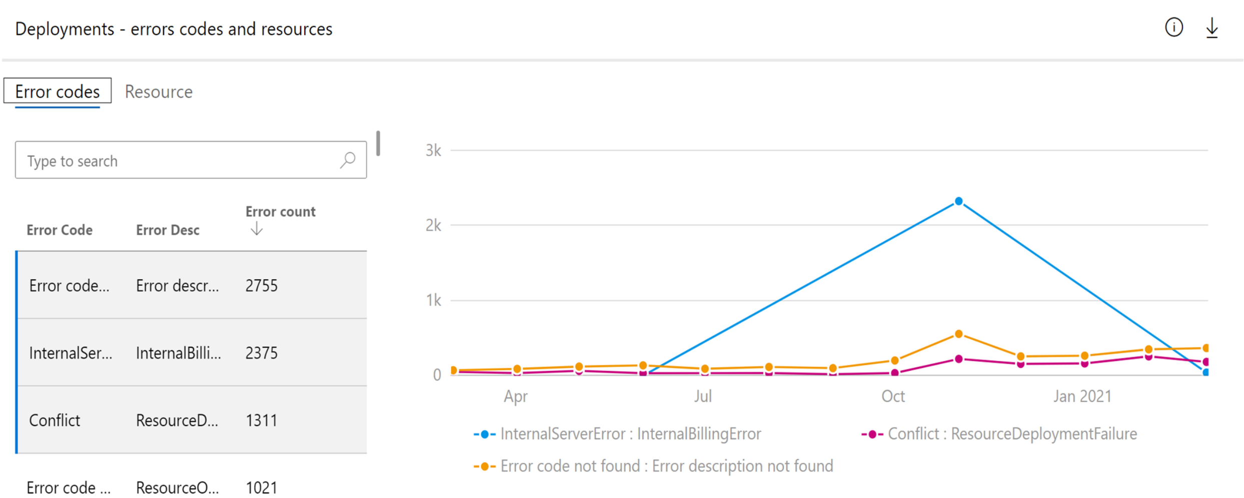
About this graph:

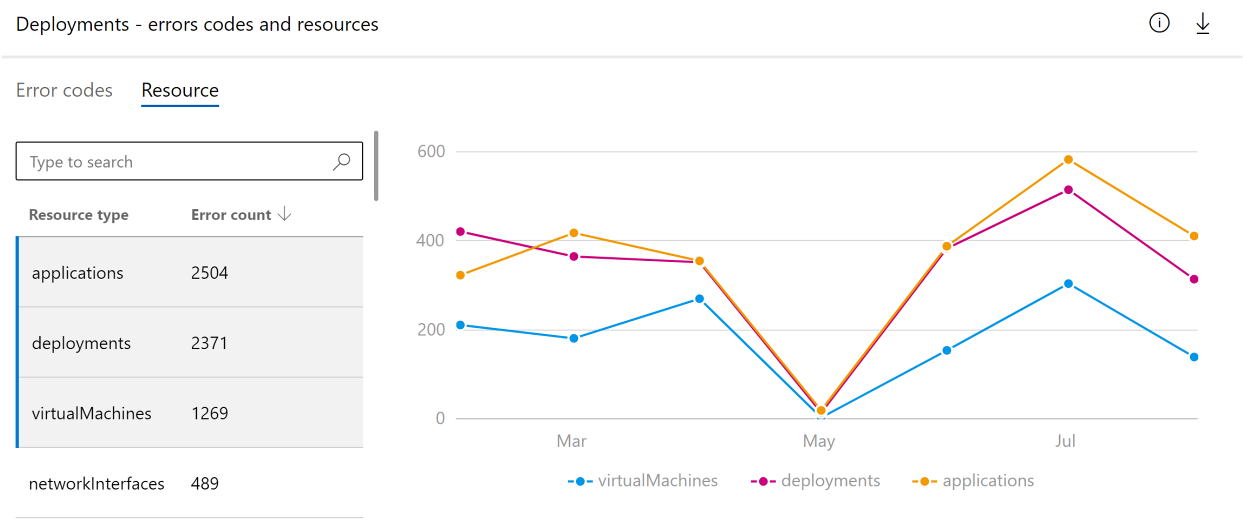
- Total count of successful and failed deployments of offers for the selected date range.
- Change in percentage of successful and failed offer deployments for the selected date range.
- Month over month trend of successful and failed offer deployment counts.

Deployment errors codes and resources

This graph shows metrics and trends of the offer deployments basis error codes and resources. The tabular section can be pivoted on error codes and resources. The first subtab provides analytics basis error codes, description, and error counts. The second provides analytics basis for the deployment resources. The line chart provides the total error count basis error codes and resources.

For more information about error codes, see Troubleshoot common Azure deployment errors with Azure Resource Manager and Resource providers for Azure services.



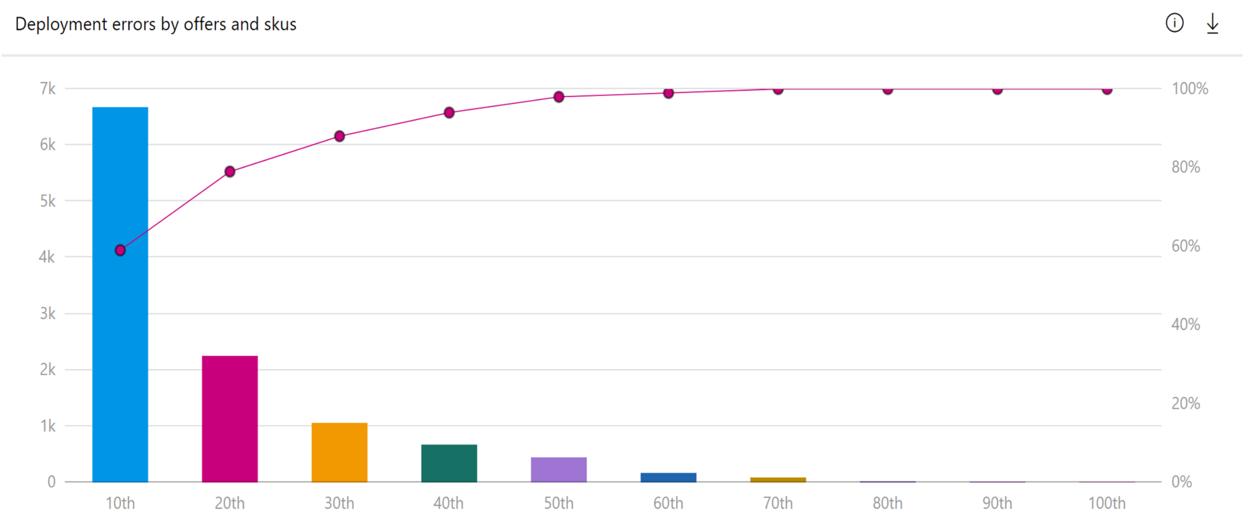


About these graphs:

- Select specific errors or resources in the legend to be displayed.
- The trend widget displays error count on a month-by-month basis.
- When viewing a month-over-month trend by error codes or resources, select a maximum of three items in the table.
- Sort error codes and resources for deployment failures by basis error count in the table.

Deployment errors by offer plan

On this graph, the Y-axis represents deployment error count and the X-axis represents the percentile of top offer plans (by error count).



About this graph:

- The bar charts represent the deployment error counts for the selected month range.
- The values on the line chart represent the cumulative error percentages by offer plan.

Deployment reliability by location

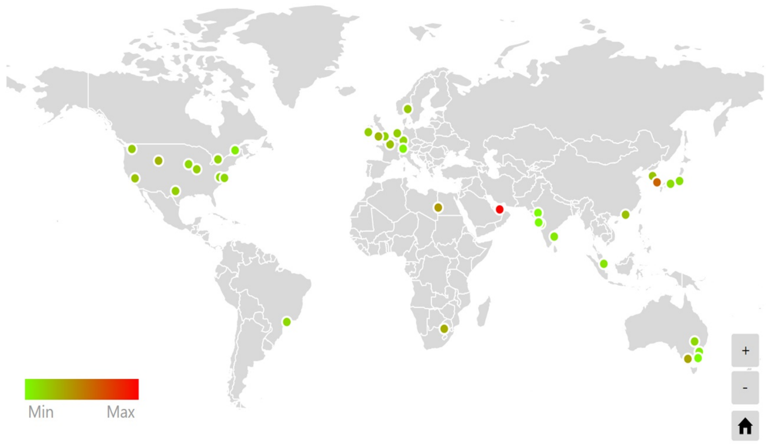
This graph shows the heat map for successful and failed deployment counts for the selected month range. It also shows failure percentage against each region. The Green to Red color scale represents low to high value of failure rates. Select a record in the table to zoom in on a deployment region.

Deployment reliability by locations

Type to sear

36 Locations

Location	Successful	Failed	Failure Percentage
eastus	2368	385	14
weste...	1163	248	18
central...	695	110	14
uksouth	671	132	16
westus	623	174	22
eastus2	629	106	14



About this graph:

- Move the map to view the exact location.
- Zoom into a specific location.
- The heat map has a supplementary grid to view the deployment details of Successful count, Failed count, and Failure percentage in a specific location.
- Red regions indicate higher failure rates and green indicate lower.
- Search and select a country/region in the grid to zoom to the location in the map. Revert to the original view with the **Home** icon.

Offer deployment details

This table shows all offer deployment details available. Download the report to view the raw data on offer deployments.

Details

Offer ID	SKU	Deployment Status	Customer Id	Customer Name	Start Time	End Time	Duration in minutes	Resou Grou Locat
testoffer-87	testsku-87	Failed	TestCustomerTenant-597	TestCustomerName-597	2021-03-31T15:24:47	2021-03-31T15:24:58	0.2	eastus
testoffer-87	testsku-87	Failed	TestCustomerTenant-94	TestCustomerName-94	2021-03-31T04:42:48	2021-03-31T04:47:51	5.1	austral
testoffer-87	testsku-87	Successful	TestCustomerTenant-566	TestCustomerName-566	2021-03-31T03:39:02	2021-03-31T03:42:36	3.6	westus
testoffer-66	testsku-75	Successful	TestCustomerTenant-629	TestCustomerName-629	2021-03-31T11:08:18	2021-03-31T11:12:51	4.6	westeu
testoffer-66	testsku-75	Successful	TestCustomerTenant-488	TestCustomerName-488	2021-03-31T08:36:36	2021-03-31T08:42:51	6.2	centra
testoffer-87	testsku-87	Successful	TestCustomerTenant-597	TestCustomerName-597	2021-03-31T03:39:57	2021-03-31T03:42:13	2.3	westus
testoffer-41	testsku-75	Successful	TestCustomerTenant-240	TestCustomerName-240	2021-03-31T11:57:11	2021-03-31T12:02:28	5.3	eastus
testoffer-87	testsku-87	Failed	TestCustomerTenant-335	TestCustomerName-335	2021-03-31T19:55:54	2021-03-31T19:56:30	0.6	southc
testoffer-49	testsku-59	Failed	TestCustomerTenant-893	TestCustomerName-893	2021-03-31T15:41:24	2021-03-31T15:41:31	0.1	eastus
testoffer-87	testsku-87	Successful	TestCustomerTenant-597	TestCustomerName-597	2021-03-31T08:09:54	2021-03-31T08:10:01	0.1	switze

1 2 3 4 5 Next >

About this table:

- Displays a numbered list of the 1000 top deployments sorted by date of deployment.
- Each column in the grid is sortable.
- Expand the control and export the table.
- The detail view is paginated. Select other pages at the bottom.

Dictionary of data terms

COLUMN NAME	ATTRIBUTE NAME	DEFINITION
Offer ID	Offer ID	The name of the deployed offer
Sku	Sku	The name of the deployed offer plan/SKU
Deployment Status	Deployment Status	The offer deployment status marked as either **successful** or **failed**
Subscription ID	Subscription ID	The Subscription ID of the customer
Customer Tenant ID	Customer Tenant ID	The Tenant ID of the customer
Customer Name	Customer Name	The name of the customer
Template Type	Template Type	Type of Azure App deployed. It can be either Managed App or Solution Templates and it cannot be private.
Deployment Start Time	Deployment Start Time	The start time of the deployment
Deployment End Time	Deployment End Time	The end time of the deployment
Deployment Duration:	Deployment Duration:	The total time duration of offer deployment in milliseconds. It is shown in minutes in the graph.
Deployment Region	Deployment Region	The location of the Azure App deployment
Resource Provider	Resource Provider	The resource provider for the particular deployed resource
Resource Uri	Resource Uri	The URI of the deployed resource
Resource Group	Resource Group	The resource group where the resource is deployed
Resource Type	Resource Type	The type of deployed resource
Resource Name	Resource Name	The name of the deployed resource
Error Code	Error Code	The error code for the deployment failure
Error Name	Error Name	The error name for the deployment failure

COLUMN NAME	ATTRIBUTE NAME	DEFINITION
Error Message	Error Message	The error message for the deployment failure
Deep Error Code	Deep Error Code	If present, contains further information on the error code
Deep Message Code	Deep Message Code	If present, contains further information on the error message
Correlation ID	Correlation ID	The identifier used to distinguish different deployments. The same value means all resources being deployed are for one deployment.

Next steps

- For information about deployment errors, see Troubleshoot common Azure deployment errors with Azure Resource Manager.
- For information about resource providers, see Resource providers for Azure services.
- For graphs, trends, and values of aggregate data that summarize marketplace activity for your offer, see Summary dashboard in commercial marketplace analytics.
- For information about your orders in a graphical and downloadable format, see Orders dashboard in commercial marketplace analytics.
- For virtual machine (VM) offers usage and metered billing metrics, see Usage dashboard in commercial marketplace analytics.
- For detailed information about your customers, including growth trends, see Customers dashboard in commercial marketplace analytics.
- For information about your licenses, see License dashboard in commercial marketplace analytics.
- For a list of your download requests over the last 30 days, see Downloads dashboard in commercial marketplace analytics.
- To see a consolidated view of customer feedback for offers on Microsoft AppSource and Azure Marketplace, see Ratings and Reviews dashboard in commercial marketplace analytics.
- For FAQs about commercial marketplace analytics and a comprehensive dictionary of data terms, see Commercial marketplace analytics common questions.

Downloads dashboard in commercial marketplace analytics

11/22/2021 • 2 minutes to read • Edit Online

This article provides information on the Downloads dashboard in Partner Center. This dashboard displays a list of your download requests over the last 30 days.

> **NOTE**
> For detailed definitions of analytics terminology, see Frequently asked questions and terminology for commercial marketplace analytics.

Downloads dashboard

The Downloads dashboard displays requests for any downloads that contain over 1000 rows of customer or order data.

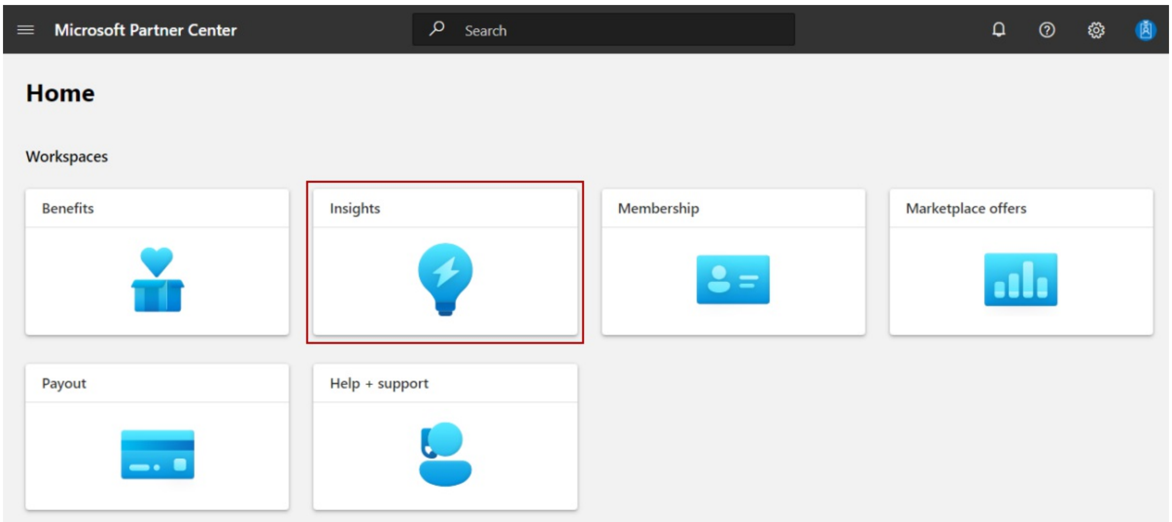
You will receive a pop-up notification containing a link to the **Downloads** dashboard whenever you request a download with over 1000 rows of data. These data downloads will be available for a 30-day period and then removed.

Access the Downloads dashboard

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Downloads**.

Lifetime export of commercial marketplace Analytics reports

On the Downloads page, end user can do the following:

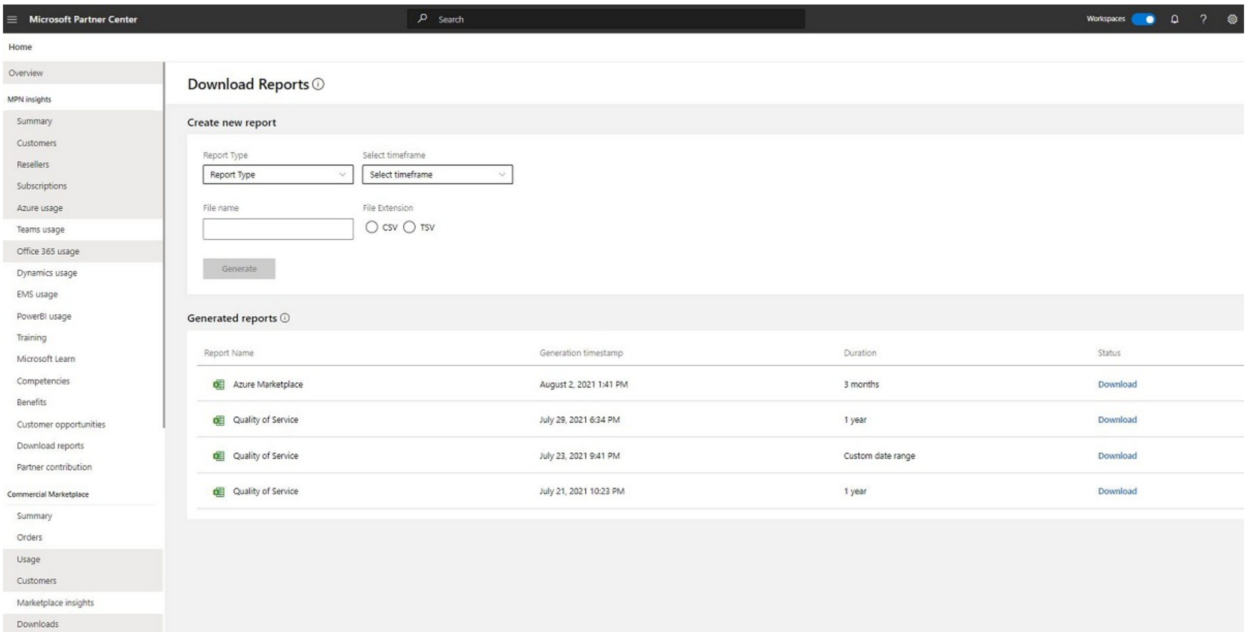
- Lifetime export of commercial marketplace Analytics reports in csv and tsv format.
- Export of commercial marketplace Analytics reports for any date range.
- Export of commercial marketplace Analytics reports for 6- or 12-month duration.

Support for Lifetime Export Capability of Analytics reports:

REPORT	LIFETIME EXPORT	ANY DURATION BASED ON DATE
Orders		
Customers		
Marketplace Insights		
Usage		Maximum of one year

A user can schedule asynchronous downloads of reports from the Downloads dashboard.

- Workspaces view
- Current view



Next steps

- For an overview of analytics reports available in the Partner Center commercial marketplace, see Analytics for the commercial marketplace in Partner Center.
- For graphs, trends, and values of aggregate data that summarize marketplace activity for your offer, see

Summary Dashboard in commercial marketplace analytics.

- For information about your orders in a graphical and downloadable format, see Orders Dashboard in commercial marketplace analytics.
- For Virtual Machine (VM) offers usage and metered billing metrics, see Usage Dashboard in commercial marketplace analytics.
- For detailed information about your customers, including growth trends, see Customer Dashboard in commercial marketplace analytics.
- To see a consolidated view of customer feedback for offers on Azure Marketplace and AppSource, see Ratings and reviews dashboard in commercial marketplace analytics.
- For frequently asked questions about commercial marketplace analytics and for a comprehensive dictionary of data terms, see Frequently asked questions and terminology for commercial marketplace analytics.

Ratings and Reviews dashboard in commercial marketplace analytics

11/22/2021 • 3 minutes to read • Edit Online

This article provides information on the Ratings and Reviews dashboard in Partner Center. This dashboard displays a consolidated view of customer feedback for offers on Microsoft AppSource and Azure Marketplace. As customers browse, search, and purchase offers in both marketplaces, they can leave ratings and reviews for the offers they've acquired.

- Customers can submit a new rating or review and update or delete an existing rating or review they have submitted. Customers can make changes only to the ratings and reviews they own.
- Reviews are posted on the Reviews tab on the product display page of the offer in Azure Marketplace or AppSource. Customers can include their name or post anonymously.

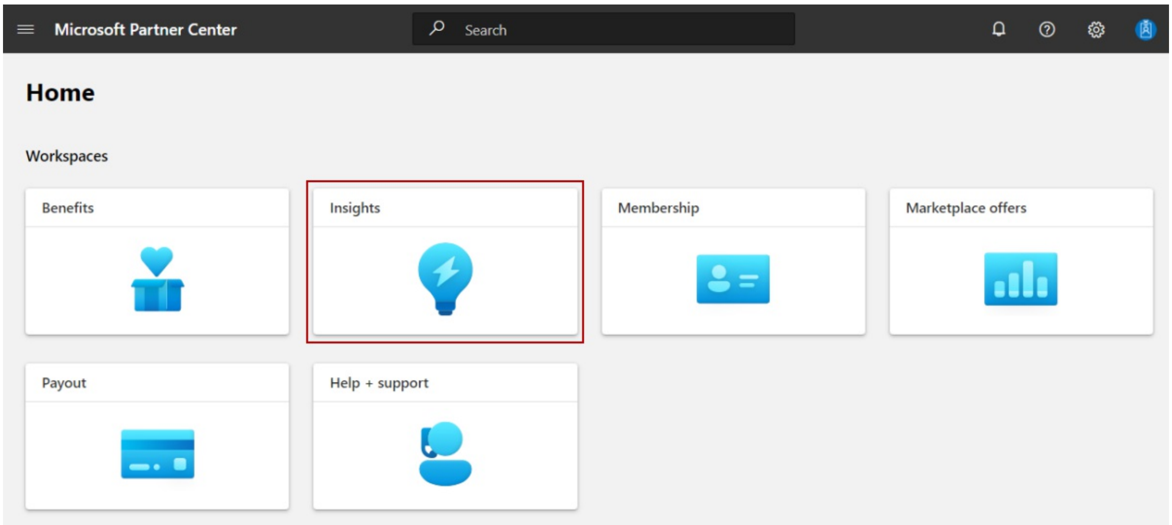
> **NOTE**
> For detailed definitions of analytics terminology, see Frequently asked questions and terminology for commercial marketplace analytics.

Access the Ratings & reviews dashboard

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.
2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Ratings & reviews**.

The dashboard displays a graphical representation of the following customer activity:

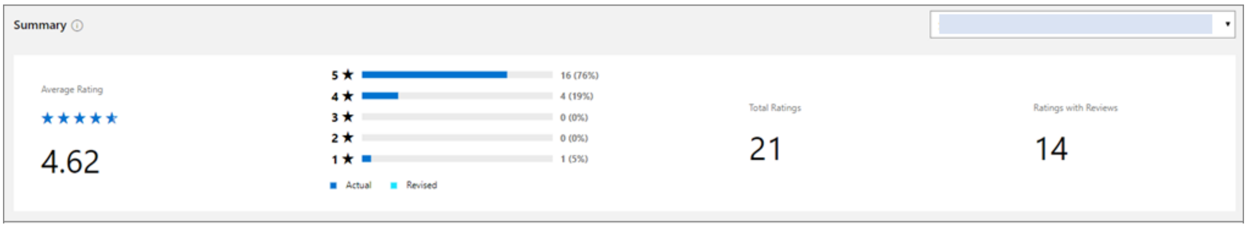
- Ratings
- Review comments

Use the **Marketplace Insights** tabs to view your offer's Microsoft AppSource and Azure Marketplace metrics separately. To view specific offer metrics, select the offer from the offer dropdown list.

Ratings and reviews summary

The summary section displays the following metrics for a selecteddate range:

- **Average rating:** Weighted average star rating of all the ratings submitted by customers for the selected offer.
- **Rating breakdown:** Breakdown of star rating by the count of customers who submitted ratings. The bar chart is stacked with actual and revised ratings (updated rating count).
- **Total ratings:** Overall count of ratings submitted. This count also includes ratings with and without reviews.
- **Ratings with reviews:** Count of reviews submitted.



Review comments

Reviews are displayed in chronological order for when they were posted. The default view displays all reviews and you can filter through the reviews by star rating using the **rating filter** in the dropdown menu. Additionally, you can search by keywords that appear in the review.

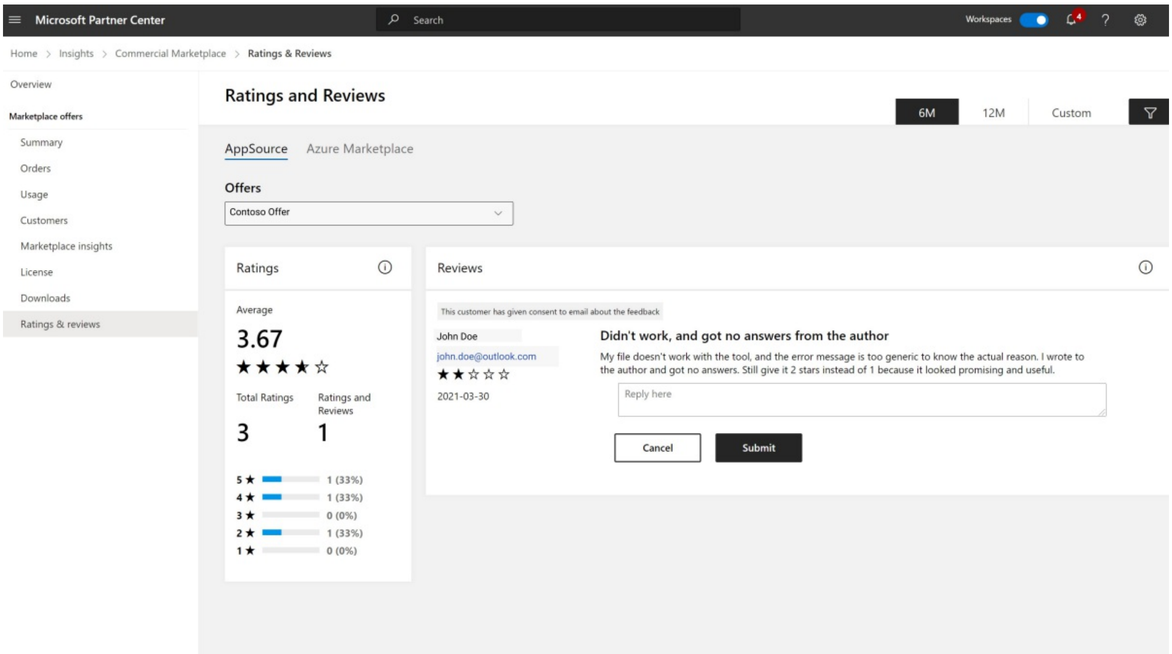
Respond to a review

You can respond to reviews from users and the response will be visible on either Azure Marketplace or AppSource storefronts. This functionality applies to the following offer types: Azure Application, Azure Container, Azure virtual machine, Dynamics 365 Business Central, Dynamics 365 Customer Engagement & Power Apps, Dynamics 365 Operations, IoT Edge Module, Managed service, Power BI app, and Software as a Service.

To respond to a review, follow these steps:

- Workspaces view
- Current view

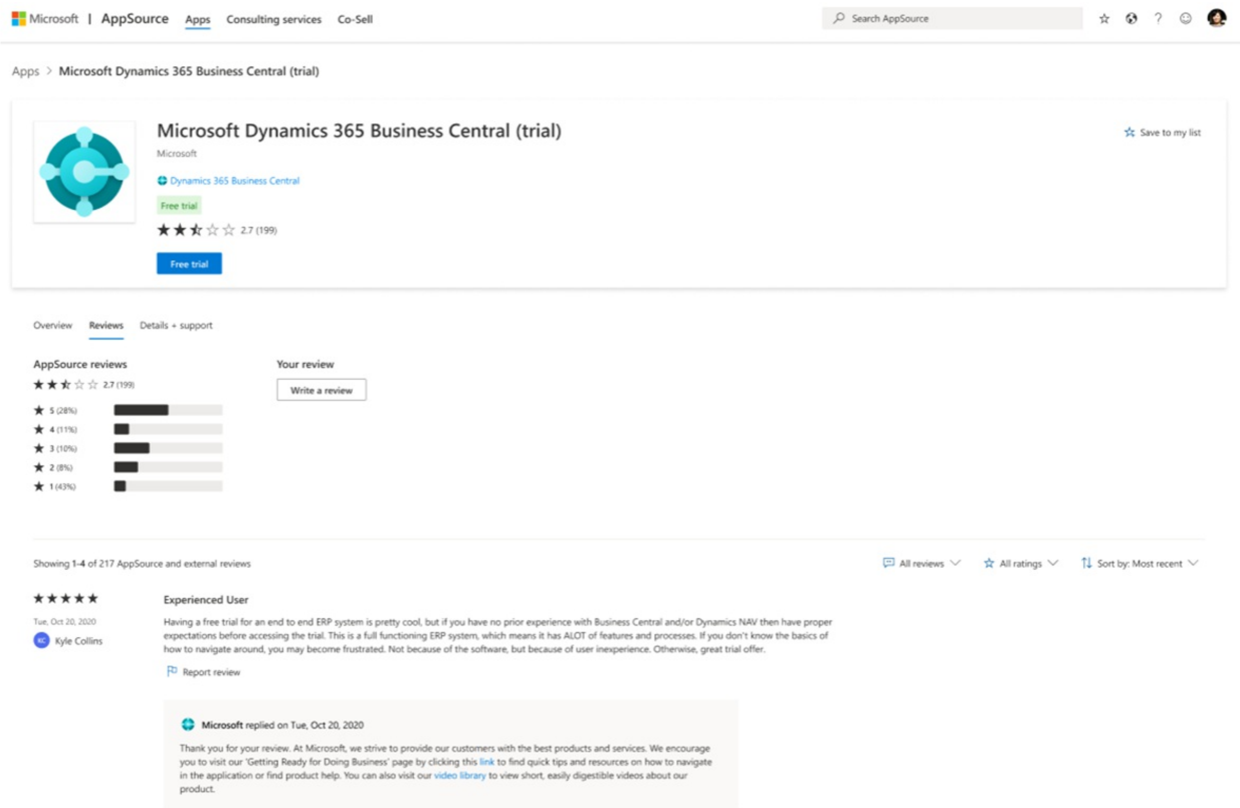
1. On the **Ratings & reviews** page, select **Azure Marketplace** or **AppSource**. You can select **filters** to narrow down the list of reviews, and display, for example, only reviews with a specific star rating.



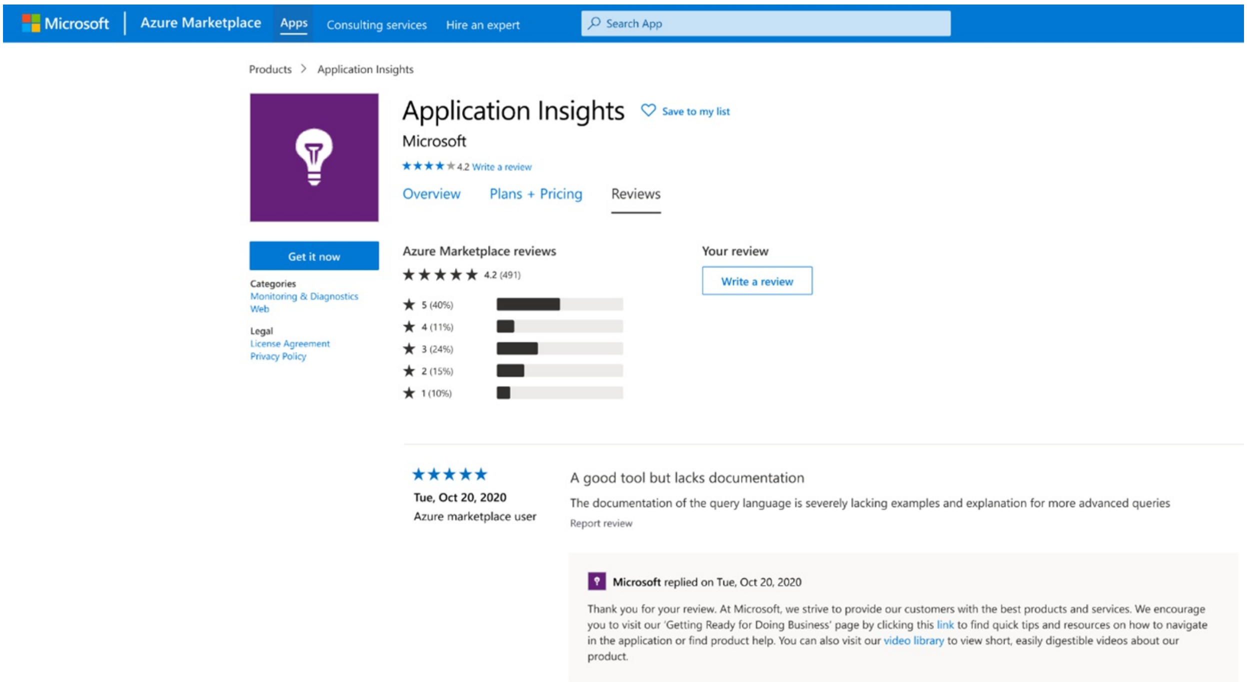
2. Select the **Reply** link for the review you wish to respond, type your reply on the **text box**, then select **Send reply**.

The response will appear under the text of the original review in the product detail page in AppSource, and Azure Marketplace online storefront.

AppSource

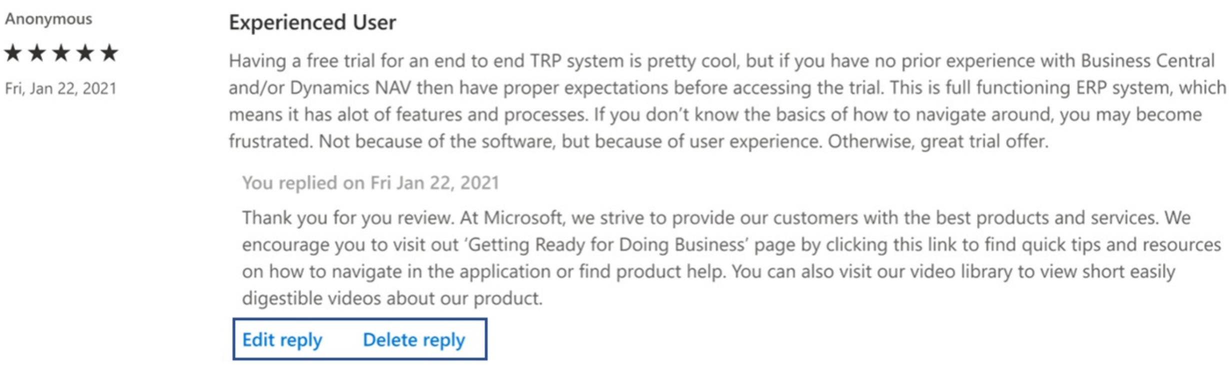


Azure Marketplace online store



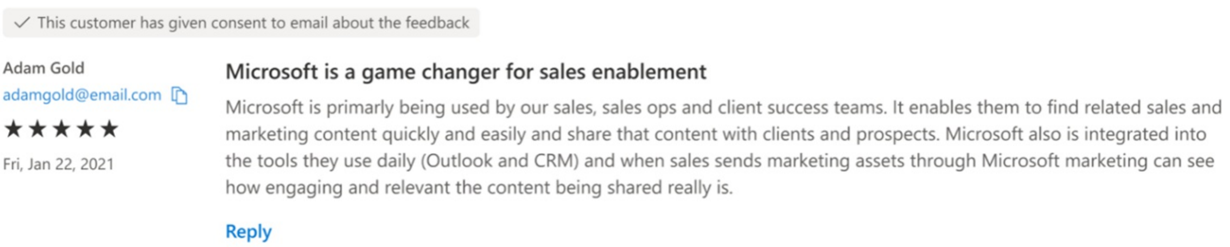
Editing or deleting a response to a review

You can edit or delete a response to a review by selecting **Edit** or **Delete**.



Contacting users after a review has been posted

When posting a review, a user can give consent to be contacted by the publisher. When a user has given consent, a notification will appear at the top of the review in Partner Center, and the email address of the user who posted the review will be visible.



Next steps

- For graphs, trends, and values of aggregate data that summarize marketplace activity for your offer, see Summary Dashboard in commercial marketplace analytics.
- For information about your orders in a graphical and downloadable format, see Orders Dashboard in commercial marketplace analytics.
- For Virtual Machine (VM) offers usage and metered billing metrics, see Usage Dashboard in commercial marketplace analytics.

- For detailed information about your customers, including growth trends, see Customer Dashboard in commercial marketplace analytics.
- For a list of your download requests over the last 30 days, see Downloads Dashboard in commercial marketplace analytics.

Get started with programmatic access to analytics data

11/22/2021 • 2 minutes to read • Edit Online

This guide helps you get on-boarded to programmatic access to Commercial Marketplace Analytics data. You'll learn how to programmatically access analytic reports to monitor sales, evaluate performance, and optimize offers in the commercial marketplace. The improved analytics tools enable you to act on performance results and maintain better relationships with your customers and resellers.

About this guide

You can use this guide to programmatically access commercial marketplace analytics data. By using the methods and APIs documented in this guide, you can schedule custom reports and ingest key data sets into your internal analytics systems. You can effectively monitor sales, evaluate performance, and optimize your offers in the commercial marketplace.

The API for accessing commercial marketplace reports enable you to schedule custom reports of your analytics data asynchronously. The capability enables you to define reporting queries/templates based on your needs, set a schedule, and get timely and trustworthy reports at scheduled intervals.

The key value of programmatic access of commercial marketplace analytics data is customized reporting and integration with internal BI systems and platforms.

> **NOTE**
>
> Partners will need dedicated engineering resources to do one time onboarding on the API interface.

Next steps

- Prerequisites to programmatically access analytics data

Prerequisites to programmatically access analytics data

11/22/2021 • 2 minutes to read • Edit Online

Before you can programmatically access commercial marketplace analytics data, you need to meet the following requirements.

Commercial marketplace enrollment

To access commercial marketplace analytics data programmatically, you need to be enrolled in the commercial marketplace program and have a Partner Center account. To learn how, see Create a commercial marketplace account in Partner Center.

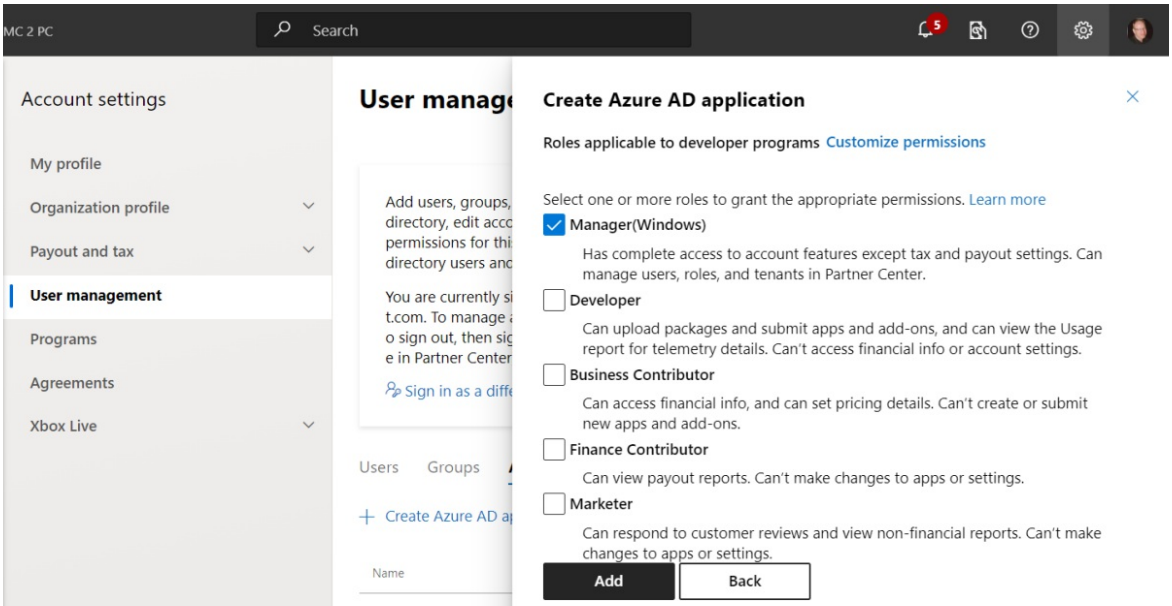
Create Azure Active Directory application

Regular user credentials cannot be used for programmatic access of commercial marketplace analytics data. An Azure Active Directory (Azure AD) application needs to be created along with a secret to access the analytics APIs. To learn how to create an Azure AD application and secret, see Quickstart: Register an application with the Microsoft identity platform.

Associate the Azure AD application to the Partner Center tenant

The Azure AD application you created in the Azure portal needs to be linked to your Partner Center account. The steps are as follows:

1. Sign in to Partner Center.
2. In the upper right, select the gear icon and then select **Account settings**.
3. In the **Account settings** menu, select **User management**.
4. Select **Azure AD applications** then **+ Create Azure AD application**.
5. Select the Azure AD application you created on the Azure portal, then **Next**.
6. Select the **Manager(Windows)** checkbox and then select **Add**.



Generate an Azure AD token

You need to Generate an Azure AD token using the Application (client) ID. This ID helps to uniquely identify your client application in the Microsoft identity platform and the client secret from the previous step. For the steps to generate an Azure AD token, see Service to service calls using client credentials (shared secret or certificate).

> **NOTE**
>
> The token is valid for one hour.

Next steps

- Programmatic access paradigm

Programmatic access paradigm

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This diagram shows the API call pattern used to create a new report template, schedule the custom report, and retrieve failure data.

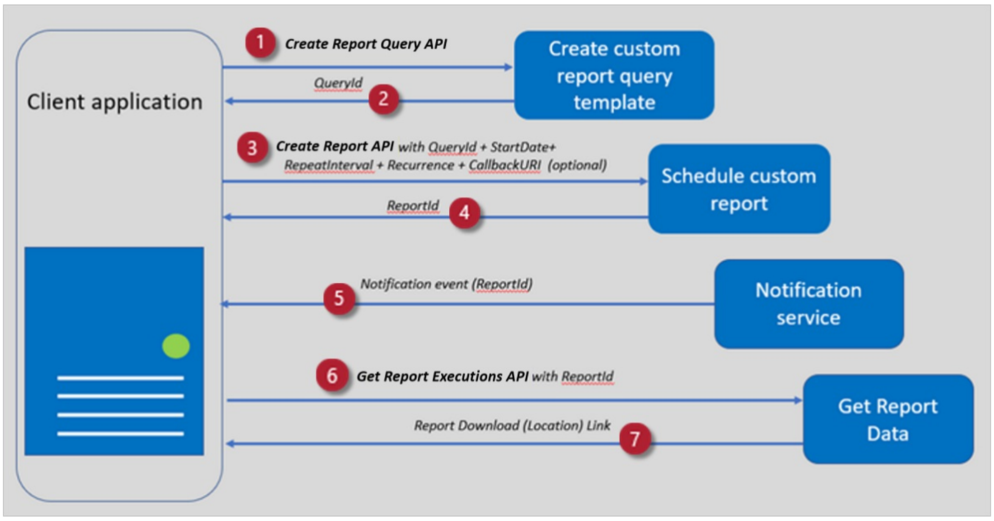

Figure 1: High-level flow of the API call pattern

This list provides more details about Figure 1.

1. The Client Application can define the custom report schema/template by calling the Create Report Query API. Alternately, you can use a report template (`QueryId`) from the list of system queries.
2. On success, the Create Report Template API returns the `QueryId` .
3. The client application then calls the Create Report API using the `QueryID` along with the report start date, Repeat Interval, Recurrence, and an optional Callback URI.
4. On success, the Create Report API returns the `ReportID` .
5. The client application gets notified at the callback URI as soon as the report data is ready for download.
6. The client application then uses the Get Report Executions API to query the status of the report with the `Report ID` and date range.
7. On success, the report download link is returned and the application can initiate download of the data.

Report query language specification

While we provide system queries you can use to create reports, you can also create your own queries based on your business needs. To learn more about custom queries, see Custom query specification.

Create report query API

This API helps to create custom queries that define the dataset from which columns and metrics need to be exported. The API provides the flexibility to create a new reporting template based on your business needs.

You can also use the system queries we provide. When custom report templates are not needed, you can call the Create Report API directly using the QueryIds of the system queries we provide.

The following example shows how to create a custom query to get *Normalized Usage and Estimated Financial Charges for PAID SKUs* from the ISVUsage dataset for the last month.

Request syntax

METHOD	REQUEST URI
POST	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledQueries`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token. The format is `Bearer <token>`.
Content-Type	`string`	`application/JSON`

Path parameter

None

Query parameter

None

Request payload example

```
{
    "Name": "ISVUsageQuery",
    "Description": "Normalized Usage and Estimated Financial Charges for PAID SKUs",
    "Query": "SELECT UsageDate, NormalizedUsage, EstimatedExtendedChargePC FROM ISVUsage WHERE
SKUBillingType = 'Paid' ORDER BY UsageDate DESC TIMESPAN LAST_MONTH"
}
```

Glossary

This table provides the key definitions of elements in the request payload.

PARAMETER	REQUIRED	DESCRIPTION	ALLOWED VALUES
`Name`	Yes	Friendly name of the query	string
`Description`	No	Description of what the query returns	string
`Query`	Yes	Report query string	Data type: string Custom query based on business need

> **NOTE**
> For custom query samples, see Examples of sample queries.

Sample Response

The response payload is structured as follows:

Response codes: 200, 400, 401, 403, 500

Response payload example:

```
{
  "value": [
        {
            "queryId": "78be43f2-e35f-491a-8cd5-78fe14194f9c",
            "name": " ISVUsageQuery",
            "description": "Normalized Usage and Estimated Financial Charges for PAID SKUs”,
            "query": " SELECT UsageDate, NormalizedUsage, EstimatedExtendedChargePC FROM ISVUsage WHERE
SKUBillingType = 'Paid' ORDER BY UsageDate DESC TIMESPAN LAST_MONTH",
            "type": "userDefined",
            "user": "142344300",
            "createdTime": "2021-01-06T05:38:34Z"
        }
    ],
    "totalCount": 1,
    "message": "Query created successfully",
    "statusCode": 200
}
```

Glossary

This table provides the key definitions of elements in the response.

PARAMETER	DESCRIPTION
`QueryId`	Universally unique identifier (UUID) of the query you created
`Name`	Friendly name given to the query in the request payload
`Description`	Description given during creation of the query
`Query`	Report query passed as input during query creation
`Type`	Set to `userDefined`
`User`	User ID used to create the query
`CreatedTime`	UTC Time the query was created in this format: yyyy-MM-ddTHH:mm:ssZ
`TotalCount`	Number of datasets in the Value array
`StatusCode`	Result Code The possible values are 200, 400, 401, 403, 500
`message`	Status message from the execution of the API

Create report API

On creating a custom report template successfully and receiving the `QueryID` as part of Create Report Query response, this API can be called to schedule a query to be executed at regular intervals. You can set a frequency and schedule for the report to be delivered. For system queries we provide, the Create Report API can also be called with QueryId.

Request syntax

METHOD	REQUEST URI
POST	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledReport`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token. The format is `Bearer <token>`.
Content Type	string	`application/JSON`

Path parameter

None

Query parameter

None

Request payload example

```
{
  "ReportName": "ISVUsageReport",
  "Description": "Normalized Usage and Estimated Financial Charges for PAID SKUs",
  "QueryId": "78be43f2-e35f-491a-8cd5-78fe14194f9c ",
  "StartTime": "2021-01-06T19:00:00Z ",
  "RecurrenceInterval": 48,
  "RecurrenceCount": 20,
  "Format": "csv",
  "CallbackUrl": "https://<SampleCallbackUrl>"
}
```

Glossary

This table provides the key definitions of elements in the request payload.

PARAMETER	REQUIRED	DESCRIPTION	ALLOWED VALUES
`ReportName`	Yes	Name assigned to the report	string
`Description`	No	Description of the created report	string
`QueryId`	Yes	Report query ID	string
`StartTime`	Yes	UTC Timestamp at which the report generation will begin. The format should be: yyyy-MM-ddTHH:mm:ssZ	string
`RecurrenceInterval`	Yes	Frequency in hours at which the report should be generated. Minimum value is 4 and maximum value is 90.	integer
`RecurrenceCount`	No	Number of reports to be generated.	integer
`Format`	No	File format of the exported file. Default format is .CSV.	CSV/TSV
`CallbackUrl`	No	Publicly reachable URL that can be optionally configured as the callback destination.	String (http URL)
`ExecuteNow`	No	This parameter should be used to create a report that will be executed only once. `StartTime`, `RecurrenceInterval`, and `RecurrenceCount` are ignored if this is set to `true`. The report is executed immediately in an asynchronous fashion.	true/false
`QueryStartTime`	No	Optionally specifies the start time for the query extracting the data. This parameter is applicable only for one time execution report which has `ExecuteNow` set to `true`. The format should be yyyy-MM-ddTHH:mm:ssZ	Timestamp as string

PARAMETER	REQUIRED	DESCRIPTION	ALLOWED VALUES
`QueryEndTime`	No	Optionally specifies the end time for the query extracting the data. This parameter is applicable only for one time execution report which has `ExecuteNow` set to `true`. The format should be yyyy-MM-ddTHH:mm:ssZ	Timestamp as string

Sample response

The response payload is structured as follows:

Response code: 200, 400, 401, 403, 404, 500

Response payload:

```
{
  "Value": [
    {
            "reportId": "72fa95ab-35f5-4d44-a1ee-503abbc88003",
            "reportName": "ISVUsageReport",
            "description": "Normalized Usage and Estimated Financial Charges for PAID SKUs",
            "queryId": "78be43f2-e35f-491a-8cd5-78fe14194f9c",
            "query": "SELECT UsageDate, NormalizedUsage, EstimatedExtendedChargePC FROM ISVUsage WHERE
SKUBillingType = 'Paid' ORDER BY UsageDate DESC TIMESPAN LAST_MONTH",
            "user": "142344300",
            "createdTime": "2021-01-06T05:46:00Z",
            "modifiedTime": null,
            "startTime": "2021-01-06T19:00:00Z",
            "reportStatus": "Active",
            "recurrenceInterval": 48,
            "recurrenceCount": 20,
            "callbackUrl": "https://<SampleCallbackUrl>",
            "format": "csv"
    }
  ],
  "TotalCount": 1,
  "Message": "Report created successfully",
  "StatusCode": 200
}
```

Glossary

This table provides the key definitions of elements in the response.

PARAMETER	DESCRIPTION
`ReportId`	Universally unique identifier (UUID) of the report you created
`ReportName`	Name given to the report in the request payload
`Description`	Description given during creation of the report
`QueryId`	Query ID passed at the time you created the report
`Query`	Query text that will be executed for this report
`User`	User ID used to create the report
`CreatedTime`	UTC Time the report was created in this format: yyyy-MM-ddTHH:mm:ssZ
`ModifiedTime`	UTC Time the report was last modified in this format: yyyy-MM-ddTHH:mm:ssZ
`StartTime`	UTC Time the report execution will begin in this format: yyyy-MM-ddTHH:mm:ssZ

PARAMETER	DESCRIPTION
`ReportStatus`	Status of the report execution. The possible values are **Paused**, **Active**, and **Inactive**.
`RecurrenceInterval`	Recurrence interval provided during report creation
`RecurrenceCount`	Recurrence count provided during report creation
`CallbackUrl`	Callback URL provided in the request
`Format`	Format of the report files. The possible values are CSV or TSV.
`TotalCount`	Number of datasets in the Value array
`StatusCode`	Result Code The possible values are 200, 400, 401, 403, 500
`message`	Status message from the execution of the API

Get report executions API

You can use this method to query the status of a report execution using the `ReportId` received from the Create Report API. The method returns the report download link if the report is ready for download. Otherwise, the method returns the status. You can also use this API to get all the executions that have happened for a given report.

> **IMPORTANT**
> This API has default query parameters set for `executionStatus=Completed` and `getLatestExecution=true`. Hence, calling the API before the first successful execution of the report will return 404. Pending executions can be obtained by setting `executionStatus=Pending`.

Request syntax

METHOD	REQUEST URI
Get	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledReport/execut` `executionId={executionId}&executionStatus={executionStatus}&getLatestExecutior` `{getLatestExecution}`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token. The format is `Bearer <token>`.
Content type	string	`application/json`

Path parameter

None

Query parameter

PARAMETER NAME	REQUIRED	TYPE	DESCRIPTION

PARAMETER NAME	REQUIRED	TYPE	DESCRIPTION
`reportId`	Yes	string	Filter to get execution details of only reports with `reportId` given in this argument. Multiple `reportIds` can be specified by separating them with a semicolon “;”.
`executionId`	No	string	Filter to get details of only reports with `executionId` given in this argument. Multiple `executionIds` can be specified by separating them with a semicolon “;”.
`executionStatus`	No	string/enum	Filter to get details of only reports with `executionStatus` given in this argument. Valid values are: `Pending`, `Running`, `Paused`, and `Completed` The default value is `Completed`. Multiple statuses can be specified by separating them with a semicolon “;”.
`getLatestExecution`	No	boolean	The API will return details of the latest report execution. By default, this parameter is set to `true`. If you choose to pass the value of this parameter as `false`, then the API will return the last 90 days execution instances.

Request payload

None

Sample response

The response payload is structured as follows:

Response codes: 200, 400, 401, 403, 404, 500

Response payload example:


```
{
    "value": [
        {
            "executionId": "a0bd78ad-1a05-40fa-8847-8968b718d00f",
            "reportId": "72fa95ab-35f5-4d44-a1ee-503abbc88003",
            "recurrenceInterval": 4,
            "recurrenceCount": 10,
            "callbackUrl": null,
            "format": "csv",
            "executionStatus": "Completed",
            "reportAccessSecureLink": "https://<path to report for download>",
            "reportExpiryTime": null,
            "reportGeneratedTime": "2021-01-13T14:40:46Z"
        }
    ],
    "totalCount": 1,
    "message": null,
    "statusCode": 200
}
```


Once report execution is complete, the execution status `Completed` is shown. You can download the report by selecting the URL in the `reportAccessSecureLink`.

Glossary

Key definitions of elements in the response.

PARAMETER	DESCRIPTION
`ExecutionId`	Universally unique identifier (UUID) of the execution instance
`ReportId`	Report ID associated with the execution instance
`RecurrenceInterval`	Recurrence interval provided during report creation
`RecurrenceCount`	Recurrence count provided during report creation
`CallbackUrl`	Callback URL associated with the execution instance
`Format`	Format of the generated file at the end of execution
`ExecutionStatus`	Status of the report execution instance. Valid values are: `Pending` , `Running` , `Paused` , and `Completed`
`ReportAccessSecureLink`	Link through which the report can be accessed securely
`ReportExpiryTime`	UTC Time after which the report link will expire in this format: yyyy-MM-ddTHH:mm:ssZ
`ReportGeneratedTime`	UTC Time at which the report was generated in this format: yyyy-MM-ddTHH:mm:ssZ
`TotalCount`	Number of datasets in the Value array
`StatusCode`	Result Code The possible values are 200, 400, 401, 403, 404 and 500
`message`	Status message from the execution of the API

Next steps

- You can try out the APIs through the Swagger API URL
- Get Started with programmatic access to analytics data

Make your first API call to access commercial marketplace analytics data

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For a list of the APIs for accessing commercial marketplace analytics data, see APIs for accessing commercial marketplace analytics data. Before you make your first API call, make sure that you met the pre-requisites to programmatically access commercial marketplace analytics data.

Token generation

Before calling any of the methods, you must first obtain an Azure Active Directory (Azure AD) access token. You need to pass the Azure AD access token to the Authorization header of each method in the API. After obtaining an access token, you have 60 minutes to use it before it expires. After the token expires, you can refresh the token and continue to use it for further calls to the API.

Refer to a sample request below for generating a token. The three values that are required to generate the token are `clientId`, `clientSecret`, and `tenantId`. The `resource` parameter should be set to `https://graph.windows.net`.

Request Example:

```
curl --location --request POST 'https://login.microsoftonline.com/{TenantId}/oauth2/token' \
--header 'return-client-request-id: true' \
--header 'Content-Type: application/x-www-form-urlencoded' \
--data-urlencode 'resource=https://graph.windows.net' \
--data-urlencode 'client_id={client_id}' \
--data-urlencode 'client_secret={client_secret}' \
--data-urlencode 'grant_type=client_credentials'
```

Response Example:

```
{
    "token_type": "Bearer",
    "expires_in": "3599",
    "ext_expires_in": "3599",
    "expires_on": "1612794445",
    "not_before": "1612790545",
    "resource": "https://graph.windows.net",
    "access_token": {Token}
}
```

For more information about how to obtain an Azure AD token for your application, see Access analytics data using Store services.

Programmatic API call

After you obtain the Azure AD Token as described in the previous section, follow these steps to create your first programmatic access report.

Data can be downloaded from the following datasets (datasetName):

- ISVCustomer

- ISVMarketplaceInsights
- ISVUsage
- ISVOrder

In the following sections, we will see examples of how to programmatically access `OrderId` from the ISVOrder dataset.

Step 1: Make a REST call using the Get Datasets API

The API response provides the dataset name from where you can download the report. For the specific dataset, the API response also provides the list of selectable columns that can be used for your custom report template. You can also refer to the following tables to get the names of the columns:

- Orders details table
- Usage details table
- Customer details table
- Marketplace insights details table

Request example:

```
curl
--location
--request GET 'https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledDataset ' \
--header 'Authorization: Bearer <AzureADToken>'
```

Response example:

```
{
    "value": [
        {
            "datasetName": "ISVOrder",
            "selectableColumns": [
                "MarketplaceSubscriptionId",
                "MonthStartDate",
                "OfferType",
                "AzureLicenseType",
                "Sku",
                "CustomerCountry",
                "IsPreviewSKU",
                "OrderId",
                "OrderQuantity",
                "CloudInstanceName",
                "IsNewCustomer",
                "OrderStatus",
                "OrderCancelDate",
                "CustomerCompanyName",
                "CustomerName",
                "OrderPurchaseDate",
                "OfferName",
                "TrialEndDate",
                "CustomerId",
                "BillingAccountId"
            ],
            "availableMetrics": [],
            "availableDateRanges": [
                "LAST_MONTH",
                "LAST_3_MONTHS",
                "LAST_6_MONTHS",
                "LIFETIME"
            ]
        },
    ],
    "totalCount": 1,
    "message": "Dataset fetched successfully",
    "statusCode": 200
}
```

Step 2: Create the custom query

In this step, we'll use the Order ID from the Orders Report to create a custom query for the report we want. The default `timespan` if not specified in the query is six months.

Request example:

```
curl
--location
--request POST ' https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledQueries' \
--header ' Authorization: Bearer <AzureAD_Token>' \
--header 'Content-Type: application/json' \
--data-raw
            '{
                "Query": "SELECT OrderId from ISVOrder",
                "Name": "ISVOrderQuery1",
                "Description": "Get a list of all Order IDs"
             }'
```

Response example:

```json
{
    "value": [
        {
            "queryId": "78be43f2-e35f-491a-8cd5-78fe14194f9c",
            "name": "ISVOrderQuery1",
            "description": "Get a list of all Order IDs”,
            "query": "SELECT OrderId from ISVOrder",
            "type": "userDefined",
            "user": "142344300",
            "createdTime": "2021-01-06T05:38:34",
            "modifiedTime": null
        }
    ],
    "totalCount": 1,
    "message": "Query created successfully",
    "statusCode": 200
}
```

On successful execution of the query, a `queryId` is generated that needs to be used to generate the report.

Step 3: Execute test query API

In this step, we'll use the test query API to get the top 100 rows for the query that was created.

Request example:

```
curl
--location
--request GET 'https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledQueries/testQueryResult?
exportQuery=SELECT%20OrderId%20from%20ISVOrder' \
--header ' Authorization: Bearer <AzureADToken>'
```

Response example:

```
{
    "value": [
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2ba8"
        },
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2bb8"
        },
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2bc8"
        },
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2bd8"
        },
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2be8"
        },
               .
               .
               .

        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2bf0"
        },
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2bf1"
        },
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2bf2"
        },
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2bf3"
        },
        {
            "OrderId": "086365c6-9c38-4fba-904a-6228f6cb2bf4"
        }
    ],
    "totalCount": 100,
    "message": null,
    "statusCode": 200
}
```

Step 4: Create the report

In this step, we'll use the previously generated `QueryId` to create the report.

Request example:

```
curl
--location
--request POST 'https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledReport' \
--header ' Authorization: Bearer <AzureADToken>' \
--header 'Content-Type: application/json' \
--data-raw
                 '{
                   “ReportName": "ISVReport1",
                   "Description": "Report for getting list of Order Ids",
                   "QueryId": "78be43f2-e35f-491a-8cd5-78fe14194f9c",
                   "StartTime": "2021-01-06T19:00:00Z”,
                   "RecurrenceInterval": 48,
                   "RecurrenceCount": 20,
                    "Format": "csv"
                  }'
```

Table 1: Description of parameters used in this request example

PARAMETER	DESCRIPTION
`Description`	Provide a brief description of the report that's being generated.
`QueryId`	This is the `queryId` that was generated when the query was created in Step 2: Create custom query.
`StartTime`	Time the first execution of the report started.
`RecurrenceInterval`	Recurrence interval provided during report creation.
`RecurrenceCount`	Recurrence count provided during report creation.
`Format`	CSV and TSV file formats are supported.

Response example:

```
{
    "value": [
        {
            "reportId": "72fa95ab-35f5-4d44-a1ee-503abbc88003",
            "reportName": "ISVReport1",
            "description": "Report for getting list of Order Ids",
            "queryId": "78be43f2-e35f-491a-8cd5-78fe14194f9c",
            "query": "SELECT OrderId from ISVOrder",
            "user": "142344300",
            "createdTime": "2021-01-06T05:46:00Z",
            "modifiedTime": null,
            "startTime": "2021-01-06T19:00:00Z",
            "reportStatus": "Active",
            "recurrenceInterval": 48,
            "recurrenceCount": 20,
            "callbackUrl": null,
            "format": "csv"
        }
    ],
    "totalCount": 1,
    "message": "Report created successfully",
    "statusCode": 200
}
```

On successful execution, a `reportId` is generated that needs to be used to schedule a download of the report.

Step 5: Execute Report Executions API

To get the secure location (URL) of the report, we'll now execute the Report Executions API.

Request example:

```
Curl
--location
--request GET 'https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledReport/execution/72fa95ab-
35f5-4d44-a1ee-503abbc88003' \
--header ' Authorization: Bearer <AzureADToken>' \
```

Response example:


```
{
    "value": [
        {
            "executionId": "1f18b53b-df30-4d98-85ee-e6c7e687aeed",
            "reportId": "72fa95ab-35f5-4d44-a1ee-503abbc88003",
            "recurrenceInterval": 48,
            "recurrenceCount": 20,
            "callbackUrl": null,
            "format": "csv",
            "executionStatus": "Pending",
            "reportAccessSecureLink": null,
            "reportExpiryTime": null,
            "reportGeneratedTime": null
        }
    ],
    "totalCount": 1,
    "message": null,
    "statusCode": 200
}
```


Next steps

- You can try out the APIs through the Swagger API URL
- Programmatic access paradigm

List of system queries

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The following system queries can be used in the Create Report API directly with a `QueryId`. The system queries are like the export reports in Partner Center for a six month (6M) computation period.

For more information on the column names, attributes, and description, see these articles:

- Customers dashboard in commercial marketplace analytics
- Orders dashboard in commercial marketplace analytics
- Usage dashboard in commercial marketplace analytics
- Marketplace Insights dashboard in commercial marketplace analytics

The following sections provide report queries for various reports.

Customers report query

Report description: Customers report for the last 6M

QueryID: `b9df4929-073f-4795-b0cb-a2c81b11e28d`

Report query:

```
SELECT
MarketplaceSubscriptionId,DateAcquired,DateLost,ProviderName,ProviderEmail,FirstName,LastName,Email,CustomerCompanyName,CustomerCity,CustomerPostalCode,Custome
FROM ISVCustomer TIMESPAN LAST_6_MONTHS
```

Orders report query

Report description: Orders report for the last 6M

QueryID: `fd0f299c-5a1c-4929-9f48-bfc6cc44355d`

Report query:

```
SELECT
MarketplaceSubscriptionId,MonthStartDate,OfferType,AzureLicenseType,MarketplaceLicenseType,Sku,CustomerCountry,IsPreviewSKU,OrderId,OrderQuantity,CloudInstance
FROM ISVOrder TIMESPAN LAST_6_MONTHS
```

Report description: OrdersV2 report for the last 6M

QueryID: `bd1b0cc1-ce45-4578-beba-6fe5a69fd421`

Report query:

```
SELECT
MarketplaceSubscriptionId,MonthStartDate,OfferType,AzureLicenseType,MarketplaceLicenseType,Sku,CustomerCountry,IsPreviewSKU,OrderId,OrderQuantity,CloudInstance
FROM ISVOrderV2 TIMESPAN LAST_6_MONTHS
```

Usage report queries

Report description: VM Normalized usage report for the last 6M

QueryID: `2c6f384b-ad52-4aed-965f-32bfa09b3778`

Report query:

```
SELECT
MarketplaceSubscriptionId,MonthStartDate,OfferType,AzureLicenseType,MarketplaceLicenseType,SKU,CustomerCountry,IsPreviewSKU,SKUBillingType,IsInternal,VMSize,Cl
FROM ISVUsage WHERE OfferType IN ('vm core image', 'Virtual Machine Licenses', 'multisolution') TIMESPAN LAST_6_MONTHS
```

Report description: VM Raw usage report for the last 6M

QueryID: `3f19fb95-5bc4-4ee0-872e-cedd22578512`

Report query:

```
SELECT
MarketplaceSubscriptionId,MonthStartDate,OfferType,AzureLicenseType,MarketplaceLicenseType,SKU,CustomerCountry,IsPreviewSKU,SKUBillingType,IsInternal,VMSize,Cl
FROM ISVUsage WHERE OfferType IN ('vm core image', 'Virtual Machine Licenses', 'multisolution') TIMESPAN LAST_6_MONTHS
```

Report description: Metered usage report for the last 6M

QueryID: `f0c4927f-1f23-4c99-be4a-1371a5a9a086`

Report query:

```
SELECT
MarketplaceSubscriptionId,MonthStartDate,OfferType,AzureLicenseType,MarketplaceLicenseType,SKU,CustomerCountry,IsPreviewSKU,SKUBillingType,IsInternal,VMSize,Cl
FROM ISVUsage WHERE OfferType IN ('SaaS', 'Azure Applications') TIMESPAN LAST_6_MONTHS
```

Marketplace insights report query

Report description: Marketplace Insights report for the last 6M

QueryID: `6fd7624b-aa9f-42df-a61d-67d42fd00e92`

Report query:

```
Date,OfferName,ReferralDomain,CountryName,PageVisits,GetItNow,ContactMe,TestDrive,FreeTrial FROM
ISVMarketplaceInsights TIMESPAN LAST_6_MONTHS
```

Next steps

- APIs for accessing commercial marketplace analytics data
- Sample application for accessing commercial marketplace analytics data

Sample queries for programmatic analytics

11/22/2021 • 3 minutes to read • Edit Online

This article provides sample queries for the Microsoft commercial marketplace Orders, Usage, and Customer reports. You can use these queries by calling the Create Report Query API endpoint. If required, the Create Report Query API call can be modified to add more columns, adjust the computation period, and add filter conditions. The supported time periods are six months (6M), 12 months (12M), and Custom Time Period.

For details about the column names, attributes, and descriptions, refer to the following tables:

- Customer details table
- Orders details table
- Usage details table

Customers report queries

These sample queries apply to the Customers report.

QUERY DESCRIPTION	SAMPLE QUERY
Active customers of the partner until the date you choose	`SELECT DateAcquired,CustomerCompanyName,CustomerId FROM ISVCustomer WHERE IsActive = 1`
Churned customers of the partner until the date you choose	`SELECT DateAcquired,CustomerCompanyName,CustomerId FROM ISVCustomer WHERE IsActive = 0`
List of new customers from a specific geography in the last six months	`SELECT DateAcquired,CustomerCompanyName,CustomerId FROM ISVCustomer WHERE DateAcquired <= ‘2020-06-30’ AND CustomerCountryRegion = ‘United States’`

Usage report queries

These sample queries apply to the Usage report.

QUERY DESCRIPTION	SAMPLE QUERY
Virtual Machine (VM) normalized usage for “Billed through Azure” Marketplace License type for the last 6M	`SELECT MonthStartDate, NormalizedUsage FROM ISVUsage WHERE MarketplaceLicenseType = ‘Billed Through Azure’ AND OfferType NOT IN (‘Azure Applications’, ‘SaaS’) TIMESPAN LAST_6_MONTHS`
VM Raw usage for “Billed through Azure” Marketplace License type for the last 12M	`SELECT MonthStartDate, RawUsage FROM ISVUsage WHERE MarketplaceLicenseType = ‘Billed Through Azure’ AND OfferType NOT IN (‘Azure Applications’, ‘SaaS’) TIMESPAN LAST_1_YEAR`
VM Normalized usage for “Bring Your Own License” Marketplace License type for the last 6M	`SELECT MonthStartDate, NormalizedUsage FROM ISVUsage WHERE MarketplaceLicenseType = ‘Bring Your Own License’ AND OfferType NOT IN (‘Azure Applications’, ‘SaaS’) TIMESPAN LAST_6_MONTHS`

QUERY DESCRIPTION	SAMPLE QUERY
VM Raw usage for “Bring Your Own License” Marketplace License type for the last 6M	`SELECT MonthStartDate, RawUsage FROM ISVUsage WHERE MarketplaceLicenseType = ‘Bring Your Own License’ AND OfferType NOT IN (‘Azure Applications’, ‘SaaS’) TIMESPAN LAST_6_MONTHS`
Based on Usage Date, daily total normalized usage and “Estimated Extended Charges (PC/CC)” for Paid plans for the last month	`SELECT UsageDate, NormalizedUsage, EstimatedExtendedChargePC FROM ISVUsage WHERE SKUBillingType = ‘Paid’ ORDER BY UsageDate DESC TIMESPAN LAST_MONTH`
Based on Usage Date, daily total raw usage and “Estimated Extended Charges (PC/CC)” for Paid plans for the last month	`SELECT UsageDate, RawUsage, EstimatedExtendedChargePC FROM ISVUsage WHERE SKUBillingType = ‘Paid’ ORDER BY UsageDate DESC TIMESPAN LAST\_MONTH`
For a specific Offer Name, VM Normalized usage for “Billed through Azure” Marketplace License type for the last 6M	`SELECT OfferName, NormalizedUsage FROM ISVUsage WHERE MarketplaceLicenseType = ‘Billed Through Azure’ AND OfferName = ‘Example Offer Name’ TIMESPAN LAST_6_MONTHS`
For a specific Offer Name, metered usage for the last 6M	`SELECT OfferName, MeteredUsage FROM ISVUsage WHERE OfferName = ‘Example Offer Name’ AND OfferType IN (‘SaaS’, ‘Azure Applications’) TIMESPAN LAST_6_MONTHS`

Orders report queries

These sample queries apply to the Orders report.

QUERY DESCRIPTION	SAMPLE QUERY
Orders report for Azure License Type as “Enterprise” for the last 6M	`SELECT OrderId, OrderPurchaseDate FROM ISVOrder WHERE AzureLicenseType = ‘Enterprise’ TIMESPAN LAST\_6\_MONTHS`
Orders report for Azure License Type as “Pay as You Go” for the last 6M	`SELECT OrderId, OrderPurchaseDate FROM ISVOrder WHERE AzureLicenseType = ‘Pay as You Go’ TIMESPAN LAST_6_MONTHS`
Orders report for specific offer name for the last 6M	`SELECT OrderId, OrderPurchaseDate FROM ISVOrder WHERE OfferName = ‘Example Offer Name’ TIMESPAN LAST_6_MONTHS`
Orders report for active orders for the last 6M	`SELECT OrderId, OrderPurchaseDate FROM ISVOrder WHERE OrderStatus = ‘Active’ TIMESPAN LAST_6_MONTHS`
Orders report for canceled orders for the last 6M	`SELECT OrderId, OrderPurchaseDate FROM ISVOrder WHERE OrderStatus = ‘Cancelled’ TIMESPAN LAST_6_MONTHS`
Orders report with term start, term end date and estimatedcharges, currency	`SELECT OrderId, TermStartId, TermEndId, estimatedcharges from ISVOrderV2 WHERE OrderStatus = ‘Active’ TIMESPAN LAST_6_MONTHS`
Orders report for trial orders active for the last 6M	`SELECT OrderId from ISVOrderV2 WHERE OrderStatus = ‘Active’ and HasTrial = ‘True’ TIMESPAN LAST_6_MONTHS`

Next steps

- APIs for accessing commercial marketplace analytics data

Sample application for accessing commercial marketplace analytics data

11/22/2021 • 2 minutes to read • Edit Online

Sample applications are created in C# and JAVA languages and are available on GitHub.

- C# Sample Application
- JAVA Sample Application

You can choose to take inspiration from the sample application and build your own application in any language.

The sample application achieves the following goals:

- Generates an Azure Active Directory (Azure AD) token.
- Gets available datasets.
- Creates user-defined queries.
- Gets user-defined and system queries.
- Schedules a report.

The sample application doesn't cover the method of calling APIs for other functionalities. However, the process of calling other APIs remains the same as outlined above.

How to run the application

1. Clone the repository to a local system using this command:

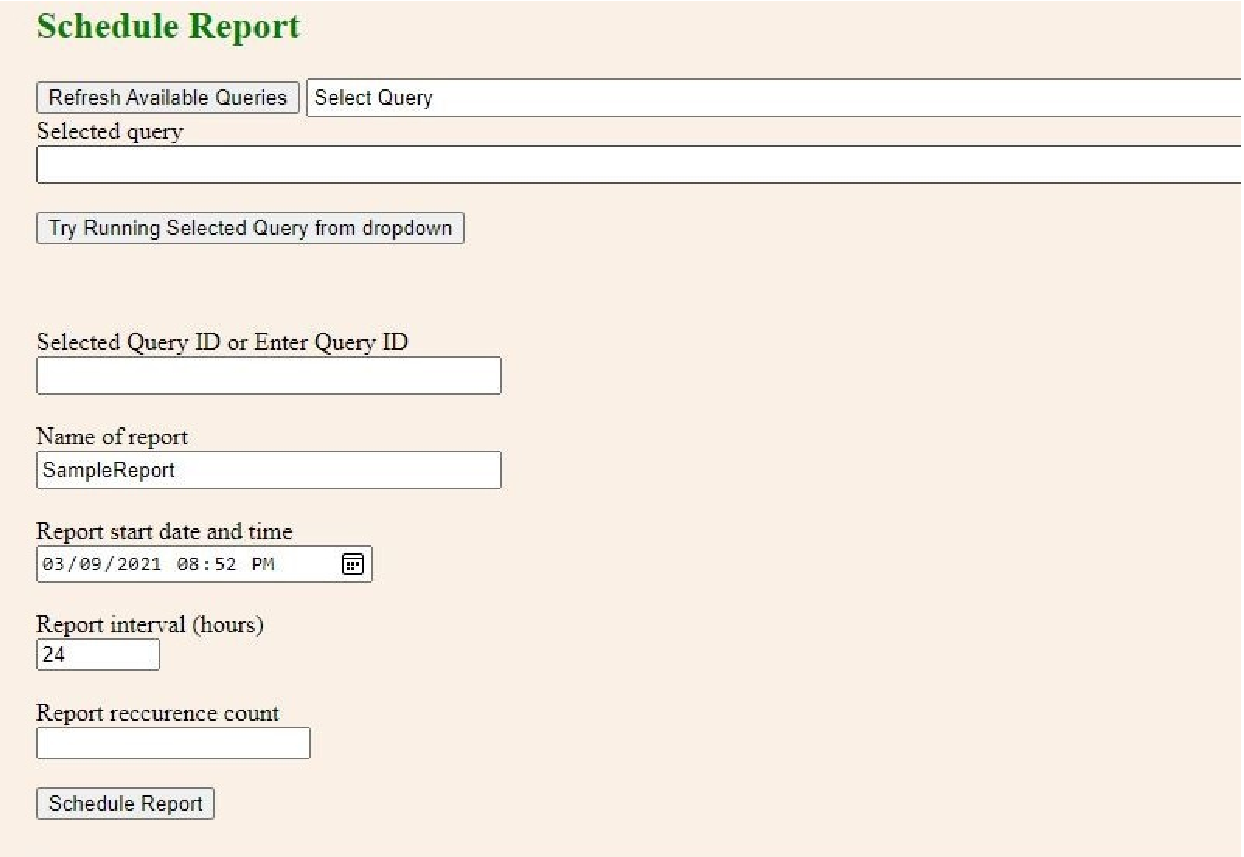
```
git clone https://github.com/partneranalytics/ProgrammaticExportSampleAppISV.git
```

> **NOTE**
>
> For more instructions, refer to the `ProgrammaticExportSampleAppISV/README.md` file in the GitHub repository.

2. To quickly run the app, update the client ID and client secret in the **appsettings.Development.json**

```
"AdTokenConfig": {
  "TokenGenerateUrl": "https://login.microsoftonline.com/{0}/oauth2/token",
  "TenantId": "abc1234a-d567-8e90-f-123-a345b6789c10",
  "ResourceId": "https://graph.windows.net",
  "WebAppClientId":
  "WebAppClientSecret":
}
```

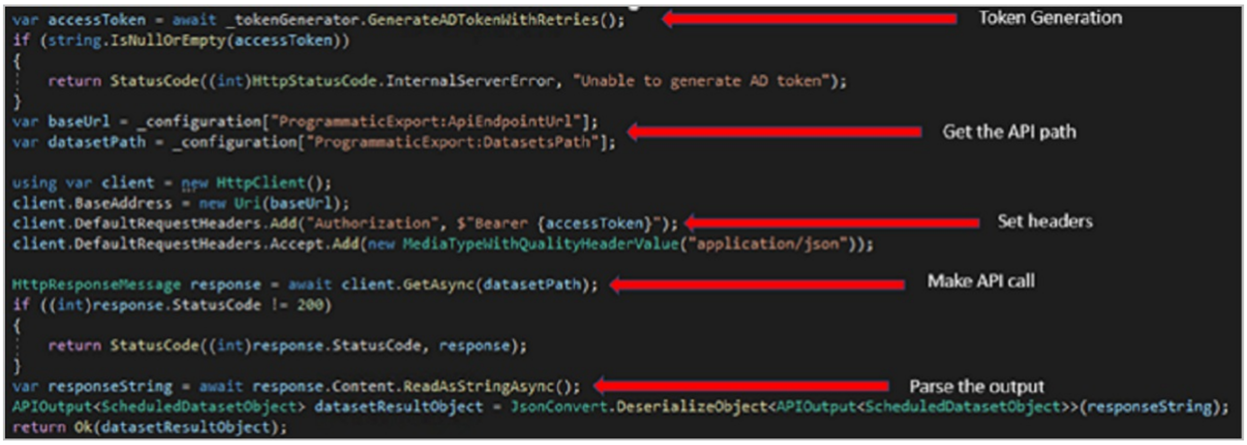
Running the app will start a local web server and a page will open (`https://localhost:44365/ProgrammaticExportSampleApp/sample`).



This page will make API calls to the webserver running on the local machine, which in turn will make the actual programmatic access API calls.

Code snippets

The basic structure of the C# code for doing the programmatic access API calls is as follows:



Next steps

- [APIs for accessing commercial marketplace analytics data]

Programmatic access of analytics data common questions

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This article addresses commonly asked questions about how to programmatically access analytics data in Partner Center for your commercial marketplace offers.

API responses

What are the different scenarios under which I can receive an API response other than 200 (Success)?

This table describes the API responses and what to do if you receive them.

ERROR DESCRIPTION	ERROR CODE	TROUBLESHOOT
Unauthorized	401	This is an authentication exception. Check the correctness of the Azure Active Directory (Azure AD) token. The Azure AD token is valid for 60 minutes, after which time you would need to regenerate the Azure AD token.
Invalid table name	400	The name of the dataset is wrong. Recheck the dataset name by calling the "Get All Datasets" API.
Incorrect column name	400	The name of the column in the query is incorrect. Recheck the column name by calling the "Get All Datasets" API or refer to the column names in the following tables: • Orders details table • Usage details table • Customer details table • Marketplace insights details table
Null or missing value	400	You may be missing mandatory parameters as part of the request payload of the API.
Invalid report parameters	400	Make sure the report parameters are correct. For example, you may be giving a value of less than 4 for `RecurrenceInterval` parameter.
Recurrence Interval must be between 4 and 90	400	Make sure the value of the `RecurrenceInterval` request parameter is between 4 and 90.
Invalid QueryId	400	Recheck the generated `QueryId`.

ERROR DESCRIPTION	ERROR CODE	TROUBLESHOOT
Invalid report parameters for creation - Start time of report should at least be 4 hours from current UTC time -	400	Start Time parameter as part of request payload shouldn't be in the past. The start time of the report should be at least 4 hours from the current UTC time.
Requested value 'string' not found	400	Check whether you have updated the request parameters `callbackurl` or `format`.
No item found with given filters.	404	Check the `reportID` parameter used in the Get Report Executions API.
There are no executions that have occurred for the given filter conditions. Please recheck the reportId or executionId and retry the API after the report's scheduled execution time	404	Make sure that the `reportId` is correct. Retry the API after the report's scheduled execution time as specified in the request payload.
Internal error encountered while creating report. Correlation ID <>	500	Make sure that the format of date for the fields "StartTime", "QueryStartTime" and "QueryEndTime" are correct.
Service unavailable	500	If you continuously receive a service unavailable (5xx error), please create a support ticket.

No records

I receive API response 200 when I download the report from the secure location. Why am I getting no records?

Check whether the string in the query has one of the allowable values for the column header. For example, this query will return zero results:

```
"SELECT UsageDate, NormalizedUsage, EstimatedExtendedChargePC FROM ISVUsage WHERE SKUBillingType = 'Paided'
ORDER BY UsageDate DESC TIMESPAN LAST_MONTH"
```

In this example, the allowable values for SKUBillingType are Paid or Free. Refer to the following tables for all possible values for the various columns:

- Orders details table
- Usage details table
- Customer details table
- Marketplace insights details table

Next steps

- APIs for accessing commercial marketplace analytics data

Custom query specification

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Partners can use this query specification to easily formulate custom queries for extracting data from analytics tables. The queries can be used to select only the desired columns and metrics that match a certain criterion. At the heart of the language specification is the dataset definition on which a custom query can be written.

Datasets

In the same way that some queries are run against a database that has tables and columns, a custom query works on Datasets that have columns and metrics. The full list of available datasets for formulating a query can be obtained by using the datasets API.

Here's an example of a dataset shown as a JSON.

```
{
"datasetName":"ISVUsage",
"selectableColumns":[
"MarketplaceSubscriptionId",
"OfferName",
            "CustomerId",
     "MonthStartDate",
"SKU"
],
"availableMetrics":[
 "NormalizedUsage",
"RawUsage"
        "EstimatedExtendedChargeCC"
],
"availableDateRanges":[
     "LAST_MONTH",
"LAST_3_MONTHS",
"LAST_6_MONTHS",
"LIFETIME"
]
}
```

Parts of a dataset

- A dataset name is like a database table name. For example, ISVUsage. A dataset has a list of columns that can be selected, such as MarketplaceSubscriptionId.
- A dataset also has metrics, which are like aggregation functions in a database. For example, NormalizedUsage.
- There are fixed time spans over which data can be exported.

Formulating a query on a dataset

These are some sample queries that show how to extract various types of data.

QUERY	DESCRIPTION
SELECT MarketplaceSubscriptionId,CustomerId **FROM** ISVUsage **TIMESPAN LAST_MONTH**	This query will get every `MarketplaceSubscriptionId` and its corresponding `CustomerId` in the last 1 month.

QUERY	DESCRIPTION
SELECT MarketplaceSubscriptionId, EstimatedExtendedChargeCC **FROM** ISVUsage **ORDER BY** EstimatedExtendedChargeCC **LIMIT** 10	This query will get the top 10 subscriptions in decreasing order of the number of licenses sold under each subscription.
SELECT CustomerId, NormalizedUsage, RawUsage **FROM** ISVUsage **WHERE** NormalizedUsage > 100000 **ORDER BY** NormalizedUsage **TIMESPAN** LAST_6_MONTHS	This query will get the NormalizedUsage and RawUsage of all the Customers who have NormalizedUsage greater than 100,000.
SELECT MarketplaceSubscriptionId, MonthStartDate, NormalizedUsage **FROM** ISVUsage **WHERE** CustomerId IN ('2a31c234-1f4e-4c60-909e-76d234f93161', '80780748-3f9a-11eb-b378-0242ac130002')	This query will get the `MarketplaceSubscriptionId` and the normalized usage for every month by the two `CustomerId` values: `2a31c234-1f4e-4c60-909e-76d234f93161` and `80780748-3f9a-11eb-b378-0242ac130002`.

Query specification

This section describes the query definition and structure.

Grammar reference

This table describes the symbols used in queries.

SYMBOL	MEANING
?	Optional
*	Zero or more
+	One or more
|	Or/One of the list

Query definition

The query statement has the following clauses: SelectClause, FromClause, WhereClause?, OrderClause?, LimitClause?, and TimeSpan?.

- **SelectClause**: **SELECT** ColumOrMetricName (, ColumOrMetricName)*
  - **ColumOrMetricName**: Columns and Metrics defined within the Dataset
- **FromClause**: **FROM** DatasetName
  - **DatasetName**: Dataset name defined within the Dataset
- **WhereClause**: **WHERE** FilterCondition (**AND** FilterCondition)*
  - **FilterCondition**: ColumOrMetricName Operator Value
    - **Operator**: = | > | < | >= | <= | != | LIKE | NOT LIKE | IN | NOT IN
    - **Value**: Number | StringLiteral | MultiNumberList | MultiStringList
      - **Number**: -? [0-9]+ (. [0-9] [0-9]*)?
      - **StringLiteral**: ' [a-zA-Z0-9_]*'
      - **MultiNumberList**: (Number (,Number)*)
      - **MultiStringList**: (StringLiteral (,StringLiteral)*)
- **OrderClause**: **ORDER BY** OrderCondition (,OrderCondition)*

- **OrderCondition**: ColumOrMetricName (**ASC** | **DESC**)*
- **LimitClause**: **LIMIT** [0-9]+
- **TimeSpan**: **TIMESPAN** (TODAY | YESTERDAY | LAST_7_DAYS | LAST_14_DAYS | LAST_30_DAYS | LAST_90_DAYS | LAST_180_DAYS | LAST_365_DAYS | LAST_MONTH | LAST_3_MONTHS | LAST_6_MONTHS | LAST_1_YEAR | LIFETIME)

Query structure

A Report query is made up of multiple parts:

- SELECT
- FROM
- WHERE
- ORDER BY
- LIMIT
- TIMESPAN

Each part is described below.

SELECT

This part of the query specifies the columns that will get exported. The columns that can be selected are the fields listed in `selectableColumns` and `availableMetrics` sections of a dataset. If there is a metric column included in the selected field list, then metrics will be calculated for every distinct combination of the non-metric columns.

Example:

- **SELECT** `OfferName`, `NormalizedUsage`

DISTINCT

Adding DISTINCT keyword after SELECT ensures the final exported data will not have any duplicate rows. DISTINCT keyword works irrespective of whether or not a metric column is selected.

Example:

- **SELECT DISTINCT** `MarketplaceSubscriptionId, OfferType`

FROM

This part of the query indicates the dataset from which data needs to be exported. The dataset name given here needs to be a valid dataset name returned by the datasets API.

Example:

- FROM `ISVUsage`
- FROM `ISVOrder`

WHERE

This part of the query is used to specify filter conditions on the dataset. Only rows matching all the conditions listed in this clause will be present in the final exported file. The filter condition can be on any of the columns listed in `selectableColumns` and `availableMetrics`. The values specified in the filter condition can be a list of numbers or a list of strings only when the operator is `IN` or `NOT IN`. The values can always be given as a literal string and they will be converted to the native types of columns. Multiple filter conditions need to be separated with an `AND` operation.

Example:

- MarketplaceSubscriptionId = ‘868368da-957d-4959-8992-3c12dc7e6260’
- CustomerName **LIKE** ‘%Contosso%’

- CustomerId **NOT IN** (1000, 1001, 1002)
- OrderQuantity=100
- OrderQuantity='100'
  - MarketplaceSubscriptionId='7b487ac0-ce12-b732-dcd6-91a1e4e74a50' AND CustomerId='0f8b7fa0-eb83-a183-1225-ca153ef807aa'

ORDER BY

This part of the query specifies the ordering criteria for the exported rows. The columns on which ordering can be defined need to be from the `selectableColumns` and `availableMetrics` of the dataset. If there is no ordering direction specified, it will be defaulted to `DESC` on the column. Ordering can be defined on multiple columns by separating the criteria with a comma.

Example:

- **ORDER BY** NormalizedUsage **ASC**, EstimatedExtendedCharge(CC) **DESC**
- **ORDER BY** CustomerName **ASC**, NormalizedUsage

LIMIT

This part of the query specifies the number of rows that will be exported. The number you specify needs to be a positive nonzero integer.

TIMESPAN

This part of the query specifies the time duration for which the data needs to be exported. The possible values should be from the `availableDateRanges` field in the dataset definition.

Case sensitivity in query specification

The specification is completely case insensitive. Predefined keywords, column names and values can be specified using upper or lower case.

See also

- List of system queries

APIs for accessing commercial marketplace analytics data

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Following are the list of APIs for accessing commercial marketplace analytics data and their associated functionalities.

- Dataset pull APIs
- Query management APIs
- Report management APIs
- Report execution pull APIs

Dataset pull APIs

Table 1: Dataset pull APIs

API	FUNCTIONALITY
Get all datasets	Gets all the available datasets. Datasets list the tables, columns, metrics, and time ranges.

Query management APIs

Table 2: Query management APIs

API	FUNCTIONALITY
Create Report Query	Creates custom queries that define the dataset from which columns and metrics need to be exported.
GET Report Queries	Gets all the queries available for use in reports. Gets all the system and user-defined queries by default.
DELETE Report Queries	Deletes user-defined queries.

Report management APIs

Table 3: Report management APIs

API	FUNCTIONALITY
Create Report	Schedules a query to be executed at regular intervals.
TRY Report Queries	Executes a Report query statement. Returns only 10 records that a partner can use to verify if the data is as expected.

API	FUNCTIONALITY
Get Report	Get all the reports that have been scheduled.
Update Report	Modify a report parameter.
Delete Report	Deletes all the report and report execution records.
Pause Report Executions	Pauses the scheduled execution of reports.
Resume Report Executions	Resumes the scheduled execution of a paused report.

Report execution pull APIs

Table 4: Report execution pull APIs

API	FUNCTIONALITY
Get Report Executions	Get all the executions that have happened for a given report.

Next steps

- You can try out the APIs through the Swagger API URL.

Get all datasets API

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The Get all datasets API gets all the available datasets. Datasets list the tables, columns, metrics, and time ranges.

Request syntax

METHOD	REQUEST URI
GET	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledDat datasetName={Dataset Name}`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token in the form `Bearer <token>`
Content-Type	string	`Application/JSON`

Path parameter

None

Query parameter

PARAMETER NAME	TYPE	REQUIRED	DESCRIPTION
`datasetName`	string	No	Filter to get details of only one dataset

Request payload

None

Glossary

None

Response

The response payload is structured as follows:

Response code: 200, 400, 401, 403, 404, 500

Response payload example:

```
{
   "Value":[
      {
         "DatasetName ":"string",
         "SelectableColumns":[
            "string"
         ],
         "AvailableMetrics":[
            "string"
         ],
         "AvailableDateRanges ":[
            "string"
         ]
      }
   ],
   "TotalCount":int,
   "Message":"<Error Message>",
   "StatusCode": int
}
```

Glossary

This table defines the key elements in the response:

PARAMETER	DESCRIPTION
`DatasetName`	Name of the dataset that this array object defines
`SelectableColumns`	Raw columns that can be specified in the select columns
`AvailableMetrics`	Aggregation/metric column names that can be specified in the select columns
`AvailableDateRanges`	Date range that can be used in report queries for the dataset
`NextLink`	Link to Next page if the data is paginated
`TotalCount`	Number of datasets in the Value array
`StatusCode`	Result Code. The possible values are 200, 400, 401, 403, 500

Get report queries API

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The Get report queries API gets all queries that are available for use in reports. It gets all the system and user-defined queries by default.

Request syntax

METHOD	REQUEST URI
GET	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledQue queryId={QueryID}&queryName={QueryName}&includeSystemQueries={include_system_queries}&includeOnlySystemQueries={include_only_system_queries}`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token in the form `Bearer <token>`
Content-Type	string	`Application/JSON`

Path Parameter

None

Query Parameter

PARAMETER NAME	TYPE	REQUIRED	DESCRIPTION
`queryId`	string	No	Filter to get details of only queries with the ID given in the argument
`queryName`	string	No	Filter to get details of only queries with the name given in the argument
`IncludeSystemQueries`	boolean	No	Include predefined system queries in the response
`IncludeOnlySystemQueries`	boolean	No	Include only system queries in the response

Request Payload

None

Glossary

None

Response

The response payload is structured as follows:

Response code: 200, 400, 401, 403, 404, 500

Response payload:


```
{
  "Value": [
    {
      "QueryId": "string",
      "Name": "string",
      "Description": "string",
      "Query": "string",
      "Type": "string",
      "User": "string",
      "CreatedTime": "string",
      "ModifiedTime": "string"
    }
  ],
  "TotalCount": 0,
  "Message": "string",
  "StatusCode": 0
}
```


Glossary

This table describes the key definitions of elements in the response.

PARAMETER	DESCRIPTION
`QueryId`	Unique UUID of the query
`Name`	Name given to the query at the time of query creation
`Description`	Description given during creation of the query
`Query`	Report query string
`Type`	Set to `userDefined` for user created queries and `system` for predefined system queries
`User`	User ID who created the query
`CreatedTime`	Time of creation of query
`TotalCount`	Number of datasets in the Value array
`StatusCode`	Result Code. The possible values are 200, 400, 401, 403, 500

Delete report queries API

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This API deletes user-defined queries.

Request syntax

METHOD	REQUEST URI
DELETE	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledQueries`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token in the form `Bearer <token>`
Content-Type	string	`Application/JSON`

Path Parameter

PARAMETER NAME	TYPE	DESCRIPTION
`queryId`	string	Filter to get details of only queries with the ID given in this argument

Query Parameter

None

Request Payload

None

Glossary

None

Response

The response payload is structured as follows in JSON format.

Response code: 200, 400, 401, 403, 404, 500

Response payload:

```
{
  "Value": [
    {
      "QueryId": "string",
      "Name": "string",
      "Description": "string",
      "Query": "string",
      "Type": "string",
      "User": "string",
      "CreatedTime": "string",
      "ModifiedTime": "string"
    }
  ],
  "TotalCount": 0,
  "Message": "string",
  "StatusCode": 0
}
```

Glossary

This table lists the key definitions of elements in the response.

PARAMETER	DESCRIPTION
`QueryId`	Unique UUID of the query that was deleted.
`Name`	Name of the query that was deleted
`Description`	Description of the deleted query
`Query`	Report query string of the deleted query
`Type`	userDefined
`User`	User ID who created the query
`CreatedTime`	Time the query was created
`ModifiedTime`	Null
`TotalCount`	Number of datasets in the Value array
`StatusCode`	Result Code. The possible values are 200, 400, 401, 403, 500

Try report queries API

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This API executes a Report query statement. The API returns only 10 records that you as a partner can use to verify if the data is as you expected.

> **IMPORTANT**
> This API has a query execution timeout of 100 seconds. If you notice the API is taking more than 100 seconds, it is highly likely that the query is syntactically correct or else you would have received an error code other than 200. The actual report generation will pass if the query syntax is correct.

Request syntax

METHOD	REQUEST URI
GET	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledQueries/tes exportQuery={query text}`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token in the form `Bearer <token>`
Content-Type	string	`Application/JSON`

QueryParameter

PARAMETER NAME	TYPE	DESCRIPTION
`exportQuery`	string	Report query string that needs to be executed
`queryId`	string	A valid existing query ID

Path Parameter

None

Request Payload

None

Glossary

None

Response

The response payload is structured as follows:

Response code: 200, 400, 401, 403, 404, 500

Response payload: Top 10 rows of query execution

Get report API

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This API gets all the reports that have been scheduled.

Request syntax

METHOD	REQUEST URI
GET	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledRe reportId={Report ID}&reportName={Report Name}&queryId={Query ID}`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token in the form `Bearer <token>`
Content-Type	string	`Application/JSON`

Path Parameter

None

Query Parameter

PARAMETER NAME	REQUIRED	TYPE	DESCRIPTION
`reportId`	No	string	Filter to get details of only reports with the `reportId` given in this argument
`reportName`	No	string	Filter to get details of only reports with the `reportName` given in this argument
`queryId`	No	boolean	Include predefined system queries in the response

Glossary

None

Response

The response payload is structured in JSON format as follows:

Response code: 200, 400, 401, 403, 404, 500

Response payload:

```
{
  "Value": [
    {
      "ReportId": "string",
      "ReportName": "string",
      "Description": "string",
      "QueryId": "string",
      "Query": "string",
      "User": "string",
      "CreatedTime": "string",
      "ModifiedTime": "string",
      "StartTime": "string",
      "ReportStatus": "string",
      "RecurrenceInterval": 0,
      " RecurrenceCount": 0,
      "CallbackUrl": "string",
      "Format": "string"
    }
  ],
  "TotalCount": 0,
  "Message": "string",
  "StatusCode": 0
}
```

Glossary

This table lists the key definitions of elements in the response.

PARAMETER	DESCRIPTION
`ReportId`	Unique UUID of the report that was created
`ReportName`	Name given to the report in the request payload
`Description`	Description given when the report was created
`QueryId`	Query ID passed at the time the report was created
`Query`	Query text that will be executed for this report
`User`	User ID used to create the report
`CreatedTime`	Time the report was created. The time format is yyyy-MM-ddTHH:mm:ssZ
`ModifiedTime`	Time the report was last modified. The time format is yyyy-MM-ddTHH:mm:ssZ
`StartTime`	Time execution will begin. The time format is yyyy-MM-ddTHH:mm:ssZ
`ReportStatus`	Status of the report execution. The possible values are Paused, Active, and Inactive.
`RecurrenceInterval`	Recurrence interval provided during report creation
`RecurrenceCount`	Recurrence count provided during report creation
`CallbackUrl`	Callback URL provided in the request
`Format`	Format of the report files

Update report API

11/22/2021 • 2 minutes to read • Edit Online

This API helps you modify a report parameter.

Request syntax

METHOD	REQUEST URI
PUT	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledReport` `ID}`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token in the form `Bearer <token>`
Content-Type	string	`Application/JSON`

Path parameter

None

Query parameter

PARAMETER NAME	REQUIRED	TYPE	DESCRIPTION
`reportId`	Yes	string	ID of the report being modified

Request payload

```
{
  "ReportName": "string",
  "Description": "string",
  "StartTime": "string",
  "RecurrenceInterval": 0,
  "RecurrenceCount": 0,
  "Format": "string",
  "CallbackUrl": "string"
}
```

Glossary

This table lists the key definitions of elements in the request payload.

PARAMETER	REQUIRED	DESCRIPTION	ALLOWED VALUES
`ReportName`	Yes	Name to be assigned to the report	string
`Description`	No	Description of the created report	string

PARAMETER	REQUIRED	DESCRIPTION	ALLOWED VALUES
`StartTime`	Yes	Timestamp after which the report generation will begin	string
`RecurrenceInterval`	No	Frequency at which the report should be generated in hours. Minimum value is 4	integer
`RecurrenceCount`	No	Number of reports to be generated. Default is indefinite	integer
`Format`	Yes	File format of the exported file. Default is CSV.	CSV/TSV
`CallbackUrl`	Yes	https callback URL to be called on report generation	string

Glossary

None

Response

The response payload is structured as follows:

Response code: 200, 400, 401, 403, 404, 500

Response payload:


```
{
  "Value": [
    {
      "ReportId": "string",
      "ReportName": "string",
      "Description": "string",
      "QueryId": "string",
      "Query": "string",
      "User": "string",
      "CreatedTime": "string",
      "ModifiedTime": "string",
      "StartTime": "string",
      "ReportStatus": "string",
      "RecurrenceInterval": 0,
      "RecurrenceCount": 0,
      "CallbackUrl": "string",
      "Format": "string"
    }
  ],
  "TotalCount": 0,
  "Message": "string",
  "StatusCode": 0
}
```


Glossary

PARAMETER	DESCRIPTION
`ReportId`	Universally unique identifier (UUID) of the report being updated
`ReportName`	Name given to the report in the request payload
`Description`	Description given during creation of the report

PARAMETER	DESCRIPTION
`QueryId`	Query ID passed at the time the report was created
`Query`	Query text that will be executed for this report
`User`	User ID used to create the report
`CreatedTime`	Time the report was created. The time format is yyyy-MM-ddTHH:mm:ssZ
`ModifiedTime`	Time the report was last modified. The time format is yyyy-MM-ddTHH:mm:ssZ
`StartTime`	Time the report execution will begin. The time format is yyyy-MM-ddTHH:mm:ssZ
`ReportStatus`	Status of the report execution. The possible values are Paused, Active, and Inactive.
`RecurrenceInterval`	Recurrence interval provided during report creation
`RecurrenceCount`	Recurrence count provided during report creation
`CallbackUrl`	Callback URL provided in the request
`Format`	Format of the report files

Delete report API

11/22/2021 • 2 minutes to read • Edit Online

On execution, this API deletes all of the report and report execution records.

Request syntax

METHOD	REQUEST URI
DELETE	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledReport ID}`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure AD access token in the form `Bearer <token>`
Content Type	string	`Application/JSON`

Path Parameter

None

Query Parameter

PARAMETER NAME	REQUIRED	STRING	DESCRIPTION
`reportId`	Yes	string	ID of the report that's being modified

Glossary

None

Response

The response payload is structured as follows:

Response code: 200, 400, 401, 403, 404, 500

Response payload:

```json
{
  "Value": [
    {
      "ReportId": "string",
      "ReportName": "string",
      "Description": "string",
      "QueryId": "string",
      "Query": "string",
      "User": "string",
      "CreatedTime": "string",
      "ModifiedTime": "string",
      "StartTime": "string",
      "ReportStatus": "string",
      "RecurrenceInterval": 0,
      "RecurrenceCount": 0,
      "CallbackUrl": "string",
      "Format": "string"
    }
  ],
  "TotalCount": 0,
  "Message": "string",
  "StatusCode": 0
}
```

Glossary

PARAMETER	DESCRIPTION
`ReportId`	Unique UUID of the deleted report
`ReportName`	Name given to the report during creation
`Description`	Description given during creation of the report
`QueryId`	Query ID passed at the time the report was created
`Query`	Query text that will be executed for this report
`User`	User ID used to create the report
`CreatedTime`	Time the report was created. The time format is yyyy-MM-ddTHH:mm:ssZ
`ModifiedTime`	Time the report was last modified. The time format is yyyy-MM-ddTHH:mm:ssZ
`StartTime`	Time the report execution will begin. The time format is yyyy-MM-ddTHH:mm:ssZ
`ReportStatus`	Status of report execution. The possible values are Paused, Active, and Inactive.
`RecurrenceInterval`	Recurrence interval provided during report creation
`RecurrenceCount`	Recurrence count provided during report creation
`CallbackUrl`	Callback URL provided in the request
`Format`	Format of the report files

Pause report executions API

11/22/2021 • 2 minutes to read • Edit Online

This API, on execution, pauses the scheduled execution of reports.

Request syntax

METHOD	REQUEST URI
PUT	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledReport/pa ID}`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token in the form `Bearer <token>`
Content-Type	string	`Application/JSON`

Path parameter

None

Query parameter

PARAMETER NAME	REQUIRED	TYPE	DESCRIPTION
`reportId`	Yes	string	ID of the report being modified

Glossary

None

Response

The response payload is structured as follows in JSON format:

Response code: 200, 400, 401, 403, 404, 500 Response payload:

```json
{
  "Value": [
    {
      "ReportId": "string",
      "ReportName": "string",
      "Description": "string",
      "QueryId": "string",
      "Query": "string",
      "User": "string",
      "CreatedTime": "string",
      "ModifiedTime": "string",
      "StartTime": "string",
      "ReportStatus": "string",
      "RecurrenceInterval": 0,
      "RecurrenceCount": 0,
      "CallbackUrl": "string",
      "Format": "string"
    }
  ],
  "TotalCount": 0,
  "Message": "string",
  "StatusCode": 0
}
```

Glossary

PARAMETER	DESCRIPTION
`ReportId`	Universally unique identifier (UUID) of the deleted report
`ReportName`	Name given to the report during creation
`Description`	Description given during creation of the report
`QueryId`	Query ID passed at the time the report was created
`Query`	Query text that will be executed for this report
`User`	User ID used for creation of the report
`CreatedTime`	Time the report was created. The time format is yyyy-MM-ddTHH:mm:ssZ
`ModifiedTime`	Time the report was last modified. The time format is yyyy-MM-ddTHH:mm:ssZ
`StartTime`	Time the report execution will begin. The time format is yyyy-MM-ddTHH:mm:ssZ
`ReportStatus`	Status of the report execution. The possible values are Paused, Active, and Inactive.
`RecurrenceInterval`	Recurrence interval provided during report creation
`RecurrenceCount`	Recurrence count provided during report creation
`CallbackUrl`	Callback URL provided in the request
`Format`	Format of the report files

Resume report executions API

11/22/2021 • 2 minutes to read • Edit Online

This API, on execution, resumes the scheduled execution of a paused commercial marketplace analytics report.

Request syntax

METHOD	REQUEST URI
PUT	`https://api.partnercenter.microsoft.com/insights/v1/cmp/ScheduledReport/resu`

Request header

HEADER	TYPE	DESCRIPTION
Authorization	string	Required. The Azure Active Directory (Azure AD) access token in the form `Bearer <token>`
Content-Type	string	`Application/JSON`

Path Parameter

None

Query Parameter

PARAMETER NAME	REQUIRED	TYPE	DESCRIPTION
`reportId`	Yes	string	ID of the report being modified

Glossary

None

Response

The response payload is structured as follows in JSON format:

Response code: 200, 400, 401, 403, 404, 500

Response payload:

```
{
  "Value": [
    {
      "ReportId": "string",
      "ReportName": "string",
      "Description": "string",
      "QueryId": "string",
      "Query": "string",
      "User": "string",
      "CreatedTime": "string",
      "ModifiedTime": "string",
      "StartTime": "string",
      "ReportStatus": "string",
      "RecurrenceInterval": 0,
      "RecurrenceCount": 0,
      "CallbackUrl": "string",
      "Format": "string"
    }
  ],
  "TotalCount": 0,
  "Message": "string",
  "StatusCode": 0
}
```

Glossary

PARAMETER	DESCRIPTION
`ReportId`	Universally unique identifier (UUID) of the resumed report
`ReportName`	Name given to the report during creation
`Description`	Description given during creation of the report
`QueryId`	Query ID passed at the time the report was created
`Query`	Query text that will be executed for this report
`User`	User ID used for creation of the report
`CreatedTime`	Time the report was created. The time format is yyyy-MM-ddTHH:mm:ssZ
`ModifiedTime`	Time the report was last modified. The time format is yyyy-MM-ddTHH:mm:ssZ
`StartTime`	Time at which report execution will begin. The time format is yyyy-MM-ddTHH:mm:ssZ
`ReportStatus`	Status of the report execution. The possible values are Paused, Active, and Inactive.
`RecurrenceInterval`	Recurrence interval provided during report creation
`RecurrenceCount`	Recurrence count provided during report creation
`CallbackUrl`	Callback URL provided in the request
`Format`	Format of the report files

Manage metered billing anomalies in Partner Center

11/22/2021 • 5 minutes to read • Edit Online

The custom metered billing option is currently available to Software as a service (SaaS) offers and Azure Applications with a Managed application plan.

If you are using the metered billing option to create offers in the commercial marketplace program that lets you charge for usage based on non-standard units, you need to know when your customer has used more of a service than expected.

Use the Anomaly detection feature

Microsoft relies on you, the partner, to report your customers' overage usage of their SaaS or Azure Managed application offers before Microsoft invoices the customer. If the wrong usage is reported, the customer could potentially receive an incorrect invoice, undermining both Microsoft's and the partner's credibility.

To help ensure that your customers are billed correctly, use the **Anomaly detection** feature for both SaaS Apps and Azure application managed application plans. This feature monitors usage against metered billing and predicts the expected value of usage within the expected range. If the usage is outside the expected range, it is treated as unexpected, (an anomaly,) and you will receive an alert notification on your Offer Overview page in the commercial marketplace program of Partner Center. You can track your customers' usage daily for every custom meter dimension that you've set.

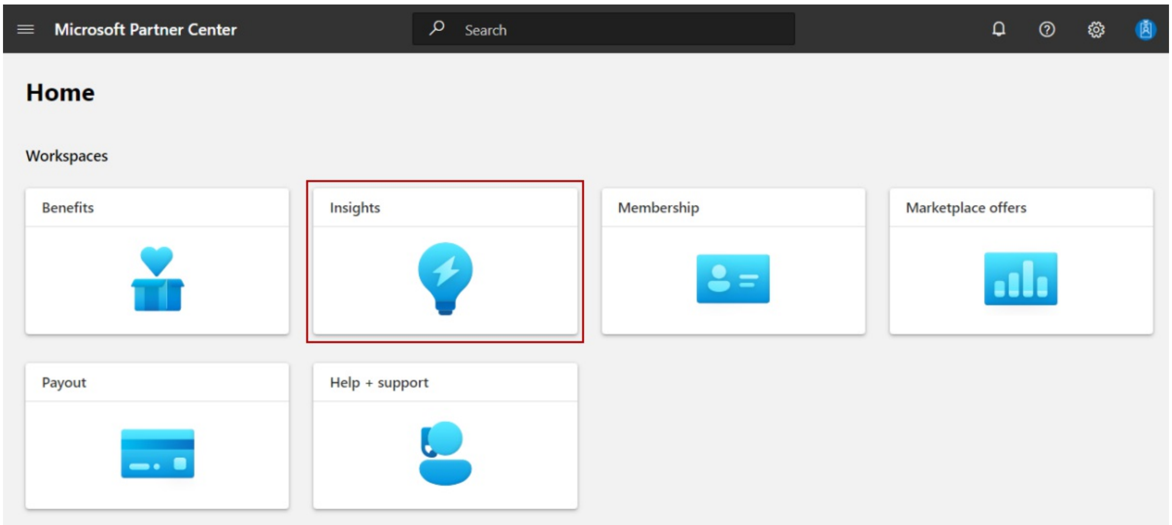
View and manage metered usage anomalies

> **NOTE**
> The Partner Center workspaces view gives you a more efficient and productive user experience through logically grouped workspaces. To learn more about the workspaces view and how to turn it on, see Getting around Partner Center.

- Workspaces view
- Current view

1. Sign in to Partner Center.

2. On the Home page, select the **Insights** tile.



3. In the left menu, select **Usage**.

4. Select the **Metered usage anomalies** tab.

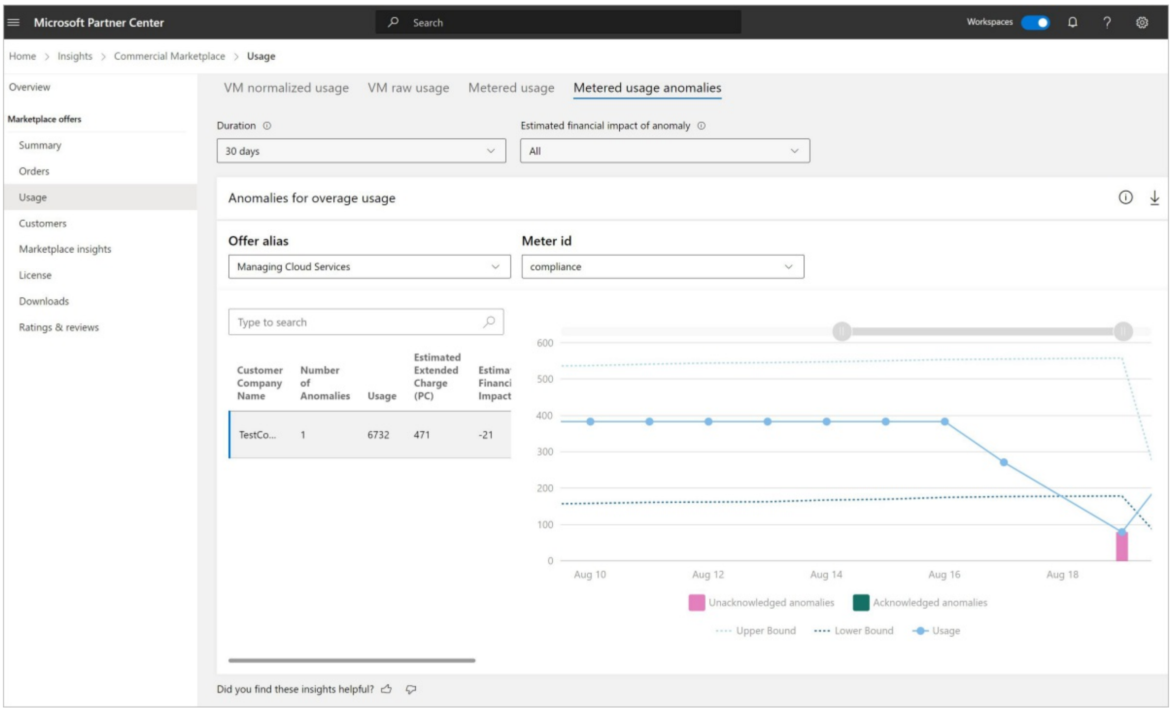


Figure 1: Metered usage anomalies tab

5. For any usage anomalies detected against metered billing, as a publisher you will be asked to investigate and confirm if the anomaly is true or not. Select **Mark as anomaly** to confirm the diagnosis.

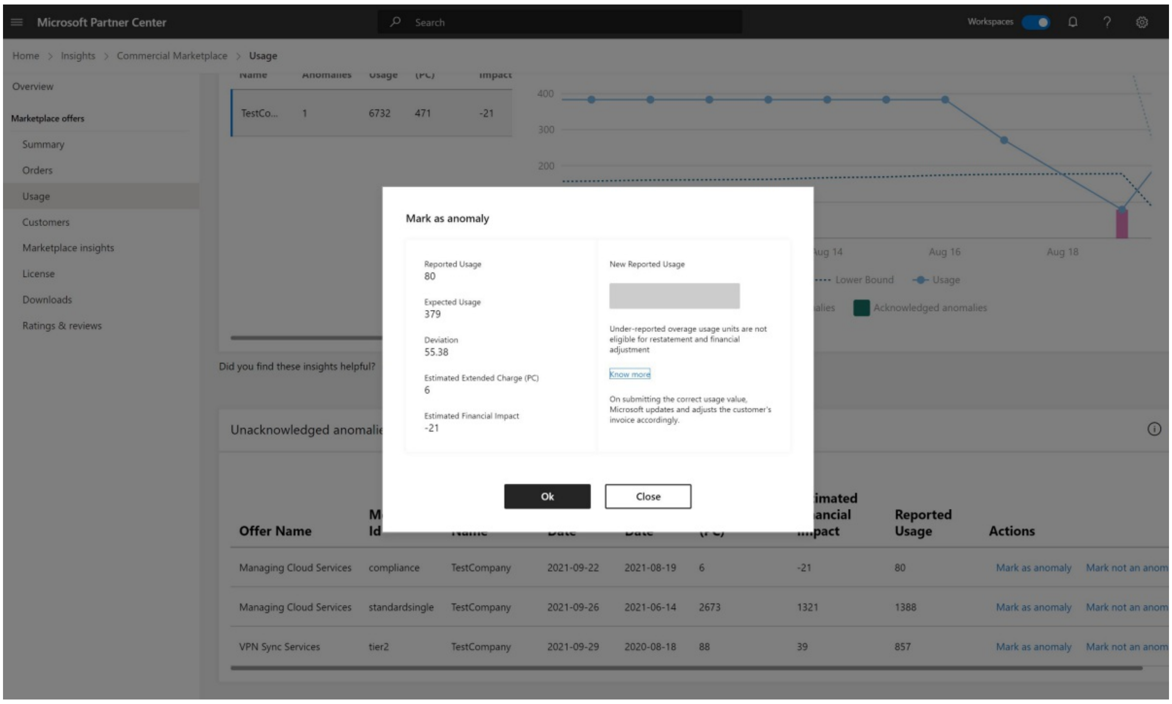


Figure 2: Mark as an anomaly dialog box

6. If you believe that the overage usage anomaly we detected is not genuine, you can provide that feedback by selecting **Not an anomaly** for the Partner Center flagged anomaly on the particular overage usage.

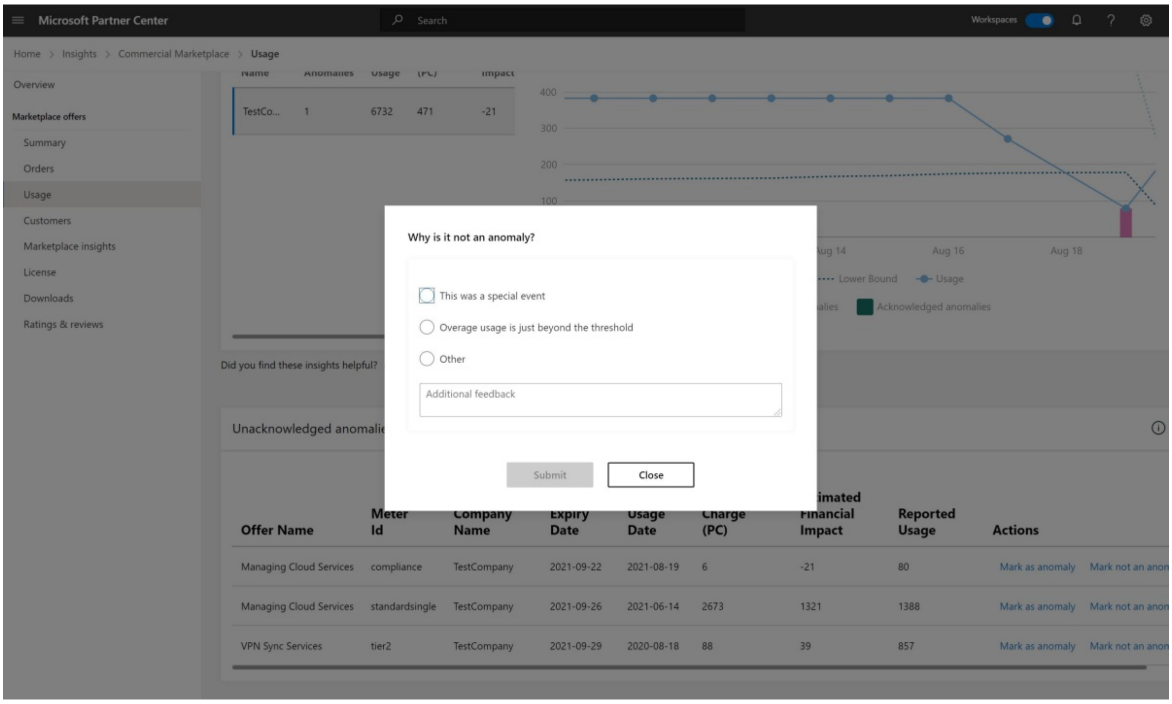


Figure 3: Why is it not an anomaly? dialog box

7. You can scroll down the page to see an inventory list of unacknowledged anomalies. The list provides an inventory of anomalies that you have not acknowledged. You can choose to mark any of the Partner Center flagged anomalies as genuine or false.

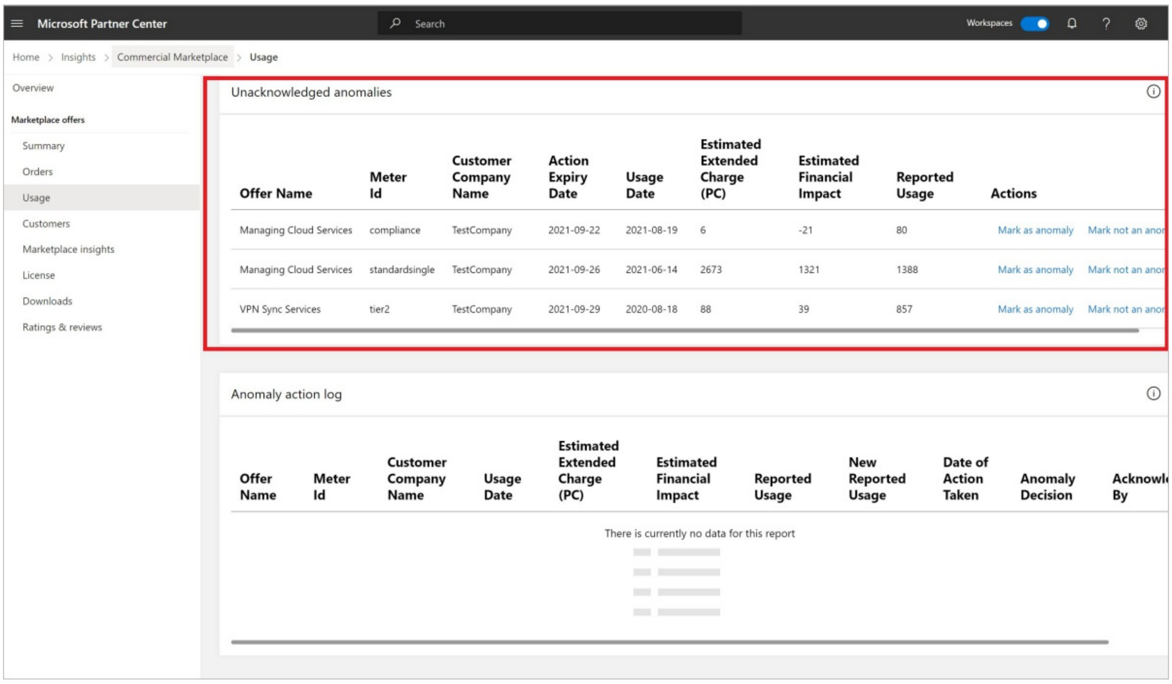
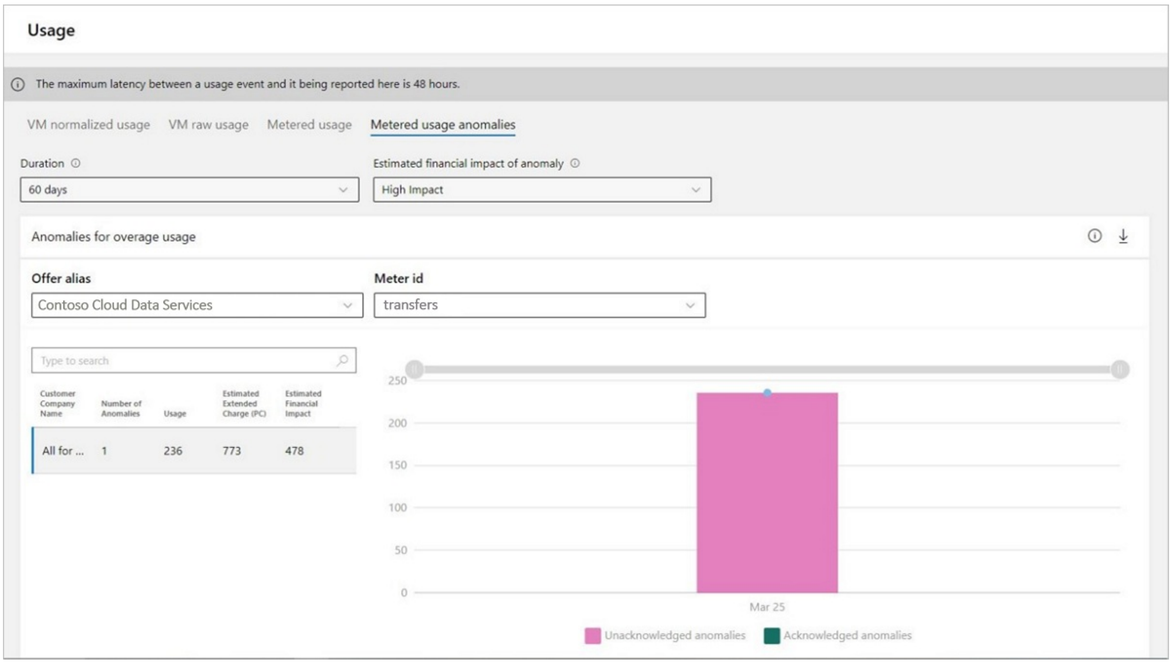


Figure 4: Partner Center unacknowledged anomalies list

By default, flagged anomalies that have an estimated financial impact greater than 100 USD are shown in Partner Center. However, you can select **All** from the **Estimated financial impact of anomaly** list to see all flagged anomalies.



8. You would also see an anomaly action log that shows the actions you took on the overage usages. In the action log, you will be able to see which overage usage events were marked as genuine or false.

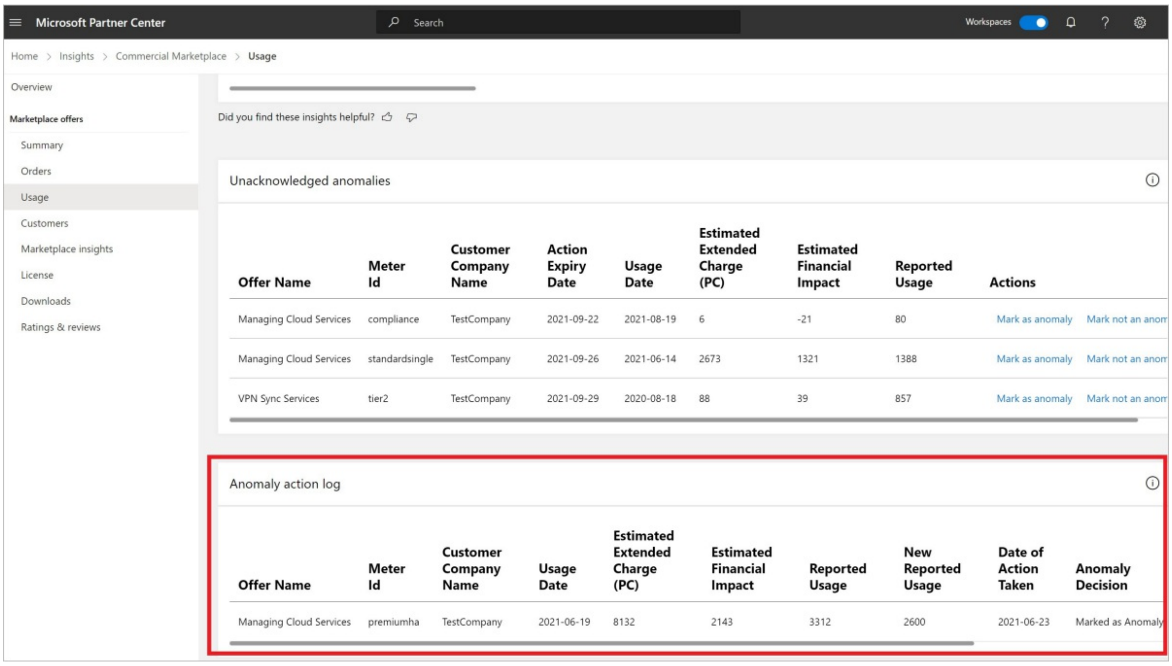


Figure 5: Anomaly action log

9. Partner Center analytics will not support restatement of overage usage events in the export reports. Partner Center lets you enter the corrected overage usage for an anomaly and the details are passed on to Microsoft teams for investigation. Based on the investigation, Microsoft will issue credit refunds to the overcharged customer, as appropriate. When you select any of the flagged anomalies, you can select **Mark as anomaly** to mark the usage overage anomaly as genuine.

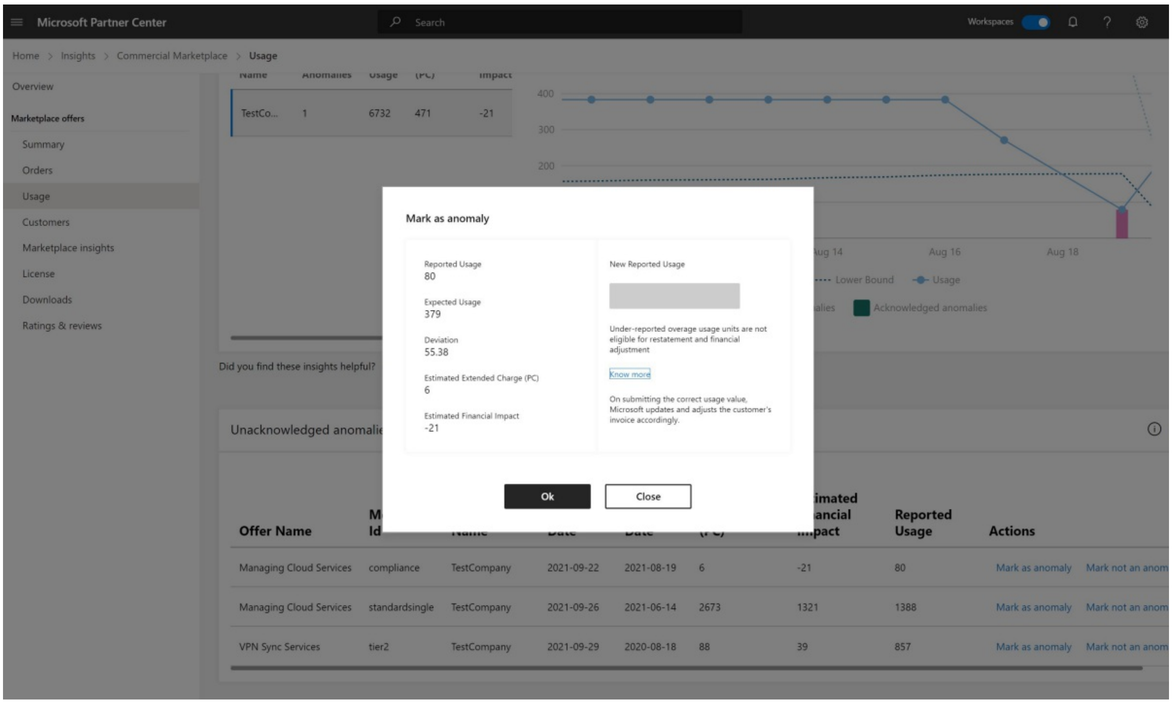


Figure: 6: Mark as anomaly dialog box

The first time an overage usage is flagged as irregular in Partner Center, you will get a window of 30 days from that instance to mark the anomaly as genuine or false. After the 30-day period, as the publisher you would not be able to act on the anomalies.

IMPORTANT

Under-reported overage usage units are not eligible for restatement and financial adjustment.

You can see all the anomalies (acknowledged or otherwise) for the selected computation period. The various computation periods are the last 30 days, last 60 days, and last 90 days.

> **IMPORTANT**
>
> You are requested to act on the flagged anomalies within 30 days of the time from when the anomalies are first reported in Partner Center.

The filter modal in the widget lets you select individual offers and individual custom meters.

After you mark an overage usage as an anomaly or acknowledge a model that flagged an anomaly as genuine, you can't change the selection to "Not an Anomaly".

> **IMPORTANT**
>
> You can re-submit overage usages in the event of overcharge situations.

See also

- Metered billing for SaaS using the commercial marketplace metering service
- Managed application metered billing
- Anomaly detection service for metered billing

Commercial marketplace policies and terms

11/22/2021 • 2 minutes to read • Edit Online

The *Microsoft commercial marketplace* is a Microsoft owned or operated platform, through which offers may be presented to or acquired by customers. Unless otherwise specified, the commercial marketplace includes Microsoft AppSource and Azure Marketplace.

Thank you for your interest in publishing offers on the commercial marketplace. We're committed to partnering with you to build a rich source of cloud solutions and a collection of business offers that both delight customers worldwide and help you build your business.

Offers on the commercial marketplace must comply with our policies and terms. We update them from time to time to ensure a good customer experience and help our partners succeed. You can leave feedback on our policies or terms, in the Microsoft AppSource and Azure Marketplace forum.

Publisher Agreement

- Microsoft Publisher Agreement
- Change history for Microsoft Publisher Agreement

The Microsoft Publisher Agreement describes the relationship for publishing offers on the commercial marketplace. It governs your access and use of features on Partner Center related to publishing and listing offers in the commercial marketplace online stores.

Policies and terms

- Commercial marketplace certification policies
- Certification policies change history
- Microsoft AppSource and Azure Marketplace review policies

Next steps

- What is the Microsoft commercial marketplace?

Align your business with our e-commerce platform

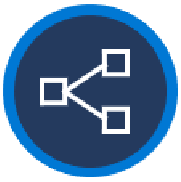
11/22/2021 • 2 minutes to read • Edit Online

This article describes how the commercial marketplace User Interface (UI) and programmatic Application Programming Interfaces (APIs) combine to support your business processes. The links under the API point to the specific interfaces developers can use to integrate their CRM system with the commercial marketplace.

Overview of activities

The activities below are not sequential. The activity you use is dependent on your business needs and sales processes. This guide shows how to integrate different APIs to automate each activity.

ACTIVITY	ISV SALES ACTIVITIES	CORRESPONDING MARKETPLACE API	CORRESPONDING MARKETPLACE UI
1. Product Marketing	Create product messaging, positioning, promotion, pricing	Create product messaging, positioning, promotion, pricing Partner Ingestion API Azure Apps Onboarding API	Create product messaging, positioning, promotion, pricing Partner Center (PC) → Offer Creation
2. Demand Generation	Product Promotion Lead nurturing Eval, trial & PoC	Product Promotion Lead nurturing Eval, trial & PoC Lead CRM Connector for D365, SFDC and Marketo Co-Sell Connector for SalesForce CRM Co-Sell Connector for Dynamics 365 CRM	Product Promotion Lead nurturing Eval, trial & PoC Azure Marketplace and AppSource PC Marketplace Insights PC Co-Sell Opportunities
3. Negotiation and Quote Creation	T&Cs Pricing Discount approvals Final quote	T&Cs Pricing Discount approvals Final quote CPP API for VM's Microsoft Graph for AAD API Partner Center '7' API Family	T&Cs Pricing Discount approvals Final quote PC → Plans (public or private)
4. Sale	Contract signing Revenue Recognition Invoicing Billing	Contract signing Revenue Recognition Invoicing Billing SaaS fulfillment API v.2 Reporting APIs	Contract signing Revenue Recognition Invoicing Billing Azure portal / Admin Center PC Marketplace Rewards PC Payouts Reports PC Marketplace Analytics PC Co-Sell Closing

ACTIVITY	ISV SALES ACTIVITIES	CORRESPONDING MARKETPLACE API	CORRESPONDING MARKETPLACE UI
5. Maintenance 	Recurring billing Overages Product Support	Recurring billing Overages Product Support SaaS/AMAs: Billing APIs SaaS fulfillment API v.2 Partner Payouts API github Metered billing API (EA Customer) Azure Consumption API (EA Customer) Azure Charges List API	Recurring billing Overages Product Support PC Payouts Reports PC Marketplace Analytics
6. Contract End 	Renew or Terminate	Renew or Terminate SaaS fulfillment API v.2 AMA/VM's: auto-renew	Renew or Terminate PC Marketplace Analytics

Next steps

- Visit the links above for each API as needed.

Commercial marketplace submission API overview

11/22/2021 • 2 minutes to read • Edit Online

Use API to programmatically query, create submissions for, and publish offers. API is useful if your account manages many offers and you want to automate and optimize the submission process for these offers.

Types of APIs

There are two sets of submission API available:

- **Partner Center submission API** – The common set of APIs that work across consumer and commercial products to publish through Partner Center. New capabilities are continuously added to this set of APIs. For more information on how to integrate with this API, see Partner Center submission API onboarding.
- **Legacy Cloud Partner Portal API** – The APIs carried over from the deprecated Cloud Partner Portal; it is integrated with and continues to work in Partner Center. This set of APIs is in maintenance mode only; new capabilities introduced in Partner Center may not be supported, and it should only be used for existing products that were already integrated before transition to Partner Center. For more information on how to continue to use the Cloud Partner Portal APIs, see Cloud Partner Portal API Reference.

Refer to the following table for supported submission APIs for each offer type.

OFFER TYPE	LEGACY CLOUD PARTNER PORTAL API SUPPORT	PARTNER CENTER SUBMISSION API SUPPORT
Azure Application		✔
Azure Container	✔	
Azure Virtual Machine	✔	
Consulting Service	✔	
Dynamics 365		✔
IoT Edge Module	✔	
Managed Service	✔	
Power BI App	✔	
Software as a Service		✔

Microsoft 365 Office add-ins, Microsoft 365 SharePoint solutions, Microsoft 365 Teams apps, and Power BI Visuals don't have submission API support.

Next steps

- Visit the API link appropriate for your offer type as needed

Partner Center submission API onboarding

11/22/2021 • 3 minutes to read • Edit Online

Use the Partner Center submission API to programmatically query, create submissions for, and publish commercial marketplace offers. This API is useful if your account manages many offers and you want to automate and optimize the submission process for these offers.

API prerequisites

The Partner Center submissions API requires a few programmatic assets:

- an Azure Active Directory application
- an Azure Active Directory (Azure AD) access token

Step 1: Complete prerequisites for using the Partner Center submission API

Before you start writing code to call the Partner Center submission API, ensure you have completed the following prerequisites.

- You (or your organization) must have an Azure AD directory and you must have Global administrator permission for the directory. If you already use Microsoft 365 or other business services from Microsoft, you already have Azure AD directory. Otherwise, you can create a new Azure AD in Partner Center at no additional charge.
- You must associate an Azure AD application with your Partner Center account and obtain your tenant ID, client ID, and key. You need these to obtain the Azure AD access token you will use in calls to the Microsoft Store submission API.

Associate an Azure AD application with your Partner Center account

To use the Partner Center submission API, you must associate an Azure AD application with your Partner Center account, retrieve the tenant ID and client ID for the application, and generate a key. The Azure AD application represents the app or service from which you want to call the Partner Center submission API. You need the tenant ID, client ID, and key to obtain an Azure AD access token to pass to the API.

> **NOTE**
> You only need to perform this task once. After you have the tenant ID, client ID and key, you can reuse them any time you need to create a new Azure AD access token.

1. In Partner Center, associate your organization's Partner Center account with your organization's Azure AD directory.
2. From the **Users** page in the **Account settings** section of Partner Center, add the Azure AD application that represents the app or service you will use to access submissions for your Partner Center account. Ensure you assign this application the **Manager** role. If the application doesn't exist yet in your Azure AD directory, create a new Azure AD application in Partner Center.
3. Return to the **Users** page, select the name of your Azure AD application to go to the application settings, and copy the **Tenant ID** and **Client ID** values.
4. Select **Add new key**. On the following screen, copy the **Key** value. You won't be able to access this info again after you leave this page. For more information, see Manage keys for an Azure AD application.

Step 2: Obtain an Azure AD access token

Before you call any of the methods in the Partner Center submission API, you must first obtain an Azure AD access token to pass to the **Authorization** header of each method in the API. An access token expires 60 minutes after issuance. After that, you can refresh it so you can use it in future calls to the API.

To obtain the access token, follow the instructions in Service to Service Calls Using Client Credentials to send an `HTTP POST` to the `https://login.microsoftonline.com/<tenant_id>/oauth2/token` endpoint. Here is a sample request:

```
POST https://login.microsoftonline.com/<tenant_id>/oauth2/token HTTP/1.1
Host: login.microsoftonline.com
Content-Type: application/x-www-form-urlencoded; charset=utf-8

grant_type=client_credentials
&client_id=<your_client_id>
&client_secret=<your_client_secret>
&resource= https://api.partner.microsoft.com
```

For the tenant_id value in the POST URI and the client_id and client_secret parameters, specify the tenant ID, client ID and the key for your application that you retrieved from Partner Center in the previous section. For the resource parameter, you must specify `https://api.partner.microsoft.com`.

Step 3: Use the Partner Center submission API

After you have an Azure AD access token, call methods in the Partner Center submission API. To create or update submissions, you typically call multiple methods in the Partner Center submission API in a specific order. For information about each scenario and the syntax of each method, see the Ingestion API swagger.

Next steps

- Start using the Partner Center submission API as described above

Cloud Partner Portal API Reference

11/22/2021 • 2 minutes to read • Edit Online

> **NOTE**
>
> The Cloud Partner Portal APIs are integrated with and will continue working in Partner Center. The transition introduces small changes. Review the Changes to CPP APIs listed in this document to ensure your code continues working after transitioning to Partner Center. CPP APIs should only be used for existing products that were already integrated before transition to Partner Center; new products should use Partner Center submission APIs.

The Cloud Partner Portal REST APIs allow the programmatic retrieval and manipulation of workloads, offers, and publisher profiles. The APIs use Azure role-based access control (Azure RBAC) to enforce correct permissions at processing time.

This reference provides the technical details for the Cloud Partner Portal REST APIs. The payload samples in this document are for reference only and are subject to change as new functionality is added.

Prerequisites and considerations

Before using the APIs, you should review:

- The Prerequisites article to learn how to add a service principal to your account, and get an Azure Active Directory (Azure AD) access token for authentication.
- The two concurrency control strategies available for calling these APIs.
- Additional API considerations, such as versioning and error handling.

Changes to CPP APIs after the migration to Partner Center

API	CHANGE DESCRIPTION	IMPACT
POST Publish, GoLive, Cancel	For migrated offers, the response header will have a different format but will continue to work in the same way, denoting a relative path to retrieve the operation status.	When sending any of the corresponding POST requests for an offer, the Location header will have one of two format depending on the migration status of the offer: • Non-migrated offers `/api/operations/{PublisherId}${offerId}$2$preview?api-version=2017-10-31` • Migrated offers `/api/publishers/{PublisherId}/offers/{offereId}/operat 0000-1000-0000-000000000000?api-version=2017-10-31`
GET Operation	For offer types that previously supported 'notification-email' field in the response, this field will be deprecated and no longer returned for migrated offers.	For migrated offers, we'll no longer send notifications to the list of emails specified in the requests. Instead, the API service will align with the notification email process in Partner Center to send emails. Specifically, notifications will be sent to the email address set in the Seller contact info section of your Account settings in Partner Center, to notify you of operation progress. Please review the email address set in the Seller contact info section of your Account settings in Partner Center to ensure the correct email is provided for notifications.

Common tasks

This reference details APIs to perform the following common tasks.

Offers

- Retrieve all offers

- Retrieve a specific offer
- Retrieve offer status
- Create an offer
- Publish an offer

Operations

- Retrieve operations
- Cancel operations

Publish an app

- Go live

Other tasks

- Set pricing for virtual machine offers

Troubleshooting

- Troubleshooting authentication errors

API Prerequisites

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> **NOTE**
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You need two required programmatic assets to use Cloud Partner Portal APIs: a service principal and an Azure Active Directory (Azure AD) access token.

Create service principal in Azure Active Directory tenant

First, you need to create a service principal in your Azure AD tenant. This tenant will be assigned its own set of permissions in the Cloud Partner Portal. Your code will call APIs using this tenant instead of your personal credentials. For a full explanation of creating a service principal, see How to: Use the portal to create an Azure AD application and service principal that can access resources.

Add service principal to your account

Now that you've created the service principal in your tenant, you can add it as a user to your Partner Center Portal account. Just like a user, the service principal can be an owner or a contributor to the portal. For details, see **Next steps** below.

Next steps

See Manage Azure AD applications.

API considerations

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API versioning

NOTE

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There may be multiple versions of the API that are available at the same time. Clients must indicate which version they wish to invoke use by providing the `api-version` parameter as part of the query string.

```
GET https://cloudpartner.azure.com/api/offerTypes?api-version=2017-10-31
```

The response to a request with an unknown or invalid API version is an HTTP code 400. This error returns the collection of known API versions in the response body.

```
    {
        "error": {
            "code":"InvalidAPIVersion",
            "message":"Invalid api version. Allowed values are [2016-08-01-preview]"
        }
    }
```

Errors

The API responds to errors with the corresponding HTTP status codes and optionally, additional information in the response serialized as JSON. When you receive an error, especially a 400-class error, do not retry the request before fixing the underlying cause. For example, in the sample response above, fix the API version parameter before resending the request.

Authorization header

For all the APIs in this reference, you must pass the authorization header along with the bearer token obtained from Azure Active Directory (Azure AD). This header is required to receive a valid response; if not present, a `401 Unauthorized` error is returned.

```
  GET https://cloudpartner.azure.com/api/offerTypes?api-version=2016-08-01-preview

    Accept: application/json
    Authorization: Bearer <YOUR_TOKEN>
```

Concurrency control

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NOTE

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Every call to the Cloud Partner Portal publishing APIs must explicitly specify which concurrency control strategy to use. Failure to provide the **If-Match** header will result in an HTTP 400 error response. We offer two strategies for concurrency control.

- **Optimistic** - The client performing the update verifies if the data has changed since it last read the data.
- **Last one wins** - The client directly updates the data, regardless of whether another application has modified it since the last read time.

Optimistic concurrency workflow

We recommend using the optimistic concurrency strategy, with the following workflow, to guarantee that no unexpected edits are made to your resources.

1. Retrieve an entity using the APIs. The response includes an ETag value that identifies the currently stored version of the entity (at the time of the response).
2. At the time of update, include this same ETag value in the mandatory **If-Match** request header.
3. The API compares the ETag value received in the request with the current ETag value of the entity in an atomic transaction.
   - If the ETag values are different, the API returns a `412 Precondition Failed` HTTP response. This error indicates that either another process has updated the entity since the client last retrieved it, or that the ETag value specified in the request is incorrect.
   - If the ETag values are the same, or the **If-Match** header contains the wildcard asterisk character (`*`), the API performs the requested operation. The API operation also updates the stored ETag value of the entity.

NOTE

Specifying the wildcard character (*) in the **If-Match** header results in the API using the Last-one-wins concurrency strategy. In this case, the ETag comparison does not occur and the resource is updated without any checks.

Retrieve offers

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NOTE

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Retrieves a summarized list of offers under a publisher namespace.

`GET https://cloudpartner.azure.com/api/publishers/<publisherId>/offers?api-version=2017-10-31`

URI parameters

NAME	DESCRIPTION	DATA TYPE
publisherId	Publisher identifier, for example `contoso`	String
api-version	Latest version of API	Date

NAME	VALUE
Content-Type	`application/json`
Authorization	`Bearer YOUR_TOKEN`

Body example

Response

```
200 OK
[
    {
        "offerTypeId": "microsoft-azure-virtualmachines",
        "publisherId": "contoso",
        "status": "published",
        "id": "059afc24-07de-4126-b004-4e42a51816fe",
        "version": 1,
        "definition": {
            "displayText": "Contoso Virtual Machine"
        },
        "changedTime":"2017-05-23T23:33:47.8802283Z"
    }
]
```

Response body properties

NAME	DESCRIPTION
offerTypeId	Identifies the type of offer
publisherId	Identifier that uniquely identifies the publisher
status	Status of the offer. For the list of possible values, see Offer status below.
id	GUID that uniquely identifies the offer in the publisher namespace.
version	Current version of the offer. The version property cannot be modified by the client. It's incremented after each publishing.
definition	Contains a summarized view of the actual definition of the workload. To get a detailed definition, use the Retrieve specific offer API.
changedTime	UTC time when the offer was last modified

Response status codes

CODE	DESCRIPTION
200	`OK` - The request was successfully processed and all the offers under the publisher were returned to the client.
400	`Bad/Malformed request` - The error response body may contain more information.
403	`Forbidden` - The client doesn't have access to the specified namespace.
404	`Not found` - The specified entity doesn't exist.

Offer Status

NAME	DESCRIPTION
NeverPublished	Offer has never been published.
NotStarted	Offer is new but is not started.
WaitingForPublisherReview	Offer is waiting for publisher approval.
Running	Offer submission is being processed.
Succeeded	Offer submission has completed processing.

NAME	DESCRIPTION
Canceled	Offer submission was canceled.
Failed	Offer submission failed.

Retrieve a specific offer

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NOTE

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Retrieves the specified offer within the publisher namespace.

You can also retrieve a particular version of the offer, or retrieve the offer in draft, view, or production slots. If a slot is not specified, the default is `draft`. Attempting to retrieve an offer that has not been previewed or published will result in a `404 Not Found` error.

WARNING

The secret values for secret type fields will not be retrieved by this API.

```
    GET https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>?api-version=2017-10-31

    GET https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>/versions/<version>?api-version=2017-10-31

    GET https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>/slot/<slotId>?api-version=2017-10-31
```

URI parameters

NAME	DESCRIPTION	DATA TYPE
publisherId	publisherId. For example, Contoso	String
offerId	Guid that uniquely identifies the offer.	String
version	Version of the offer being retrieved. By default, the latest offer version is retrieved.	Integer
slotId	The slot from which the offer is to be retrieved, can be one of: - `Draft` (default) retrieves the offer version currently in draft. - `Preview` retrieves the offer version currently in preview. - `Production` retrieves the offer version currently in production.	enum

NAME	DESCRIPTION	DATA TYPE
api-version	Latest version of API	Date

NAME	VALUE
Content-Type	`application/json`
Authorization	`Bearer YOUR_TOKEN`

Body example

Response

```
{
    "offerTypeId": "microsoft-azure-virtualmachines",
    "publisherId": "contoso",
    "status": "failed",
    "id": "059afc24-07de-4126-b004-4e42a51816fe",
    "version": 5,
    "definition": {
        "displayText": "Contoso Virtual Machine Offer",
        "offer": {
            "microsoft-azure-marketplace-testdrive.enabled": false,
            "microsoft-azure-marketplace-testdrive.videos": [],
            "microsoft-azure-marketplace.title": "Contoso App",
            "microsoft-azure-marketplace.summary": "Contoso App makes dev ops a breeze",
            "microsoft-azure-marketplace.longSummary": "Contoso App makes dev ops a breeze",
            "microsoft-azure-marketplace.description": "Contoso App makes dev ops a breeze",
            "microsoft-azure-marketplace.offerMarketingUrlIdentifier": "contosoapp",
            "microsoft-azure-marketplace.allowedSubscriptions": [
                "59160c40-2e25-4dcf-a2fd-6514cb08bf08"
            ],
            "microsoft-azure-marketplace.usefulLinks": [
            {
                "linkTitle": "Contoso App for Azure",
                "linkUrl": "https://azuremarketplace.microsoft.com"
            }
            ],
                "microsoft-azure-marketplace.categoryMap": [
                {
                "categoryL1": "analytics",
                "categoryL2-analytics": [
                "visualization-and-reporting"
                ]
                },
                {
                "categoryL1": "ai-plus-machine-learning",
                "categoryL2-ai-plus-machine-learning": [
                "bot-services",
                "cognitive-services",
                "other"
                ]
                }
            ],
            "microsoft-azure-marketplace.smallLogo":
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/6218c455-9cbc-450c-9920-f2e7a69ee132.png?sv=2014-02-
14&sr=b&sig=6O8MM9dgiJ48VK0MwddkyVbprRAnBszyhVkVHGShhkI%3D&se=2019-03-28T19%3A46%3A50Z&sp=r",
            "microsoft-azure-marketplace.mediumLogo":
```

```
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/557e714b-2f31-4e12-b0cc-e48dd840edf4.png?sv=2014-02-
14&sr=b&sig=NwL67NTQf9Gc9VScmZehtbHXpYmxhwZc2foy3o4xavs%3D&se=2019-03-28T19%3A46%3A49Z&sp=r",
            "microsoft-azure-marketplace.largeLogo":
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/142485da-784c-44cb-9523-d4f396446258.png?sv=2014-02-
14&sr=b&sig=xaMxhwx%2FlKYfz33mJGIg8UBdVpsOwVvqhjTJ883o0iY%3D&se=2019-03-28T19%3A46%3A49Z&sp=r",
            "microsoft-azure-marketplace.wideLogo":
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/48af9013-1df7-4c94-8da8-4626e5039ce0.png?sv=2014-02-
14&sr=b&sig=%2BnN7f2tprkrqb45ID6JlT01zXcy1PMTkWXtLKD6nfoE%3D&se=2019-03-28T19%3A46%3A49Z&sp=r",
            "microsoft-azure-marketplace.screenshots": [],
            "microsoft-azure-marketplace.videos": [],
            "microsoft-azure-marketplace.leadDestination": "None",
            "microsoft-azure-marketplace.tableLeadConfiguration": {},
            "microsoft-azure-marketplace.blobLeadConfiguration": {},
            "microsoft-azure-marketplace.salesForceLeadConfiguration": {},
            "microsoft-azure-marketplace.crmLeadConfiguration": {},
            "microsoft-azure-marketplace.httpsEndpointLeadConfiguration": {},
            "microsoft-azure-marketplace.marketoLeadConfiguration": {},
            "microsoft-azure-marketplace.privacyURL": "https://azuremarketplace.microsoft.com",
            "microsoft-azure-marketplace.termsOfUse": "Terms of use",
            "microsoft-azure-marketplace.engineeringContactName": "Jon Doe",
            "microsoft-azure-marketplace.engineeringContactEmail": "jondoe@outlook.com",
            "microsoft-azure-marketplace.engineeringContactPhone": "555-555-5555",
            "microsoft-azure-marketplace.supportContactName": "Jon Doe",
            "microsoft-azure-marketplace.supportContactEmail": "jondoe@outlook.com",
            "microsoft-azure-marketplace.supportContactPhone": "555-555-5555",
            "microsoft-azure-marketplace.publicAzureSupportUrl": "",
            "microsoft-azure-marketplace.fairfaxSupportUrl": ""
            },
            "plans": [
            {
                "planId": "contososkuidentifier",
                "microsoft-azure-virtualmachines.skuTitle": "Contoso App",
                "microsoft-azure-virtualmachines.skuSummary": "Contoso App makes dev ops a breeze.",
                "microsoft-azure-virtualmachines.skuDescription": "This is a description for the Contoso App
that makes dev ops a breeze.",
                "microsoft-azure-virtualmachines.hideSKUForSolutionTemplate": false,
                "microsoft-azure-virtualmachines.cloudAvailability": [
                    "PublicAzure"
                ],
                "microsoft-azure-virtualmachines.certificationsFairfax": [],
                "virtualMachinePricing": {
                    "isByol": true,
                    "freeTrialDurationInMonths": 0
                },
                "microsoft-azure-virtualmachines.operatingSystemFamily": "Windows",
                "microsoft-azure-virtualmachines.windowsOSType": "Other",
                "microsoft-azure-virtualmachines.operationSystem": "Contoso App",
                "microsoft-azure-virtualmachines.recommendedVMSizes": [
                    "a0-basic",
                    "a0-standard",
                    "a1-basic",
                    "a1-standard",
                    "a2-basic",
                    "a2-standard"
                ],
                "microsoft-azure-virtualmachines.openPorts": [],
                "microsoft-azure-virtualmachines.vmImages": {
                    "1.0.1": {
                    "osVhdUrl": "http://contosoteststorage.blob.core.windows.net/test/contosoVM.vhd?sv=2014-
02-14&sig=WlDo6Q4xwYH%2B5QEJbItPUVdgHhBcrVxPBmntZ2vU96w%3D&st=2016-06-25T18%3A30%3A00Z&se=2017-06-
25T18%3A30%3A00Z&sp=rl",
                    "lunVhdDetails": []
                    }
                },
                "regions": [
                    "DZ",
```

```
                    "AR"
                ]
            }
            ]
        },
        "changedTime": "2017-06-07T06:15:39.7349221Z"
    }
}
```

Response body properties

NAME	DESCRIPTION
offerTypeId	Identifies the type of offer
publisherId	Unique Identifier of the publisher
status	Status of the offer. For the list of possible values, see Offer status below.
Id	GUID that uniquely identifies the offer
version	Current version of the offer. The version property cannot be modified by the client. It's incremented after each publishing.
definition	Actual definition of the workload
changedTime	UTC datetime when the offer was last modified

Response status codes

CODE	DESCRIPTION
200	`OK` - The request was successfully processed and all the offers under the publisher were returned to the client.
400	`Bad/Malformed request` - The error response body may contain more information.
403	`Forbidden` - The client doesn't have access to the specified namespace.
404	`Not found` - The specified entity doesn't exist. Client should check the publisherId, offerId, and version (if specified).

Offer status

NAME	DESCRIPTION
NeverPublished	Offer has never been published.
NotStarted	Offer is new but is not started.

NAME	DESCRIPTION
WaitingForPublisherReview	Offer is waiting for publisher approval.
Running	Offer submission is being processed.
Succeeded	Offer submission has completed processing.
Canceled	Offer submission was canceled.
Failed	Offer submission failed.

Create or modify an offer

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This call updates a specific offer within the publisher namespace or creates a new offer.

```
PUT https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>?api-version=2017-10-31
```

URI parameters

NAME	DESCRIPTION	DATA TYPE
publisherId	Publisher identifier, for example `contoso`	String
offerId	Offer identifier	String
api-version	Latest version of the API	Date

NAME	VALUE
Content-Type	`application/json`
Authorization	`Bearer YOUR_TOKEN`

Body example

The following example creates an offer with offerID of `contosovirtualmachine`.

Request

```
{
    "publisherId": "contoso",
    "offerTypeId": "microsoft-azure-virtualmachines",
    "id": "contosovirtualmachine",
    "offerTypeVersions": {
        "microsoft-azure-virtualmachines": 87,
        "microsoft-azure-marketplace": 39
    },
    "definition": {
        "displayText": "Contoso Virtual Machine Offer",
        "offer": {
        "microsoft-azure-marketplace.title": "Contoso App",
```

```
            "microsoft-azure-marketplace.summary": "Contoso App makes dev ops a breeze",
            "microsoft-azure-marketplace.longSummary": "Contoso App makes dev ops a breeze",
            "microsoft-azure-marketplace.description": "Contoso App makes dev ops a breeze",
            "microsoft-azure-marketplace.offerMarketingUrlIdentifier": "contosoapp",
            "microsoft-azure-marketplace.allowedSubscriptions": ["59160c40-2e25-4dcf-a2fd-6514cb08bf08"],
            "microsoft-azure-marketplace.usefulLinks": [{
                "linkTitle": "Contoso App for Azure",
                "linkUrl": "https://azuremarketplace.microsoft.com"
            }],
            "microsoft-azure-marketplace.categoryMap": [
                  {
                      "categoryL1": "analytics",
                      "categoryL2-analytics": [
                          "visualization-and-reporting"
                      ]
                  },
                  {
                      "categoryL1": "ai-plus-machine-learning",
                      "categoryL2-ai-plus-machine-learning":[
                          "bot-services",
                          "cognitive-services",
                          "other"
                      ]
                  }
           ],
            "microsoft-azure-marketplace.smallLogo":
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/6218c455-9cbc-450c-9920-f2e7a69ee132.png?sv=2014-02-
14&sr=b&sig=6O8MM9dgiJ48VK0MwddkyVbprRAnBszyhVkVHGShhkI%3D&se=2019-03-28T19%3A46%3A50Z&sp=r",
            "microsoft-azure-marketplace.mediumLogo":
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/557e714b-2f31-4e12-b0cc-e48dd840edf4.png?sv=2014-02-
14&sr=b&sig=NwL67NTQf9Gc9VScmZehtbHXpYmxhwZc2foy3o4xavs%3D&se=2019-03-28T19%3A46%3A49Z&sp=r",
            "microsoft-azure-marketplace.largeLogo":
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/142485da-784c-44cb-9523-d4f396446258.png?sv=2014-02-
14&sr=b&sig=xaMxhwx%2FlKYfz33mJGIg8UBdVpsOwVvqhjTJ883o0iY%3D&se=2019-03-28T19%3A46%3A49Z&sp=r",
            "microsoft-azure-marketplace.wideLogo":
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/48af9013-1df7-4c94-8da8-4626e5039ce0.png?sv=2014-02-
14&sr=b&sig=%2BnN7f2tprkrqb45ID6JlT01zXcy1PMTkWXtLKD6nfoE%3D&se=2019-03-28T19%3A46%3A49Z&sp=r",
            "microsoft-azure-marketplace.heroLogo":
"https://publishingapistore.blob.core.windows.net/testcontent/D6191_publishers_contoso/contosovirtualmachine
/c46ec74d-d214-4fb5-9082-3cee55200eba.png?sv=2014-02-
14&sr=b&sig=RfDvjowFGpP4WZGAHylbF2CuXwO2NXOrwycrXEJvJI4%3D&se=2019-03-28T19%3A46%3A49Z&sp=r",
            "microsoft-azure-marketplace.screenshots": [],
            "microsoft-azure-marketplace.videos": [],
            "microsoft-azure-marketplace.leadDestination": "None",
            "microsoft-azure-marketplace.privacyURL": "https://azuremarketplace.microsoft.com",
            "microsoft-azure-marketplace.termsOfUse": "Terms of use",
            "microsoft-azure-marketplace.engineeringContactName": "Jon Doe",
            "microsoft-azure-marketplace.engineeringContactEmail": "jondoe@outlook.com",
            "microsoft-azure-marketplace.engineeringContactPhone": "555-555-5555",
            "microsoft-azure-marketplace.supportContactName": "Jon Doe",
            "microsoft-azure-marketplace.supportContactEmail": "jondoe@outlook.com",
            "microsoft-azure-marketplace.supportContactPhone": "555-555-5555",
            "microsoft-azure-marketplace.publicAzureSupportUrl": "",
            "microsoft-azure-marketplace.fairfaxSupportUrl": ""
        },
        "plans":
        [
            {
                "planId": "contososkuidentifier",
                "microsoft-azure-virtualmachines.skuTitle": "Contoso App",
                "microsoft-azure-virtualmachines.skuSummary": "Contoso App makes dev ops a breeze.",
                "microsoft-azure-virtualmachines.skuDescription": "This is a description for the Contoso App
that makes dev ops a breeze.",
                "microsoft-azure-virtualmachines.hideSKUForSolutionTemplate": false,
                "microsoft-azure-virtualmachines.cloudAvailability": ["PublicAzure"],
```

```
            "virtualMachinePricing": {
                "isByol": true,
                "freeTrialDurationInMonths": 0
            },
            "microsoft-azure-virtualmachines.operatingSystemFamily": "Windows",
            "microsoft-azure-virtualmachines.windowsOSType": "Other",
            "microsoft-azure-virtualmachines.operationSystem": "Contoso App",
            "microsoft-azure-virtualmachines.recommendedVMSizes": ["a0-basic", "a0-standard", "a1-basic",
"a1-standard", "a2-basic", "a2-standard"],
            "microsoft-azure-virtualmachines.openPorts": [],
            "microsoft-azure-virtualmachines.vmImages":
            {
                "1.0.1":
                {
                    "osVhdUrl": "http://contosoteststorage.blob.core.windows.net/test/contosoVM.vhd?
sv=2014-02-14&sr=c&sig=WlDo6Q4xwYH%2B5QEJbItPUVdgHhBcrVxPBmntZ2vU96w%3D&st=2016-06-25T18%3A30%3A00Z&se=2017-
06-25T18%3A30%3A00Z&sp=rl",
                    "lunVhdDetails": []
                }
            },
            "regions": ["AZ"]
        }
        ]
    },
    "eTag": "W/\"datetime'2017-06-07T06%3A15%3A40.4771399Z'\"",
    "version": 5
}
```


Response


```
{
        "offerTypeId": "microsoft-azure-virtualmachines",
        "publisherId": "contoso",
        "status": "neverPublished",
        "id": "contosovirtualmachine",
        "version": 1,
        "definition": {
        "displayText": "Contoso Virtual Machine Offer",
        "offer":
        {
            "microsoft-azure-marketplace-testdrive.videos": [],
            "microsoft-azure-marketplace.title": "Contoso App",
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                    "AZ"
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}
```

NOTE

To modify this offer, add an **If-Match** header set to * to the above request. Use the same request body as above, but modify the values as desired.

Response status codes

CODE	DESCRIPTION
200	`OK`. The request was successfully processed and offer was modified successfully.
201	`Created`. The request was successfully processed and the offer was created successfully.
400	`Bad/Malformed request`. The error response body could provide more information.
403	`Forbidden`. The client doesn't have access to the requested namespace.
404	`Not found`. The entity referred to by the client does not exist.
412	The server does not meet one of the preconditions that the requester specified in the request. The client should check the ETAG sent with the request.

Uploading artifacts

Artifacts, such as images and logos, should be shared by uploading them to an accessible location on the web, then including each as a URI in the PUT request, as in the example above. The system will detect that these files are not present in Azure Marketplace storage and download them. As a result, you will find that future GET requests will return an Azure Marketplace service URL for these files.

Categories and industries

When creating a new offer, you must specify a category for your offer in the marketplace. Optionally, for some offer types you can also specify industries. Based on the offer type, provide the categories/industries applicable to the offer using specific key values from the following tables.

Azure Marketplace categories

These categories and their respective keys are applicable for Azure apps, Virtual Machines, Core Virtual Machines, Containers, Container apps, IoT Edge modules, and SaaS offer types. Items in bold italic (like ***analytics***) are categories and standard text items (like data-insights) are subcategories below them. Use the exact key values, without changing spacing or capitalization.

CATEGORY	SAAS KEYS	AZURE APP KEYS	VIRTUAL MACHINE, CONTAINERS, CONTAINER APPS, IOT EDGE MODULE, CORE VIRTUAL MACHINE KEYS
Analytics	***analytics***	***analytics-azure-apps***	***analytics-amp***
Data Insights	data-insights	data-insights	data-insights
Data Analytics	data-analytics	data-analytics	data-analytics
Big Data	big-data	bigData	big-data
Predictive Analytics	predictive-analytics	predictive-analytics	predictive-analytics
Real-time/Streaming Analytics	real-time-streaming-analytics	real-time-streaming-analytics	real-time-streaming-analytics
Other	other	other-analytics	other
AI + Machine Learning	***ArtificialIntelligence***	***ai-plus-machine-learning***	***ai-plus-machine-learning***
Bot Services	bot-services	bot-services	bot-services
Cognitive Services	cognitive-services	cognitive-services	cognitive-services
ML Service	ml-service	ml-service	ml-service
Automated ML	automated-ml	automated-ml	automated-ml
Business/Robotic Process Automation	business-robotic-process-automation	business-robotic-process-automation	business-robotic-process-automation
Data Labelling	data-labelling	data-labelling	data-labelling
Data Preparation	data-preparation	data-preparation	data-preparation

CATEGORY	SAAS KEYS	AZURE APP KEYS	VIRTUAL MACHINE, CONTAINERS, CONTAINER APPS, IOT EDGE MODULE, CORE VIRTUAL MACHINE KEYS
Knowledge Mining	knowledge-mining	knowledge-mining	knowledge-mining
ML Operations	ml-operations	ml-operations	ml-operations
Other	other-AI-plus-machine-learning	other	other
Blockchain	*blockchain*	*blockchain*	*blockchain*
App Accelerators	app-accelerators	app-accelerators	app-accelerators
Single-node Ledger	single-node-ledger	single-node-ledger	single-node-ledger
Multi-node Ledger	multi-node-ledger	multi-node-ledger	multi-node-ledger
Tools	tools	tools	tools
Other	other	other	other
Compute	*compute-saas*	*compute-azure-apps*	*compute*
Application Infrastructure	appInfra	appInfrastructure	application-infrastructure
Operating Systems	clientOS	clientOS	operating-systems
Cache	cache	cache	cache
Other	other-compute	other-compute	other
Containers	*containers*	*containers*	*containers*
Container Apps	container-apps	container-apps	container-apps
Container Images	container-images	container-images	container-images
Get Started with Containers	get-started-with-containers	get-started-with-containers	get-started-with-containers
Other	other	other	other
Databases	*databases-saas*	*database*	*databases*
NoSQL Databases	nosql-databases	nosql-databases	nosql-databases
Relational Databases	relational-databases	relational-databases	relational-databases
Ledger/Blockchain Databases	ledger-blockchain-databases	ledger-blockchain-databases	ledger-blockchain-databases

CATEGORY	SAAS KEYS	AZURE APP KEYS	VIRTUAL MACHINE, CONTAINERS, CONTAINER APPS, IOT EDGE MODULE, CORE VIRTUAL MACHINE KEYS
Data Lakes	data-lakes	data-lakes	data-lakes
Data Warehouse	data-warehouse	data-warehouse	data-warehouse
Other	other-databases	other-databases	other
Developer Tools	*developer-tools-saas*	*developer-tools-azure-apps*	*developer-tools*
Tools	tools-developer-tools	tools-developer-tools	tools-developer-tools
Scripts	scripts	scripts	scripts
Developer Service	devService	devService	developer-service
Other	other-developer-tools	other-developer-tools	other
DevOps	*devops*	*devops*	*devops*
Other	other	other	other
Identity	*identity*	*identity*	*identity*
Access management	access-management	access-management	access-management
Other	other	other	other
Integration	*integration*	*integration*	*integration*
Messaging	messaging	messaging	messaging
Other	other	other	other
Internet of Things	*IoT*	*internet-of-things-azure-apps*	*internet-of-things*
IoT Core Services	N/A	iot-core-services	iot-core-services
IoT Edge Modules	N/A	iot-edge-modules	iot-edge-modules
IoT Solutions	iot-solutions	iot-solutions	iot-solutions
Data Analytics & Visualization	data-analytics-and-visualization	data-analytics-and-visualization	data-analytics-and-visualization
IoT Connectivity	iot-connectivity	iot-connectivity	iot-connectivity
Other	other-internet-of-things	other-internet-of-things	other

CATEGORY	SAAS KEYS	AZURE APP KEYS	VIRTUAL MACHINE, CONTAINERS, CONTAINER APPS, IOT EDGE MODULE, CORE VIRTUAL MACHINE KEYS
IT & Management Tools	*ITandAdministration*	*it-and-management-tools-azure-apps*	*it-and-management-tools*
Management Solutions	management-solutions	management-solutions	management-solutions
Business Applications	businessApplication	businessApplication	business-applications
Other	other-it-management-tools	other-it-management-tools	other
Monitoring & Diagnostics	*monitoring-and-diagnostics*	*monitoring-and-diagnostics*	*monitoring-and-diagnostics*
Other	other	other	other
Media	*media*	*media*	*media*
Media Services	media-services	media-services	media-services
Content Protection	content-protection	content-protection	content-protection
Live & On-Demand Streaming	live-and-on-demand-streaming	live-and-on-demand-streaming	live-and-on-demand-streaming
Other	other	other	other
Migration	*migration*	*migration*	*migration*
Data Migration	data-migration	data-migration	data-migration
Other	other	other	other
Mixed Reality	*mixed-reality*	*mixed-reality*	*mixed-reality*
Other	other	other	other
Networking	*networking*	*networking*	*networking*
Appliance Managers	appliance-managers	appliance-managers	appliance-managers
Connectivity	connectivity	connectivity	connectivity
Firewalls	firewalls	firewalls	firewalls
Load Balancers	load-balancers	load-balancers	load-balancers
Other	other	other	other
Security	*security*	*security*	*security*

CATEGORY	SAAS KEYS	AZURE APP KEYS	VIRTUAL MACHINE, CONTAINERS, CONTAINER APPS, IOT EDGE MODULE, CORE VIRTUAL MACHINE KEYS
Identity & Access Management	identity-and-access-management	identity-and-access-management	identity-and-access-management
Threat Protection	threat-protection	threat-protection	threat-protection
Information Protection	information-protection	information-protection	information-protection
Other	other	other	other
Storage	***storage-saas***	***storage-azure-apps***	***storage***
Backup & Recovery	backup	backup	backup-and-recovery
Enterprise Hybrid Storage	enterprise-hybrid-storage	enterprise-hybrid-storage	enterprise-hybrid-storage
File Sharing	file-sharing	file-sharing	file-sharing
Data Lifecycle Management	data-lifecycle-management	data-lifecycle-management	data-lifecycle-management
Other	other-storage	other-storage	other
Web	***web***	***web***	***web***
Blogs & CMSs	blogs-and-cmss	blogs-and-cmss	blogs-and-cmss
Starter Web Apps	starter-web-apps	starter-web-apps	starter-web-apps
Ecommerce	ecommerce	ecommerce	ecommerce
Web Apps Frameworks	web-apps-frameworks	web-apps-frameworks	web-apps-frameworks
Web Apps	web-apps	web-apps	web-apps
Other	other	other	other

Microsoft AppSource categories

These categories and their respective keys are applicable for SaaS, Power BI app, Dynamics 365 business central, Dynamics 365 for customer engagement, and Dynamics 365 for operation offer types. Items in bold italic (like ***analytics***) are categories and standard text items (like advanced-analytics) are subcategories below them. Use the exact key values, without changing spacing or capitalization.

CATEGORY	SAAS KEYS	DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APP KEYS
Analytics	***analytics***	***Analytics***	***Analytics***

CATEGORY	SAAS KEYS	DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APP KEYS
Advanced Analytics	advanced-analytics	advanced-analytics	advanced-analytics
Visualization & Reporting	visualization-reporting	visualization-reporting	visualization-reporting
Other	other	other-analytics	other-analytics
AI + Machine Learning	*ArtificialIntelligence*	*ai-plus-machine-learning-dynamics*	*ai-plus-machine-learning-appsource*
AI for Business	ai-for-business	ai-for-business	ai-for-business
Bot Apps	bot-apps	bot-apps	bot-apps
Other	other-ai-plus-machine-learning	other-ai-plus-machine-learning	other-ai-plus-machine-learning
Collaboration	*Collaboration*	*Collaboration*	*collaboration*
Contact & People	contact-people	contact-people	contact-and-people
Meeting Management	meeting-management	meeting-management	meeting-management
Site Design & Management	site-design-management	site-design-management	site-design-and-management
Task & Project Management	task-project-management	task-project-management	task-and-project-management
Voice & Video Conferencing	voice-video-conferencing	voice-video-conferencing	voice-and-video-conferencing
Other	other-collaboration	other-collaboration	other
Compliance & Legal	*compliance*	*compliance*	*compliance-and-legal*
Tax & Audit	tax-audit	tax-audit	tax-and-audit
Legal	Legal	Legal	legal
Data, Governance & Privacy	data-governance-privacy	data-governance-privacy	data-governance-and-privacy
Health & Safety	health-safety	health-safety	health-and-safety
Other	other-compliance-legal	other-compliance-legal	other
Customer Service	*CustomerService*	*CustomerService*	*customer-service*
Contact Center	contact-center	contact-center	contact-center

CATEGORY	SAAS KEYS	DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APP KEYS
Face to Face Service	face-to-face-service	face-to-face-service	face-to-face-service
Back Office & Employee Service	back-office-employee-service	back-office-employee-service	back-office-and-employee-service
Knowledge & Case Management	knowledge-case-management	knowledge-case-management	knowledge-and-case-management
Social Media & Omnichannel Engagement	social-media-omnichannel-engagement	social-media-omnichannel-engagement	social-media-and-omnichannel-engagement
Other	other-customer-service	other-customer-service	other
Finance	*Finance*	*Finance*	*finance*
Accounting	accounting	accounting	accounting
Asset Management	asset-management	asset-management	asset-management
Analytics, Consolidation & Reporting	analytics-consolidation-reporting	analytics-consolidation-reporting	analytics-consolidation-and-reporting
Credit & Collections	credit-collections	credit-collections	credit-and-collections
Compliance & Risk Management	compliance-risk-management	compliance-risk-management	compliance-and-risk-management
Other	other-finance	other-finance	other
Human Resources	*HumanResources*	*HumanResources*	*human-resources*
Talent Acquisition	talent-acquisition	talent-acquisition	talent-acquisition
Talent Management	talent-management	talent-management	talent-management
HR Operations	hr-operations	hr-operations	hr-operations
Workforce Planning & Analytics	workforce-planning-analytics	workforce-planning-analytics	workforce-planning-and-analytics
Other	other-human-resources	other-human-resources	other
Internet of Things	*IoT*	*internet-of-things-dynamics*	*internet-of-things-appsource*
Asset Management & Operations	asset-management-operations	asset-management-operations	asset-management-and-operations
Connected Products	connected-products	connected-products	connected-products

CATEGORY	SAAS KEYS	DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APP KEYS
Intelligent Supply Chain	intelligent-supply-chain	intelligent-supply-chain	intelligent-supply-chain
Predictive Maintenance	predictive-maintenance	predictive-maintenance	predictive-maintenance
Remote Monitoring	remote-monitoring	remote-monitoring	remote-monitoring
Safety & Security	safety-security	safety-security	safety-and-security
Smart Infrastructure & Resources	smart-infrastructure-resources	smart-infrastructure-resources	smart-infrastructure-and-resources
Vehicles & Mobility	vehicles-mobility	vehicles-mobility	vehicles-and-mobility
Other	other-internet-of-things	other-internet-of-things	other
IT & Management Tools	*ITandAdministration*	*ITandAdministration*	*it-and-management-tools*
Management Solutions	management-solutions	management-solutions	management-solutions
Business Applications	businessApplication	businessApplication	business-applications
Other	other-it-management-tools	other-it-management-tools	other
Marketing	*Marketing*	*Marketing*	*marketing*
Advertisement	advertisement	advertisement	advertisement
Analytics	analytics-marketing	analytics-marketing	analytics-marketing
Campaign Management & Automation	campaign-management-automation	campaign-management-automation	campaign-management-and-automation
Email Marketing	email-marketing	email-marketing	email-marketing
L2 -Events & Resource Management	events-resource-management	events-resource-management	events-and-resource-management
Research & Analysis	research-analytics	research-analytics	research-and-analysis
Social Media	social-media	social-media	social-media
Other	other-marketing	other-marketing	other
Operations & Supply Chain	*OperationsSupplyChain*	*OperationsSupplyChain*	*operations-and-supply-chain*
Asset & Production Management	asset-production-management	asset-production-management	asset-and-production-management

CATEGORY	SAAS KEYS	DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APP KEYS
Demand Forecasting	demand-forecasting	demand-forecasting	demand-forecasting
Information Management & Connectivity	information-management-connectivity	information-management-connectivity	information-management-and-connectivity
Planning, Purchasing & Reporting	planning-purchasing-reporting	planning-purchasing-reporting	planning-purchasing-and-reporting
Quality & Service Management	quality-service-management	quality-service-management	quality-and-service-management
Sales & Order Management	sales-order-management	sales-order-management	sales-and-order-management
Transportation & Warehouse Management	transportation-warehouse-management	transportation-warehouse-management	transportation-and-warehouse-management
Other	other-operations-supply-chain	other-operations-supply-chain	other
Productivity	***Productivity***	***Productivity***	***productivity***
Content Creation & Management	content-creation-management	content-creation-management	content-creation-and-management
Language & Translation	language-translation	language-translation	language-and-translation
Document Management	document-management	document-management	document-management
Email Management	email-management	email-management	email-management
Search & Reference	search-reference	search-reference	search-and-reference
Other	other-productivity	other-productivity	other
Gamification	Gamification	Gamification	gamification
Sales	***Sales***	***Sales***	***Sales***
Telesales	telesales	telesales	telesales
Configure, Price, Quote (CPQ)	configure-price-quote	configure-price-quote	configure-price-quote
Contract Management	contract-management	contract-management	contract-management
CRM	crm	crm	crm
E-commerce	e-commerce	e-commerce	e-commerce

CATEGORY	SAAS KEYS	DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APP KEYS
Business Data Enrichment	business-data-enrichment	business-data-enrichment	business-data-enrichment
Sales Enablement	sales-enablement	sales-enablement	sales-enablement
Other	other-sales	other-sales	other-sales
Geolocation	***geolocation***	***geolocation***	***geolocation***
Maps	maps	maps	maps
News & Weather	news-and-weather	news-and-weather	news-and-weather
Other	other-geolocation	other-geolocation	other-geolocation

Microsoft AppSource industries

These industries and their respective keys are applicable for SaaS, Power BI app, Dynamics 365 business central, Dynamics 365 for customer engagement, and Dynamics 365 for operation offer types. Items in bold italic (like ***Automotive***) are categories and standard text items (like AutomotiveL2) are subcategories below them. Use the exact key values, without changing spacing or capitalization.

INDUSTRY	SAAS, DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APPS KEYS
Automotive	***Automotive***	***automotive***
Automotive	AutomotiveL2	AutomotiveL2
Agriculture	***Agriculture***	***agriculture***
Other - Unsegmented	Agriculture_OtherUnsegmented	other-unsegmented
Distribution	***Distribution***	***distribution***
Wholesale	Wholesale	wholesale
Parcel & Package Shipping	ParcelAndPackageShipping	parcel-and-package-shipping
Education	***Education***	***education***
Higher Education	HigherEducation	higher-education
Primary & Secondary Education / K-12	PrimaryAndSecondaryEducationK12	primary-and-secondary-education
Libraries & Museums	LibrariesAndMuseums	libraries-and-museums

INDUSTRY	SAAS, DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APPS KEYS
Financial Services	*FinancialServices*	*financial-services*
Banking & Capital Markets	BankingAndCapitalMarkets	banking-and-capital-markets
Insurance	Insurance	insurance
Government	*Government*	*government*
Defense & Intelligence	DefenseAndIntelligence	defense-and-intelligence
Public Safety & Justice	PublicSafetyAndJustice	public-safety-and-justice
Civilian Government	CivilianGovernment	civilian-government
Healthcare	*HealthCareandLifeSciences*	*healthcare*
Health Payor	HealthPayor	health-payor
Health Provider	HealthProvider	health-provider
Pharmaceuticals	Pharmaceuticals	pharmaceuticals
Manufacturing & Resources	*Manufacturing*	*manufacturing-and-resources*
Chemical & Agrochemical	ChemicalAndAgrochemical	chemical-and-agrochemical
Discrete Manufacturing	DiscreteManufacturing	discrete-manufacturing
Energy	Energy	energy
Retail & Consumer Goods	*RetailandConsumerGoods*	*retail-and-consumer-goods*
Consumer Goods	ConsumerGoods	consumer-goods
Retailers	Retailers	retailers
Media & Communications	*MediaAndCommunications*	*media-and-communications*
Media & Entertainment	MediaandEntertainment	media-and-entertainment
Telecommunications	Telecommunications	telecommunications
Professional Services	*ProfessionalServices*	*professional-services*
Legal	Legal	legal
Partner Professional Services	PartnerProfessionalServices	partner-professional-services

INDUSTRY	SAAS, DYNAMICS 365 BUSINESS CENTRAL, DYNAMICS 365 FOR CUSTOMER ENGAGEMENT, DYNAMICS 365 FOR OPERATION KEYS	POWER BI APPS KEYS
Architecture & Construction	*ArchitectureAndConstruction*	*architecture-and-construction*
Other - Unsegmented	ArchitectureAndConstruction_OtherUnsegmented	other-unsegmented
Hospitality & Travel	*HospitalityandTravel*	*hospitality-and-travel*
Hotels & Leisure	HotelsAndLeisure	hotels-and-leisure
Travel & Transportation	TravelAndTransportation	travel-and-transportation
Restaurants & Food Services	RestaurantsAndFoodServices	restaurants-and-food-services
Other Public Sector Industries	*OtherPublicSectorIndustries*	*other-public-sector-industries*
Forestry & Fishing	ForestryAndFishing	forestry-and-fishing
Nonprofits	Nonprofits	nonprofits
Real Estate	*RealEstate*	*real-estate*
Other - Unsegmented	RealEstate_OtherUnsegmented	other-unsegmented

Retrieve offer status

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> **NOTE**
>
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Retrieves the current status of the offer.

```
GET https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>/status?api-version=2017-10-31
```

URI parameters

NAME	DESCRIPTION	DATA TYPE
publisherId	Publisher identifier, for example `Contoso`	String
offerId	GUID that uniquely identifies the offer	String
api-version	Latest version of API	Date

NAME	VALUE
Content-Type	`application/json`
Authorization	`Bearer YOUR_TOKEN`

Body example

Response

```
{
    "status": "succeeded",
    "messages": [],
    "steps": [
    {
        "estimatedTimeFrame": "< 15 min",
        "id": "displaydummycertify",
        "stepName": "Validate Pre-Requisites",
        "description": "Offer settings provided are validated.",
        "status": "complete",
        "messages": [
            {
                "messageHtml": "Step completed.",
                "level": "information"
```

```
                    "level": "information",
                    "timestamp": "2018-03-16T17:50:45.7215661Z"
                }
            ],
            "progressPercentage": 100
        },
        {
            "estimatedTimeFrame": "~2-3 days",
            "id": "displaycertify",
            "stepName": "Certification",
            "description": "Your offer is analyzed by our certification systems for issues.",
            "status": "notStarted",
            "messages": [],
            "progressPercentage": 0
        },
        {
            "estimatedTimeFrame": "< 1 day",
            "id": "displayprovision",
            "stepName": "Provisioning",
            "description": "Your virtual machine is being replicated in our production systems.",
            "status": "notStarted",
            "messages": [],
            "progressPercentage": 0
        },
        {
            "estimatedTimeFrame": "< 1 hour",
            "id": "displaypackage",
            "stepName": "Packaging and Lead Generation Registration",
            "description": "Your virtual machine is being packaged for customers. Additionally, lead systems
are being configured and set up.",
            "status": "notStarted",
            "messages": [],
            "progressPercentage": 0
        },
        {
            "estimatedTimeFrame": "< 1 hour",
            "id": "publisher-signoff",
            "stepName": "Publisher signoff",
            "description": "Offer is available to preview. Ensure that everything looks good before making
your offer live.",
            "status": "complete",
            "messages": [],
            "progressPercentage": 0
        },
        {
            "estimatedTimeFrame": "~2-5 days",
            "id": "live",
            "stepName": "Live",
            "description": "Offer is publicly visible and is available for purchase.",
            "status": "complete",
            "messages": [],
            "progressPercentage": 0
        }
        ],
        "previewLinks": [],
        liveLinks": [],
    }
```


Response body properties

NAME	DESCRIPTION
status	The status of the offer. For the list of possible values, see Offer status below.
messages	Array of messages associated with the offer

NAME	DESCRIPTION
steps	Array of the steps that the offer goes through during an offer publishing
estimatedTimeFrame	Estimate of time it would take to complete this step, in friendly format
id	Identifier of the step
stepName	Name of the step
description	Description of the step
status	Status of the step. For the list of possible values, see Step status below.
messages	Array of messages related to the step
processPercentage	Percentage completion of the step
previewLinks	*Not currently implemented*
liveLinks	*Not currently implemented*
notificationEmails	Deprecated for offers migrated to Partner Center. Notification emails for migrated offers will be sent to the email specified under the Seller contact info in Account settings. For non-migrated offers, comma-separated list of email addresses to be notified of the progress of the operation

Response status codes

CODE	DESCRIPTION
200	`OK` - The request was successfully processed, and the current status of the offer was returned.
400	`Bad/Malformed request` - The error response body may contain more information.
404	`Not found` - The specified entity doesn't exist.

Offer status

NAME	DESCRIPTION
NeverPublished	Offer has never been published.
NotStarted	Offer is new and not started.

NAME	DESCRIPTION
WaitingForPublisherReview	Offer is waiting for publisher approval.
Running	Offer submission is being processed.
Succeeded	Offer submission has completed processing.
Canceled	Offer submission was canceled.
Failed	Offer submission failed.

Step Status

NAME	DESCRIPTION
NotStarted	Step has not started.
InProgress	Step is running.
WaitingForPublisherReview	Step is waiting for publisher approval.
WaitingForApproval	Step is waiting for process approval.
Blocked	Step is blocked.
Rejected	Step is rejected.
Complete	Step is complete.
Canceled	Step was canceled.

Publish an offer

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NOTE

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Starts the publishing process for the specified offer. This call is a long running operation.

```
POST https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>/publish?api-version=2017-10-31
```

URI parameters

NAME	DESCRIPTION	DATA TYPE
publisherId	Publisher identifier, for example `contoso`	String
offerId	Offer identifier	String
api-version	Latest version of the API	Date

NAME	VALUE
Content-Type	`application/json`
Authorization	`Bearer YOUR_TOKEN`

Body example

Request

```
{
    'metadata':
        {
            'notification-emails': 'jdoe@contoso.com'
        }
}
```

Request body properties

NAME	DESCRIPTION
notification-emails	Comma-separated list of email addresses to be notified of the progress of the publishing operation.

Response

Migrated offers

```
Location: /api/publishers/contoso/offers/contoso-offer/operations/56615b67-2185-49fe-80d2-c4ddf77bb2e8?api-version=2017-10-31
```

Non-migrated offers

```
Location: /api/operations/contoso$contoso-offer$2$preview?api-version=2017-10-31
```

Response Header

NAME	VALUE
Location	The relative path to retrieve this operation's status

Response status codes

CODE	DESCRIPTION
202	`Accepted` - The request was successfully accepted. The response contains a location that can be used to track the operation that is launched.
400	`Bad/Malformed request` - The error response body may provide more information.
422	`Un-processable entity` - Indicates that the entity to be published failed validation.
404	`Not found` - The entity specified by the client doesn't exist.

Retrieve operations

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NOTE

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Retrieves all the operations on the offer or to get a particular operation for the specified operationId. The client may use query parameters to filter on running operations.

```
GET https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>/submissions/?api-version=2017-10-31&status=<filteredStatus>

GET https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>/operations/<operationId>?api-version=2017-10-31
```

URI parameters

NAME	DESCRIPTION	DATA TYPE
publisherId	Publisher identifier, for example `Contoso`	String
offerId	Offer identifier	String
operationId	GUID that uniquely identifies the operation on the offer. The operationId may be retrieved by using this API, and is also returned in the HTTP header of the response for any long running operation, such as the Publish offer API.	Guid
api-version	Latest version of API	Date

NAME	VALUE
Content-Type	`application/json`
Authorization	`Bearer YOUR_TOKEN`

Body example

Response

GET operations

```
[
    {
        "id": "5a63deb5-925b-4ee0-938b-7c86fbf287c5",
        "offerId": "56615b67-2185-49fe-80d2-c4ddf77bb2e8",
        "offerVersion": 1,
        "offerTypeId": "microsoft-azure-virtualmachines",
        "publisherId": "contoso",
        "submissionType": "publish",
        "submissionState": "running",
        "publishingVersion": 2,
        "slot": "staging",
        "version": 636576975611768314,
        "definition": {
            "metadata": {
                "emails": "jdoe@contoso.com"
            }
        },
        "changedTime": "2018-03-26T21:46:01.179948Z"
    }
]
```

GET operation

```
[
    {
        "status" : "running",
        "messages" : [],
        "publishingVersion" : 2,
        "offerVersion" : 1,
        "cancellationRequestState": "canCancel",
        "steps": [
                    {
                        "estimatedTimeFrame": "< 15 min",
                        "id": "displaydummycertify",
                        "stepName": "Validate Pre-Requisites",
                        "description": "Offer settings provided are validated",
                        "status": "complete",
                        "messages":
                        [
                            {
                                "messageHtml": "Step completed.",
                                "level": "information",
                                "timestamp": "2017-03-28T19:50:36.500052Z"
                            }
                        ],
                        "progressPercentage": 100
                    },
                    {
                        "estimatedTimeFrame": "< 5 day",
                        "id": "displaycertify",
                        "stepName": "Certification",
                        "description": "Your offer is analyzed by our certification systems for
issues.",
                        "status": "blocked",
                        "messages":
                        [
                            {
                                "messageHtml": "No virtual machine image was found for the plan
contoso.",
                                "level": "error",
                                "timestamp": "2017-03-28T19:50:39.5506018Z"
```

```
                                },
                                {
                                    "messageHtml": "This step has not started yet.",
                                    "level": "information",
                                    "timestamp": "2017-03-28T19:50:39.5506018Z"
                                }
                            ],
                            "progressPercentage": 0
                        },
                        {
                            "estimatedTimeFrame": "< 1 day",
                            "id": "displayprovision",
                            "stepName": "Provisioning",
                            "description": "Your virtual machine is being replicated in our production
systems.",
                            "status": "notStarted",
                            "messages": [],
                            "progressPercentage": 0
                        },
                        {
                            "estimatedTimeFrame": "< 1 hour",
                            "id": "displaypackage",
                            "stepName": "Packaging and Lead Generation Registration",
                            "description": "Your virtual machine is packaged for being shown to your
customers. Additionally, we hookup our lead generation systems to send leads for your offer.",
                            "status": "notStarted",
                            "messages": [],
                            "progressPercentage": 0
                        },
                        {
                            "id": "publisher-signoff",
                            "stepName": "Publisher signoff",
                            "description": "Offer is available to preview. Ensure that everything looks good
before making your offer live.",
                            "status": "notStarted",
                            "messages": [],
                            "progressPercentage": 0
                        },
                        {
                            "estimatedTimeFrame": "~2-5 days",
                            "id": "live",
                            "stepName": "Live",
                            "description": "Offer is publicly visible and is available for purchase.",
                            "status": "notStarted",
                            "messages": [],
                            "progressPercentage": 0
                        }
                    ],
                "previewLinks": [],
                "liveLinks": [],
            }
        }
    ]
```

Response body properties

NAME	DESCRIPTION
id	GUID that uniquely identifies the operation
submissionType	Identifies the type of operation being reported for the offer, for example `Publish/GoLive`
createdDateTime	UTC datetime when the operation was created

NAME	DESCRIPTION
lastActionDateTime	UTC datetime when the last update was done on the operation
status	Status of the operation, either `not started` | `running` | `failed` | `completed`. Only one operation can have status `running` at a time.
error	Error message for failed operations

Response step properties

NAME	DESCRIPTION
estimatedTimeFrame	The estimated duration of this operation
id	The unique identifier for the step process
description	Description of the step
stepName	The friendly name for the step
status	The status of the step, either `notStarted` | `running` | `failed` | `completed`
messages	Any notifications or warnings encountered during the step. Array of strings
progressPercentage	An integer from 0 to 100 indicating the progression of the step

Response status codes

CODE	DESCRIPTION
200	`OK` - The request was successfully processed and the operation(s) requested were returned.
400	`Bad/Malformed request` - The error response body may contain more information.
403	`Forbidden` - The client doesn't have access to the specified namespace.
404	`Not found` - The specified entity does not exist.

Cancel operation

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NOTE

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This API cancels an operation currently in progress on the offer. Use the Retrieve operations API to get an `operationId` to pass to this API. Cancellation is usually a synchronous operation, however in some complex scenarios a new operation may be required to cancel an existing one. In this case, the HTTP response body contains the operation's location that should be used to query status.

```
POST https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>/cancel?api-version=2017-10-31
```

URI parameters

NAME	DESCRIPTION	DATA TYPE
publisherId	Publisher identifier, for example, `contoso`	String
offerId	Offer identifier	String
api-version	Current version of API	Date

NAME	VALUE
Content-Type	application/json
Authorization	Bearer YOUR TOKEN

Body example

Request

```
{
   "metadata": {
     "notification-emails": "jondoe@contoso.com"
    }
}
```

Request body properties

NAME	DESCRIPTION
notification-emails	Comma separated list of email Ids to be notified of the progress of the publishing operation.

Response

Migrated offers

```
Location: /api/publishers/contoso/offers/contoso-offer/operations/56615b67-2185-49fe-80d2-c4ddf77bb2e8?api-version=2017-10-31
```

Non-migrated offers

```
Location: /api/operations/contoso$contoso-offer$2$preview?api-version=2017-10-31
```

Response Header

NAME	VALUE
Location	The relative path to retrieve this operation's status.

Response status codes

CODE	DESCRIPTION
200	Ok. The request was successfully processed and the operation is canceled synchronously.
202	Accepted. The request was successfully processed and the operation is in the process of being canceled. Location of the cancellation operation is returned in the response header.
400	Bad/Malformed request. The error response body could provide more information.
403	Access Forbidden. The client does not have access to the namespace specified in the request.
404	Not found. The specified entity does not exist.

Go live API

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NOTE

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This API starts the process for pushing an app to production. This operation is usually long-running. This call uses the notification email list from the Publish API operation.

```
POST https://cloudpartner.azure.com/api/publishers/<publisherId>/offers/<offerId>/golive?api-version=2017-10-31
```

URI parameters

NAME	DESCRIPTION	DATA TYPE
publisherId	Publisher identifier for the offer to retrieve, for example `contoso`	String
offerId	Offer identifier of the offer to retrieve	String
api-version	Latest version of the API	Date

NAME	VALUE
Content-Type	`application/json`
Authorization	`Bearer YOUR_TOKEN`

Body example

Response

Migrated offers

```
Location: /api/publishers/contoso/offers/contoso-offer/operations/56615b67-2185-49fe-80d2-c4ddf77bb2e8?api-version=2017-10-31
```

Non-migrated offers

```
Location: /api/operations/contoso$contoso-offer$2$preview?api-version=2017-10-31
```

Response Header

NAME	VALUE
Location	The relative path to retrieve this operation's status

Response status codes

CODE	DESCRIPTION
202	`Accepted` - The request was successfully accepted. The response contains a location to track the operation status.
400	`Bad/Malformed request` - Additional error information is found within the response body.
404	`Not found` - The specified entity does not exist.

Pricing for virtual machine offers

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NOTE

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There are three ways to specify pricing for virtual machine offers: customized core pricing, per-core pricing, and spreadsheet pricing.

Customized core pricing

Pricing is specific for each region and core combination. Every region in the sell list must be specified in the **virtualMachinePricing/regionPrices** section of the definition. Use the correct currency codes for each region in your request. The following example demonstrates these requirements:

```
"virtualMachinePricing":
{
    ...
    "coreMultiplier":
    {
        "currency": "USD",
            "individually":
            {
                "sharedcore": 1,
                "1core": 2,
                "2core": 2,
                "4core": 2,
                "6core": 2,
                "8core": 2,
                "10core": 4,
                "12core": 4,
                "16core": 4,
                "20core": 4,
                "24core": 4,
                "32core": 6,
                "36core": 6,
                "40core": 6,
                "44core": 6,
                "48core": 10,
                "60core": 10,
                "64core": 10,
                "72core": 10,
                "80core": 12,
                "96core": 12,
                "120core": 15,
                "128core": 15,
                "208core": 20,
                "416core": 30
            }
    }
    ...
 }
```

Per-core pricing

In this case, the publishers specify one price in USD for their SKU and all other prices are automatically generated. The price per core is specified in the `single` parameter in the request.

```
    "virtualMachinePricing":
    {
        ...
        "coreMultiplier":
        {
            "currency": "USD",
            "single": 1.0
        }
    }
```

Spreadsheet pricing

The publisher may also upload their pricing spreadsheet to a temporary storage location, then include the URI in the request like other file artifacts. The spreadsheet is then uploaded, translated to evaluate the specified price schedule, and finally updates the offer with the pricing information. Subsequent GET requests for the offer will return the spreadsheet URI and the evaluated prices for the region.

```
    "virtualMachinePricing":
    {
        ...
        "spreadSheetPricing":
        {
            "uri": "https://blob.storage.azure.com/<your_spreadsheet_location_here>/prices.xlsx",
        }
    }
```

New core sizes added on 7/2/2019

VM publishers were notified on July 2, 2019 of the addition of new prices for new Azure virtual machine sizes (based on the number of cores). The new prices are for the core sizes 10, 44, 48, 60, 120, 208, and 416. For existing VM offers new prices for these cores sizes were automatically calculated based on current prices. Publishers have until August 1, 2019 to review the additional prices and make any desired changes. After this date, if not already re-published by the publisher, the automatically calculated prices for these new core sizes will take effect.

Regions

The following table shows the different regions that you can specify for customized core pricing, and their corresponding currency codes.

REGION	NAME	CURRENCY CODE
DZ	Algeria	DZD
AR	Argentina	ARS
AU	Australia	AUD
AT	Austria	EUR

REGION	NAME	CURRENCY CODE
BH	Bahrain	BHD
BY	Belarus	RUB
BE	Belgium	EUR
BR	Brazil	USD
BG	Bulgaria	BGN
CA	Canada	CAD
CL	Chile	CLP
CO	Colombia	COP
CR	Costa Rica	CRC
HR	Croatia	HRK
CY	Cyprus	EUR
CZ	Czechia	CZK
DK	Denmark	DKK
DO	Dominican Republic	USD
EC	Ecuador	USD
EG	Egypt	EGP
SV	El Salvador	USD
EE	Estonia	EUR
FI	Finland	EUR
FR	France	EUR
DE	Germany	EUR
GR	Greece	EUR
GT	Guatemala	GTQ
HK	Hong Kong SAR	HKD
HU	Hungary	HUF

REGION	NAME	CURRENCY CODE
IS	Iceland	ISK
IN	India	INR
ID	Indonesia	IDR
IE	Ireland	EUR
IL	Israel	ILS
IT	Italy	EUR
JP	Japan	JPY
JO	Jordan	JOD
KZ	Kazakhstan	KZT
KE	Kenya	KES
KR	Korea	KRW
KW	Kuwait	KWD
LV	Latvia	EUR
LI	Liechtenstein	CHF
LT	Lithuania	EUR
LU	Luxembourg	EUR
MY	Malaysia	MYR
MT	Malta	EUR
MX	Mexico	MXN
ME	Montenegro	EUR
MA	Morocco	MAD
NL	Netherlands	EUR
NZ	New Zealand	NZD
NG	Nigeria	NGN
MK	North Macedonia	MKD

REGION	NAME	CURRENCY CODE
NO	Norway	NOK
OM	Oman	OMR
PK	Pakistan	PKR
PA	Panama	USD
PY	Paraguay	PYG
PE	Peru	PEN
PH	Philippines	PHP
PL	Poland	PLN
PT	Portugal	EUR
PR	Puerto Rico	USD
QA	Qatar	QAR
RO	Romania	RON
RU	Russia	RUB
SA	Saudi Arabia	SAR
RS	Serbia	RSD
SG	Singapore	SGD
SK	Slovakia	EUR
SI	Slovenia	EUR
ZA	South Africa	ZAR
ES	Spain	EUR
LK	Sri Lanka	USD
SE	Sweden	SEK
CH	Switzerland	CHF
TW	Taiwan	TWD
TH	Thailand	THB

REGION	NAME	CURRENCY CODE
TT	Trinidad and Tobago	TTD
TN	Tunisia	TND
TR	Turkey	TRY
UA	Ukraine	UAH
AE	United Arab Emirates	EUR
GB	United Kingdom	GBP
US	United States	USD
UY	Uruguay	UYU
VE	Venezuela	USD

Troubleshooting common authentication errors

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NOTE

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This article provides assistance with common authentication errors when using the Cloud Partner Portal APIs.

Unauthorized error

If you consistently get `401 unauthorized` errors, verify that you have a valid access token. If you have not already done so, create a basic Azure Active Directory (Azure AD) application and a service principal as described in Use portal to create an Azure Active Directory application and service principal that can access resources. Then, use the application or a simple HTTP POST request to verify your access. You will include the Tenant ID, Application ID, Object ID, and the secret key to obtain the access token.

Forbidden error

If you get a `403 forbidden` error, make sure that the correct service principal has been added to your publisher account in the Cloud Partner Portal. Follow the steps in the Prerequisites page to add your service principal to the portal.

If the correct service principal has been added, then verify all the other information. Pay close attention to the Object ID entered on the portal. There are two Object IDs in the Azure Active Directory app registration page, and you must use the local Object ID. You can find the correct value by going to the **App registrations** page for your app and clicking on the app name under **Managed application in local directory**. This takes you to the local properties for the app, where you can find the correct Object ID in the **Properties** page, as shown in the following figure. Also, ensure that you use the correct publisher ID when you add the service principal and make the API call.

Anomaly detection service for metered billing

11/22/2021 • 4 minutes to read • Edit Online

The Marketplace metering service lets you create offers in the commercial marketplace program that are charged according to non-standard units. With metered billing, you send usage events for your customer's usage to Microsoft and we prepare the billing based on that usage.

Incorrect usage data could come from a variety of causes, such as bugs, misconfigurations in your consumption tracking, or fraud. Incorrect usage data would result in incorrect customer charges and billing disputes.

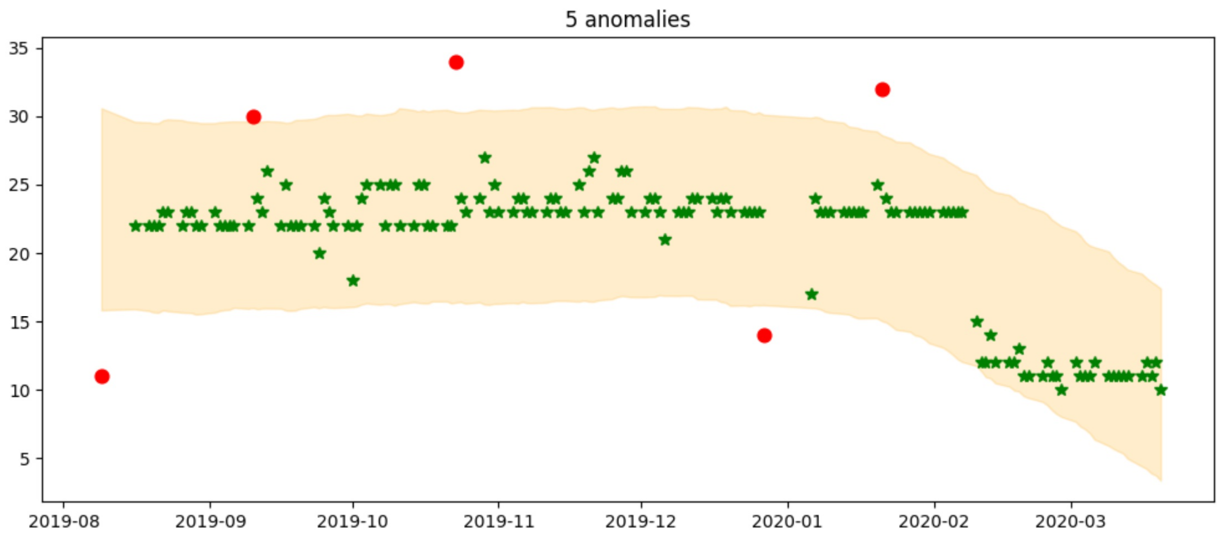
To mitigate the risk, our anomaly detection service applies machine learning algorithms to determine normal metered billing behavior, analyze the metered billing usage, and discover anomalies with minimal user intervention.

You are notified if there is anomaly detected in your metered billing usage. This gives you an opportunity to investigate and notify us if an anomaly is confirmed to be a real issue, at which point actions can be taken to address the customer billing issue proactively.

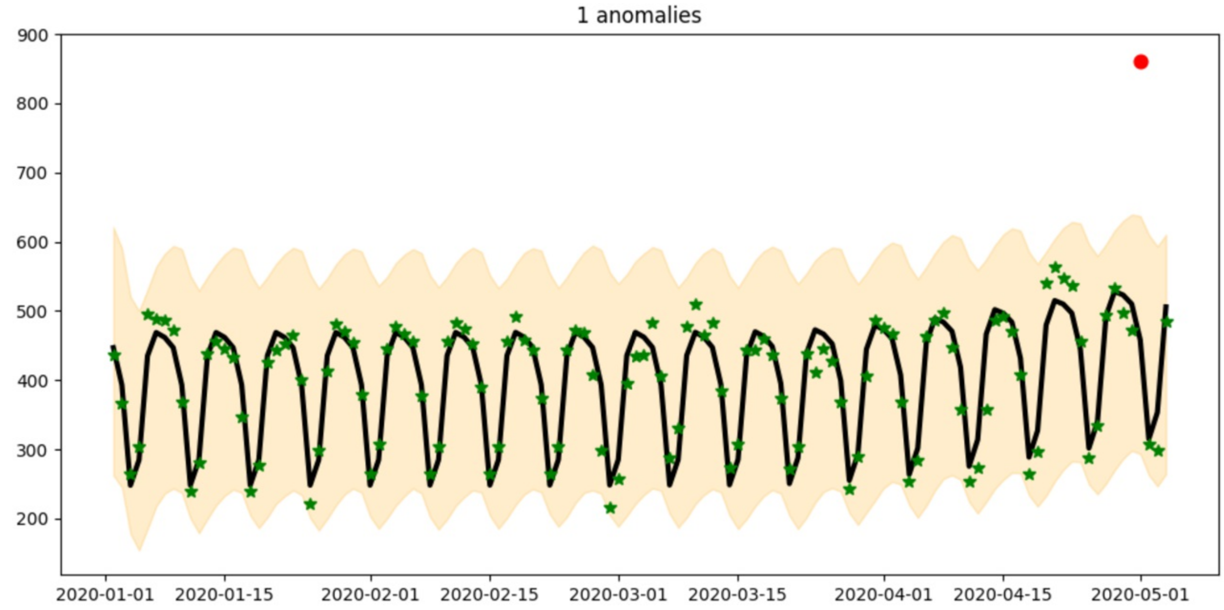
In addition to sudden spikes, dips, and trend changes of metered billing usage, our model also accounts for seasonal effects. Because metered billing is communicated via overage data, our model is also able to gracefully handle long periods of missing data.

Following are examples of anomaly detection results. The expected range shows as a yellow band. Acceptable metered billing usage shows as green stars in the band. Billing usage outside the band displays as a red dot.

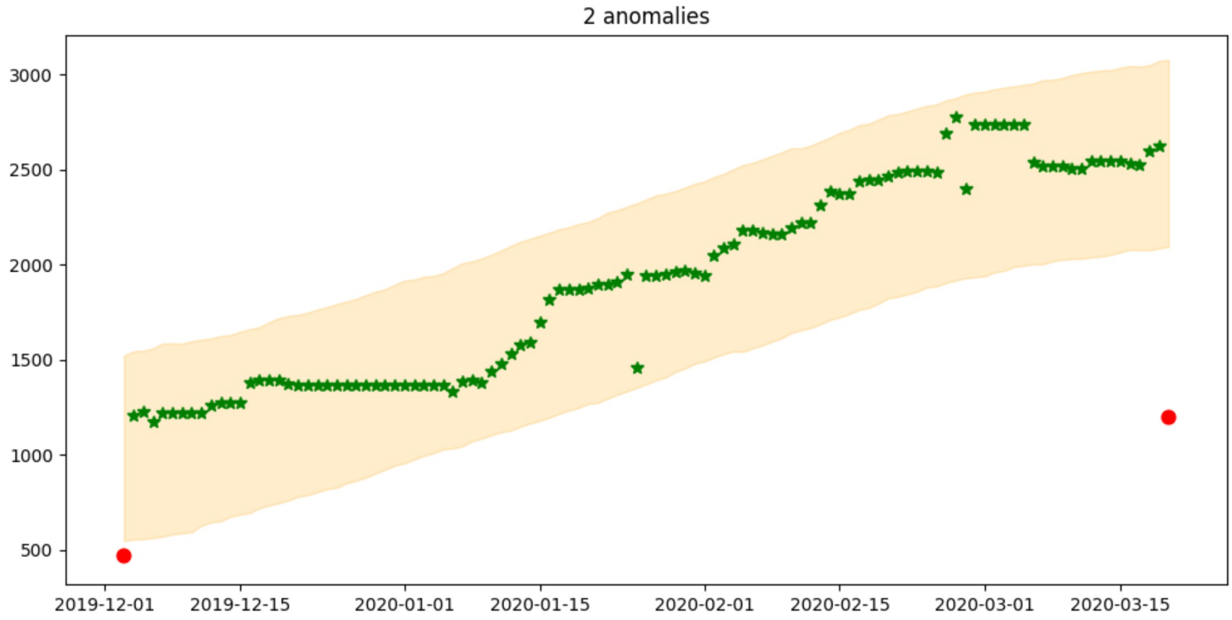
Anomalies detected outside a predictable trend:



Anomalies detected outside a recurring cyclic trend:



Anomalies detected in an upward trend:



How anomaly detection service works

Anomaly detection is enabled automatically for all metered billing usage. When you submit the usage events to Microsoft, anomaly detection service creates a model of expected values based on past usage data. This model runs weekly.

Anomaly detection functions on a per-meter and per-customer level. This means each meter with each customer will have a model trained based on this customer's past usage pattern of this meter.

The model works by generating retrospective confidence intervals. The time series forecast is a generalized additive model consisting of a trend prediction part and a seasonality part. Because the model is formulated as a regression task, it can gracefully handle long periods of missing data. If an observation falls outside of the predicted confidence intervals, it means that observation cannot be explained based on historical patterns of the metered billing and therefore may be an anomaly.

Anomaly detection notification

You can evaluate, manage, and acknowledge anomalies in Partner Center. To learn how, see Manage metered billing anomalies in Partner Center.

To ensure that your customers are not overcharged for metered usage, you should investigate if detected anomalies are real issues. If so, you can acknowledge the incorrect usage in Partner Center.

We recommended that you confirm if detected anomalies are normal usage. Doing so will improve the anomaly data we provide to you. If an anomaly represents a potentially high financial risk, we may contact you to confirm the usage.

When and how to get support

If you sent us an incorrect metered usage that did or will result in an undercharge to the customer, we will not initiate a bill to the customer for under-reported usage or pay you for that usage. You will have to bear the loss of revenue due to under-reporting.

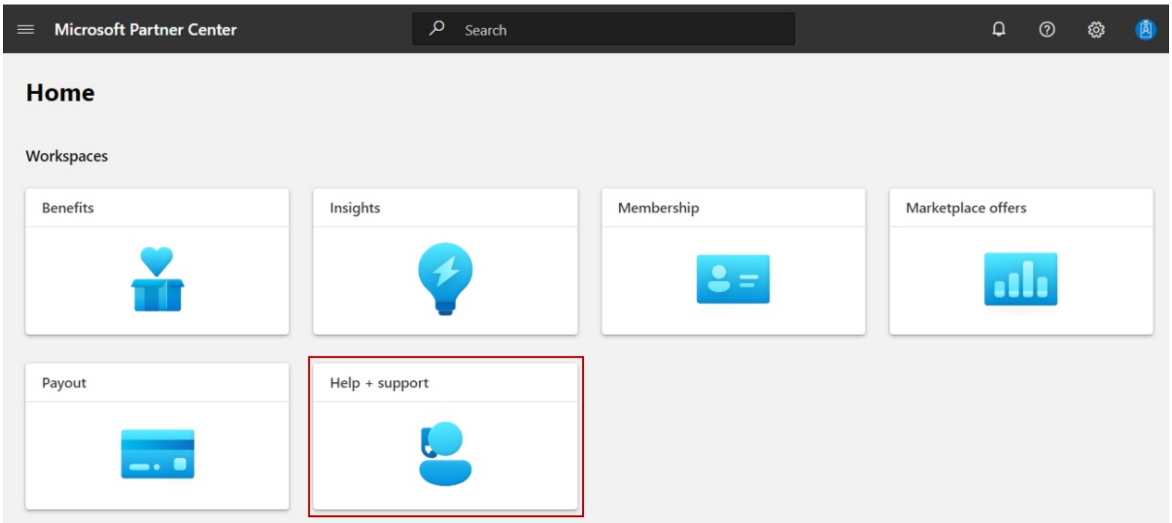
If one of the following cases applies, you can adjust the usage amount in Partner Center which will result in a refund or billing adjustment for your customers:

- You confirmed that one of the anomalies we found is a real issue and the incorrect usage would result in overcharging the customer.
- You discover that you sent incorrect usage to us and the incorrect usage would result in overcharging the customer.

To submit a support ticket related to metered billing anomalies:

- Workspaces view
- Current view

1. Sign in to Partner Center with your work account.
2. On the Home page, select the **Help + support** tile.



3. Under **My support requests**, select **+ New request**.
4. In the **Problem summary** box, enter **metered billing**.
5. In the **Problem type** box, select one of the following:
    - **Commercial Marketplace > Metered Billing > Wrong usage sent for Azure Applications offer**
    - **Commercial Marketplace > Metered Billing > Wrong usage sent for SaaS offer**
6. Under **Next step**, select **Review solutions**.
7. Review the recommended documents, if any or select **Provide issue details** to submit a support ticket.

For more publisher support options, see Support for the commercial marketplace program in Partner Center.

Next steps

- Learn about the Marketplace metering service API.
- Manage metered billing anomalies in Partner Center

Marketplace metering service authentication strategies

11/22/2021 • 3 minutes to read • Edit Online

Marketplace metering service supports two authentication strategies:

- Azure AD security token
- Managed identities

We will explain when and how to use the different authentication strategies to securely submit custom meters using Marketplace metering service.

Using the Azure AD security token

Applicable offer types are transactable SaaS and Azure Applications with managed application plan type.

Submit custom meters by using a predefined fixed Azure AD application ID to authenticate.

For SaaS offers, this is the only available option. It's a mandatory step for publishing any SaaS offer as described in register a SaaS application.

For Azure applications with managed application plan, you should consider using this strategy in the following cases:

- You already have a mechanism to communicate with your backend services, and you want to extend this mechanism to emit custom meters from a central service.
- You have complex custom meters logic. Run this logic in a central location, instead of the managed application resources.

Once you have registered your application, you can programmatically request an Azure AD security token. The publisher is expected to use this token and make a request to resolve it.

For more information about these tokens, see Azure Active Directory access tokens.

Get a token based on the Azure AD app

HTTP Method

POST

Request URL

`https://login.microsoftonline.com/*{tenantId}*/oauth2/token`

URI parameter

PARAMETER NAME	REQUIRED	DESCRIPTION
`tenantId`	True	Tenant ID of the registered Azure AD application.

Request header

HEADER NAME	REQUIRED	DESCRIPTION
`Content-Type`	True	Content type associated with the request. The default value is `application/x-www-form-urlencoded`.

Request body

PROPERTY NAME	REQUIRED	DESCRIPTION
`Grant_type`	True	Grant type. Use `client_credentials`.
`Client_id`	True	Client/app identifier associated with the Azure AD app.
`client_secret`	True	Secret associated with the Azure AD app.
`Resource`	True	Target resource for which the token is requested. Use `20e940b3-4c77-4b0b-9a53-9e16a1b010a7`.

Response

NAME	TYPE	DESCRIPTION
`200 OK`	`TokenResponse`	Request succeeded.

TokenResponse

Sample response token:

```
  {
      "token_type": "Bearer",
      "expires_in": "3600",
      "ext_expires_in": "0",
      "expires_on": "15251…",
      "not_before": "15251…",
      "resource": "20e940b3-4c77-4b0b-9a53-9e16a1b010a7",
      "access_token":
"eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsIng1dCI6ImlCakwxUmNxemhpeTRmcHhJeGRacW9oTTJZayIsImtpZCI6ImlCakwxUmNxemh
peTRmcHhJeGRacW9oTTJZayJ9…"
  }
```

Using the Azure-managed identities token

Applicable offer type is Azure applications with managed application plan type.

Using this approach will allow the deployed resources identity to authenticate to send custom meters usage events. You can embed the code that emits usage within the boundaries of your deployment.

NOTE

Publisher should ensure that the resources that emit usage are locked, so it will not be tampered.

Your managed application can contain different type of resources, from Virtual Machines to Azure Functions. For more information on how to authenticate using managed identities for different services, see how to use managed identities for Azure resources).

For example, follow the steps below to authenticate using a Windows VM,

1. Make sure Managed Identity is configured using one of the methods:
    - Azure portal UI
    - CLI
    - PowerShell
    - Azure Resource Manager Template
    - REST)
    - Azure SDKs
2. Get an access token for Marketplace metering service application ID (`20e940b3-4c77-4b0b-9a53-9e16a1b010a7`) using the system identity, RDP to the VM, open PowerShell console and run the command below

```
# curl is an alias to Web-Invoke PowerShell command
# Get system identity access tokenn
$MetadataUrl = "http://169.254.169.254/metadata/identity/oauth2/token?api-version=2018-02-01&resource=https%3A%2F%2Fmanagement.azure.com%2F"
$Token = curl -H @{"Metadata" = "true"} $MetadataUrl | Select-Object -Expand Content | ConvertFrom-Json
$Headers = @{}
$Headers.Add("Authorization","$($Token.token_type) "+ " " + "$($Token.access_token)")
```

3. Get the managed app ID from the current resource groups 'ManagedBy' property

```
# Get subscription and resource group
$metadata = curl -H @{'Metadata'='true'} http://169.254.169.254/metadata/instance?api-version=2019-06-01 | select -ExpandProperty Content | ConvertFrom-Json

# Make sure the system identity has at least reader permission on the resource group
$managementUrl = "https://management.azure.com/subscriptions/" + $metadata.compute.subscriptionId + "/resourceGroups/" + $metadata.compute.resourceGroupName + "?api-version=2019-10-01"
$resourceGroupInfo = curl -Headers $Headers $managementUrl | select -ExpandProperty Content | ConvertFrom-Json
$managedappId = $resourceGroupInfo.managedBy
```

4. Marketplace metering service requires to report usage on a `resourceID`, and `resourceUsageId` if a managed application.

```
# Get resourceUsageId from the managed app
$managedAppUrl = "https://management.azure.com/subscriptions/" + $metadata.compute.subscriptionId + "/resourceGroups/" + $metadata.compute.resourceGroupName + "/providers/Microsoft.Solutions/applications/" + $managedappId + "\?api-version=2019-07-01"
$ManagedApp = curl $managedAppUrl -H $Headers | Select-Object -Expand Content | ConvertFrom-Json
# Use this resource ID to emit usage
$resourceUsageId = $ManagedApp.properties.billingDetails.resourceUsageId
```

5. Use the Marketplace metering service API to emit usage.

Next steps

- Create an Azure application offer
- Plan a SaaS offer

Marketplace metered billing APIs

11/22/2021 • 9 minutes to read • Edit Online

The metered billing APIs should be used when the publisher creates custom metering dimensions for an offer to be published in Partner Center. Integration with the metered billing APIs is required for any purchased offer that has one or more plans with custom dimensions to emit usage events.

> **IMPORTANT**
>
> You must keep track of the usage in your code and only send usage events to Microsoft for the usage that is above the base fee.

For more information on creating custom metering dimensions for SaaS, see SaaS metered billing.

For more information on creating custom metering dimensions for an Azure Application offer with a Managed app plan, see Configure your Azure application offer setup details.

Enforcing TLS 1.2 Note

TLS version 1.2 version is enforced as the minimal version for HTTPS communications. Make sure you use this TLS version in your code. TLS version 1.0 and 1.1 are deprecated and connection attempts will be refused.

Metered billing single usage event

The usage event API should be called by the publisher to emit usage events against an active resource (subscribed) for the plan purchased by the specific customer. The usage event is emitted separately for each custom dimension of the plan defined by the publisher when publishing the offer.

Only one usage event can be emitted for each hour of a calendar day. For example, at 8:15am today, you can emit one usage event. If this event is accepted, the next usage event will be accepted from 9:00 am today. If you send an additional event between 8:15 and 8:59:59 today, it will be rejected as a duplicate. You should accumulate all units consumed in an hour and then emit it in a single event.

Only one usage event can be emitted for each hour of a calendar day per resource. If more than one unit is consumed in an hour, then accumulate all the units consumed in the hour and then emit it in a single event. Usage events can only be emitted for the past 24 hours. If you emit a usage event at any time between 8:00 and 8:59:59 (and it is accepted) and send an additional event for the same day between 8:00 and 8:59:59, it will be rejected as a duplicate.

POST: `https://marketplaceapi.microsoft.com/api/usageEvent?api-version=<ApiVersion>`

Query parameters:

PARAMETER	RECOMMENDATION
`ApiVersion`	Use 2018-08-31.

Request headers:

CONTENT-TYPE	USE `APPLICATION/JSON`
`x-ms-requestid`	Unique string value for tracking the request from the client, preferably a GUID. If this value is not provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	Unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the ISV that is making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained for • SaaS in Get the token with an HTTP POST. • Managed application in Authentication strategies.

Request body example:

```
{
  "resourceId": <guid>, // unique identifier of the resource against which usage is emitted.
  "quantity": 5.0, // how many units were consumed for the date and hour specified in effectiveStartTime,
must be greater than 0, can be integer or float value
  "dimension": "dim1", // custom dimension identifier
  "effectiveStartTime": "2018-12-01T08:30:14", // time in UTC when the usage event occurred, from now and
until 24 hours back
  "planId": "plan1", // id of the plan purchased for the offer
}
```

> **NOTE**
> `resourceId` has different meaning for SaaS app and for Managed app emitting custom meter.

For Azure Application Managed Apps plans, the `resourceId` is the Managed App `resource group Id`. An example script for fetching it can be found in using the Azure-managed identities token.

For SaaS offers, the `resourceId` is the SaaS subscription ID. For more details on SaaS subscriptions, see list subscriptions.

Responses

Code: 200
OK. The usage emission was accepted and recorded on Microsoft side for further processing and billing.

Response payload example:

```
{
  "usageEventId": <guid>, // unique identifier associated with the usage event in Microsoft records
  "status": "Accepted" // this is the only value in case of single usage event
  "messageTime": "2020-01-12T13:19:35.3458658Z", // time in UTC this event was accepted
  "resourceId": <guid>, // unique identifier of the resource against which usage is emitted. For SaaS it's
the subscriptionId.
  "quantity": 5.0, // amount of emitted units as recorded by Microsoft
  "dimension": "dim1", // custom dimension identifier
  "effectiveStartTime": "2018-12-01T08:30:14", // time in UTC when the usage event occurred, as sent by the
ISV
  "planId": "plan1", // id of the plan purchased for the offer
}
```

Code: 400
Bad request.

- Missing or invalid request data provided.
- `effectiveStartTime` is more than 24 hours in the past. Event has expired.
- SaaS subscription is not in Subscribed status.

Response payload example:

```
{
  "message": "One or more errors have occurred.",
  "target": "usageEventRequest",
  "details": [
    {
      "message": "The resourceId is required.",
      "target": "ResourceId",
      "code": "BadArgument"
    }
  ],
  "code": "BadArgument"
}
```

Code: 403

Forbidden. The authorization token isn't provided, is invalid or expired. Or the request is attempting to access a subscription for an offer that was published with a different Azure AD App ID from the one used to create the authorization token.

Code: 409
Conflict. A usage event has already been successfully reported for the specified resource ID, effective usage date and hour.

Response payload example:

```
{
  "additionalInfo": {
    "acceptedMessage": {
      "usageEventId": "<guid>", //unique identifier associated with the usage event in Microsoft records
      "status": "Duplicate",
      "messageTime": "2020-01-12T13:19:35.3458658Z",
      "resourceId": "<guid>", //unique identifier of the resource against which usage is emitted.
      "quantity": 1.0,
      "dimension": "dim1",
      "effectiveStartTime": "2020-01-12T11:03:28.14Z",
      "planId": "plan1"
    }
  },
  "message": "This usage event already exist.",
  "code": "Conflict"
}
```

Metered billing batch usage event

The batch usage event API allows you to emit usage events for more than one purchased resource at once. It also allows you to emit several usage events for the same resource as long as they are for different calendar hours. The maximal number of events in a single batch is 25.

POST: `https://marketplaceapi.microsoft.com/api/batchUsageEvent?api-version=<ApiVersion>`

Query parameters:

PARAMETER	RECOMMENDATION
`ApiVersion`	Use 2018-08-31.

Request headers:

CONTENT-TYPE	USE `APPLICATION/JSON`
`x-ms-requestid`	Unique string value for tracking the request from the client, preferably a GUID. If this value is not provided, one will be generated, and provided in the response headers.
`x-ms-correlationid`	Unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated, and provided in the response headers.
`authorization`	A unique access token that identifies the ISV that is making this API call. The format is `Bearer <access_token>` when the token value is retrieved by the publisher as explained for • SaaS in Get the token with an HTTP POST. • Managed application in Authentication strategies.

> **NOTE**
> In the request body, the resource identifier has different meanings for SaaS app and for Azure Managed app emitting custom meter. The resource identifier for SaaS App is `resourceID`. The resource identifier for Azure Application Managed Apps plans is `resourceUri`.

For SaaS offers, the `resourceId` is the SaaS subscription ID. For more details on SaaS subscriptions, see list subscriptions.

Request body example for SaaS apps:

```
{
  "request": [ // list of usage events for the same or different resources of the publisher
    { // first event
      "resourceId": "<guid1>", // Unique identifier of the resource against which usage is emitted.
      "quantity": 5.0, // how many units were consumed for the date and hour specified in
effectiveStartTime, must be greater than 0, can be integer or float value
      "dimension": "dim1", //Custom dimension identifier
      "effectiveStartTime": "2018-12-01T08:30:14",//Time in UTC when the usage event occurred, from now and
until 24 hours back
      "planId": "plan1", // id of the plan purchased for the offer
    },
    { // next event
      "resourceId": "<guid2>",
      "quantity": 39.0,
      "dimension": "email",
      "effectiveStartTime": "2018-11-01T23:33:10
      "planId": "gold", // id of the plan purchased for the offer
    }
  ]
}
```

For Azure Application Managed Apps plans, the `resourceUri` is the Managed App `resource group Id`. An example script for fetching it can be found in using the Azure-managed identities token.

Request body example for Azure Application managed apps:

```
{
  "request": [ // list of usage events for the same or different resources of the publisher
    { // first event
      "resourceUri": "<guid1>", // Unique identifier of the resource against which usage is emitted.
      "quantity": 5.0, // how many units were consumed for the date and hour specified in
effectiveStartTime, must be greater than 0, can be integer or float value
      "dimension": "dim1", //Custom dimension identifier
      "effectiveStartTime": "2018-12-01T08:30:14",//Time in UTC when the usage event occurred, from now and
until 24 hours back
      "planId": "plan1", // id of the plan purchased for the offer
    },
    { // next event
      "resourceId": "<guid2>",
      "quantity": 39.0,
      "dimension": "email",
      "effectiveStartTime": "2018-11-01T23:33:10
      "planId": "gold", // id of the plan purchased for the offer
    }
  ]
}
```

Responses

Code: 200
OK. The batch usage emission was accepted and recorded on Microsoft side for further processing and billing. The response list is returned with status for each individual event in the batch. You should iterate through the response payload to understand the responses for each individual usage event sent as part of the batch event.

Response payload example:

```json
{
  "count": 2, // number of records in the response
  "result": [
    { // first response
      "usageEventId": "<guid>", // unique identifier associated with the usage event in Microsoft records
      "status": "Accepted" // see list of possible statuses below,
      "messageTime": "2020-01-12T13:19:35.3458658Z", // Time in UTC this event was accepted by Microsoft,
      "resourceId": "<guid1>", // unique identifier of the resource against which usage is emitted.
      "quantity": 5.0, // amount of emitted units as recorded by Microsoft
      "dimension": "dim1", // custom dimension identifier
      "effectiveStartTime": "2018-12-01T08:30:14",// time in UTC when the usage event occurred, as sent by
the ISV
      "planId": "plan1", // id of the plan purchased for the offer
    },
    { // second response
      "status": "Duplicate",
      "messageTime": "0001-01-01T00:00:00",
      "error": {
        "additionalInfo": {
          "acceptedMessage": {
            "usageEventId": "<guid>",
            "status": "Duplicate",
            "messageTime": "2020-01-12T13:19:35.3458658Z",
            "resourceId": "<guid2>",
            "quantity": 1.0,
            "dimension": "email",
            "effectiveStartTime": "2020-01-12T11:03:28.14Z",
            "planId": "gold"
          }
        },
        "message": "This usage event already exist.",
        "code": "Conflict"
      },
      "resourceId": "<guid2>",
      "quantity": 1.0,
      "dimension": "email",
      "effectiveStartTime": "2020-01-12T11:03:28.14Z",
      "planId": "gold"
    }
  ]
}
```

Description of status code referenced in `BatchUsageEvent` API response:

STATUS CODE	DESCRIPTION
`Accepted`	Accepted.
`Expired`	Expired usage.
`Duplicate`	Duplicate usage provided.
`Error`	Error code.
`ResourceNotFound`	The usage resource provided is invalid.
`ResourceNotAuthorized`	You are not authorized to provide usage for this resource.
`ResourceNotActive`	The resource is suspended or was never activated.

STATUS CODE	DESCRIPTION
`InvalidDimension`	The dimension for which the usage is passed is invalid for this offer/plan.
`InvalidQuantity`	The quantity passed is lower or equal to 0.
`BadArgument`	The input is missing or malformed.

Code: 400
Bad request. The batch contained more than 25 usage events.

Code: 403
Forbidden. The authorization token isn't provided, is invalid or expired. Or the request is attempting to access a subscription for an offer that was published with a different Azure AD App ID from the one used to create the authorization token.

Development and testing best practices

To test the custom meter emission, implement the integration with metering API, create a plan for your published SaaS offer with custom dimensions defined in it with zero price per unit. And publish this offer as preview so only limited users would be able to access and test the integration.

You can also use private plan for an existing live offer to limit the access to this plan during testing to limited audience.

Get support

Follow the instruction in Support for the commercial marketplace program in Partner Center to understand publisher support options and open a support ticket with Microsoft.

Next steps

For more information on metering service APIs , see Marketplace metering service APIs FAQ.

SaaS fulfillment APIs in the Microsoft commercial marketplace

11/22/2021 • 2 minutes to read • Edit Online

The SaaS Fulfillment APIs enable publishers, also known as independent software vendors (ISVs), to publish and sell their SaaS applications in Microsoft AppSource, Azure Marketplace, and Azure portal. These APIs enable ISV applications to participate in all commerce enabled channels: direct, partner-led (reseller), and field-led. Integrating with these APIs is a requirement for creating and publishing a transactable SaaS offer in Partner Center.

To learn about the SaaS fulfillment APIs, we recommend you also read the following articles:

- Managing the SaaS subscription life cycle
- SaaS fulfillment Subscription APIs v2
- SaaS fulfillment Operations APIs v2
- Implementing a webhook on the SaaS service
- Common questions about SaaS fulfillment APIs

API flows

ISVs must implement the following API flows by adding into their SaaS service code to maintain the same subscription status for both ISVs and Microsoft:

- Landing page flow: Microsoft notifies the publisher that the publisher's SaaS offer has been purchased by a customer in the marketplace.
- Activation flow: Publisher notifies Microsoft that a newly purchased SaaS account has been configured on the publisher's side.
- Update flow: Change of purchased plan or the number of purchased seats or both.
- Suspend and reinstate flow: Suspending the purchased SaaS offer in case the customer's payment method is no longer valid. The suspended offer can be reinstated when the issue with payment method is resolved.
- Webhook flows: Microsoft will notify the publisher about SaaS subscription changes and cancellation triggered by the customer from the Microsoft side.

For the cancellation of the purchased SaaS subscription, integration is optional, because it can be done by the customer from Microsoft side.

Correct integration with SaaS Fulfillment APIs is critical for making sure that:

- End customers who purchased the publisher's SaaS offer are billed correctly by Microsoft.
- End customers are getting the correct user experience purchasing, configuring, using, and managing SaaS subscriptions purchased in the marketplace.

These APIs enable the publisher's offers to participate in all commerce enabled channels:

- Direct
- Partner-led (reseller, CSP)
- Field-led

In the reseller (CSP) scenario, a CSP is purchasing the SaaS offer on behalf of the end customer. A customer is expected to use the SaaS offer, but the CSP is the entity that does the following tasks:

- Bills the customer
- Changes subscription plans/amount of purchased seats
- Cancels the subscriptions

The Publisher is not required to implement any of the API call flows differently for this scenario.

For more information about CSP, refer to https://partner.microsoft.com/licensing.

> **WARNING**
>
> The current version of this API is version 2, which should be used for all new SaaS offers. Version 1 of the API is deprecated and is being maintained to support existing offers.

> **NOTE**
>
> The SaaS fulfillment APIs are only intended to be called from a backend service of the publisher. Integration with the APIs directly from the publisher's web page is not supported. Only service-to-service authentication flow should be used.

Next steps

- If you have not already done so, register your SaaS application in the Azure portal as explained in Register an Azure AD Application. Afterwards, use the most current version of this interface for development: SaaS fulfillment Subscription APIs v2 and SaaS fulfillment Operations APIs v2.

Register a SaaS application

11/22/2021 • 4 minutes to read • Edit Online

This article explains how to register a SaaS application using the Microsoft Azure portal and how to get publisher's access token (Azure Active Directory access token). The publisher will use this token to authenticate the SaaS application by calling the SaaS Fulfillment APIs. The Fulfillment APIs use the OAuth 2.0 client credentials to grant flow on Azure Active Directory (v1.0) endpoints to make a service-to-service access token request.

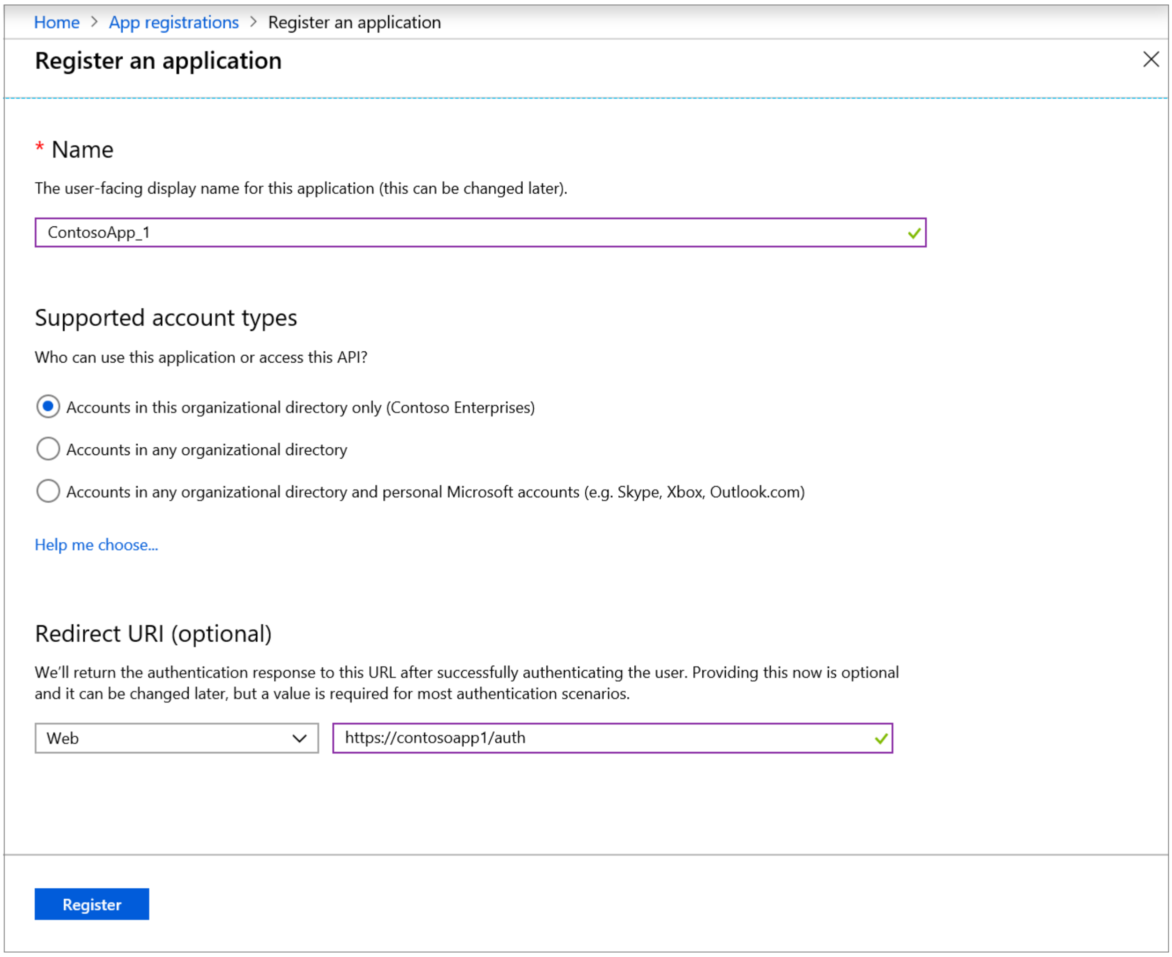
Azure Marketplace does not impose any constraints on the authentication method that your SaaS service uses for end users. The flow below is required only for authenticating the SaaS Service in Azure Marketplace.

For more information about Azure AD (Active Directory), see What is authentication?

Register an Azure AD-secured app

Any application that wants to use the capabilities of Azure AD must first be registered in an Azure AD tenant. This registration process involves giving Azure AD some details about your application. To register a new application using the Azure portal, perform the following steps:

1. Sign in to the Azure portal.
2. If your account gives you access to more than one, select your account in the top-right corner. Then set your portal session to the desired Azure AD tenant.
3. In the left-hand navigation pane, select the **Azure Active Directory** service, select **App registrations**, and then select **New application registration**.



4. On the Create page, enter your application's registration information:

   - **Name**: Enter a meaningful application name
   - **Application type**:

     Select **Web app / API** for client applications) and resource/API applications) that are installed on a secure server. This setting is used for OAuth confidential web clients) and public user-agent-based clients). The same application can also expose both a client and resource/API.

     For specific examples of web applications, check out the quickstart guided setups that are available in the Get Started section of the Azure AD Developers Guide.

5. When finished, select **Register**. Azure AD assigns a unique *Application ID* to your new application. We recommend registering one app that accesses the API only, and as single tenant.

6. To create client secret, navigate to **Certificates & secrets page** and select **+New client secret**. Be sure to copy the secret value to use it in your code.

The **Azure AD app ID** is associated to your publisher ID, so make sure that the same *app ID* is used in all your offers.

> **NOTE**
>
> If the publisher has two or more different accounts in Partner Center, the Azure AD app registration details can be used in one account only. Using the same tenant ID, app ID pair for an offer under a different publisher account is not supported.

How to get the publisher's authorization token

After you register your application, you can programmatically request the publisher's authorization token (Azure

AD access token, using Azure AD V1 endpoint). The publisher must use this token when calling the various SaaS Fulfillment APIs. This token is only valid for one hour.

For more information about these tokens, see Azure Active Directory access tokens. In the flow below V1 endpoint token is used.

Get the token with an HTTP POST

HTTP Method

Post

Request URL

`https://login.microsoftonline.com/*{tenantId}*/oauth2/token`

URI parameter

PARAMETER NAME	REQUIRED	DESCRIPTION
`tenantId`	True	Tenant ID of the registered AAD application.

Request header

HEADER NAME	REQUIRED	DESCRIPTION
`content-type`	True	Content type associated with the request. The default value is `application/x-www-form-urlencoded`.

Request body

PROPERTY NAME	REQUIRED	DESCRIPTION
`grant_type`	True	Grant type. Use `"client_credentials"`.
`client_id`	True	Client/app identifier associated with the Azure AD app.
`client_secret`	True	Secret associated with the Azure AD app.
`resource`	True	Target resource for which the token is requested. Use `20e940b3-4c77-4b0b-9a53-9e16a1b010a7` because Marketplace SaaS API is always the target resource in this case.

Response

NAME	TYPE	DESCRIPTION
200 OK	TokenResponse	Request succeeded.

TokenResponse

Sample response:

```
{
      "token_type": "Bearer",
      "expires_in": "3600",
      "ext_expires_in": "0",
      "expires_on": "15251…",
      "not_before": "15251…",
      "resource": "20e940b3-4c77-4b0b-9a53-9e16a1b010a7",
      "access_token":
"eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsIng1dCI6ImlCakwxUmNxemhpeTRmcHhJeGRacW9oTTJZayIsImtpZCI6ImlCakwxUmNxemhpeTRmcHhJeGRacW9oTTJZayJ9…"
  }
```

ELEMENT	DESCRIPTION
`access_token`	This element is the `<access_token>` that you will pass as the authorization parameter when calling all SaaS fulfillment and Marketplace metering APIs. When calling a secured REST API, the token is embedded in the `Authorization` request header field as a "bearer" token, allowing the API to authenticate the caller.
`expires_in`	The number of seconds the access token continues to be valid, before expiring, from time of issuance. Time of issuance can be found in the token's `iat` claim.
`expires_on`	The timespan when the access token expires. The date is represented as the number of seconds from "1970-01-01T0:0:0Z UTC" (corresponds to the token's `exp` claim).
`not_before`	The timespan when the access token takes effect, and can be accepted. The date is represented as the number of seconds from "1970-01-01T0:0:0Z UTC" (corresponds to the token's `nbf` claim).
`resource`	The resource the access token was requested for, which matches the `resource` query string parameter of the request.
`token_type`	The type of token, which is a "Bearer" access token, which means the resource can give access to the bearer of this token.

Next steps

Your Azure AD-secured app can now use the SaaS Fulfillment Subscription APIs Version 2 and SaaS Fulfillment Operations APIs Version 2.

Managing the SaaS subscription life cycle

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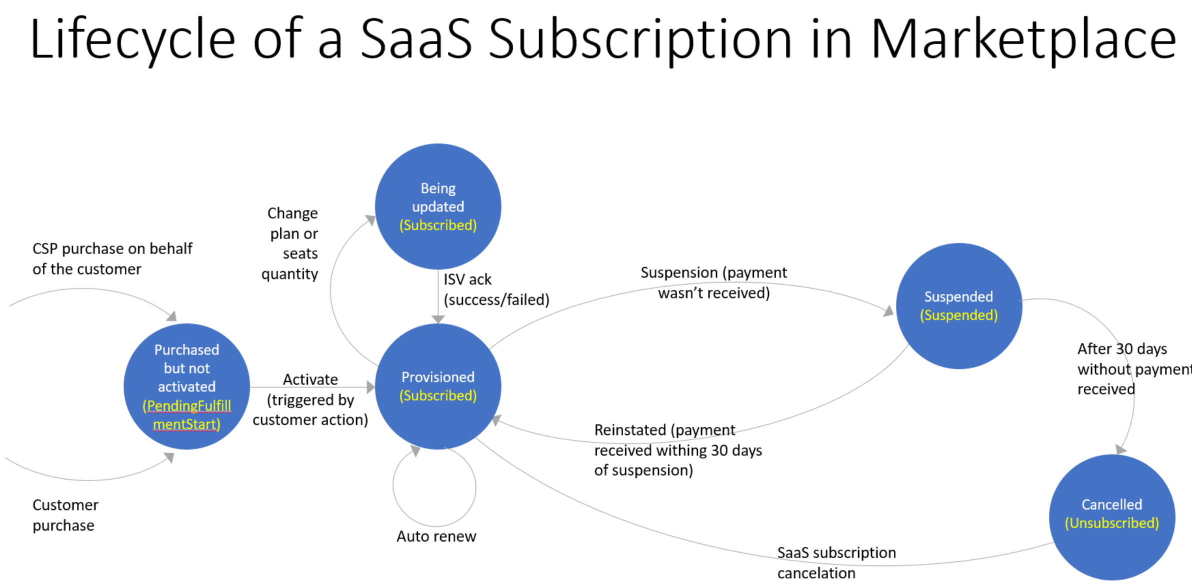
The commercial marketplace manages the entire life cycle of a SaaS subscription after its purchase by the end user. It uses the landing page, Fulfillment APIs, Operations APIs, and the webhook as a mechanism to drive the actual SaaS subscription activation, usage, updates, and cancellation. The end user's bill is based on the state of the SaaS subscription that Microsoft maintains.

States of a SaaS subscription

The following diagram shows the states of a SaaS subscription and the applicable actions.



Purchased but not yet activated (*PendingFulfillmentStart*)

After an end user or cloud solution provider (CSP) purchases a SaaS offer in the commercial marketplace, the publisher is notified of the purchase. The publisher can then create and configure a new SaaS account on the publisher side for the end user.

For account creation to happen:

1. The customer selects the **Configure account now** button that's available for a SaaS offer after its successful purchase in Microsoft AppSource or the Azure portal. Alternatively, the customer can use the **Configure now** button in the email that they will receive shortly after the purchase.
2. Microsoft then notifies the partner about the purchase by opening the landing page URL with the token parameter (the purchase identification token from the commercial marketplace) in the new browser tab.

An example of such call is `https://contoso.com/signup?token=<blob>`, but the landing page URL for this SaaS offer in Partner Center is configured as `https://contoso.com/signup`. This token provides the publisher with an ID that uniquely identifies the SaaS purchase and the customer.

TIP

Don't include the pound sign character (#) in the landing page URL. Otherwise, customers will not be able to access your landing page.

> **IMPORTANT**
>
> The landing page URL must be up and running all day, every day, and ready to receive new calls from Microsoft at all times. If the landing page becomes unavailable, customers won't be able to sign up for the SaaS service and start using it.

Next, the publisher must pass the *token* back to Microsoft by calling the SaaS Resolve API, and entering the token as the value of the `x-ms-marketplace-token header` header parameter. As the result of the Resolve API call, the token is exchanged for details of the SaaS purchase such as the unique ID of the purchase, purchased offer ID, and purchased plan ID.

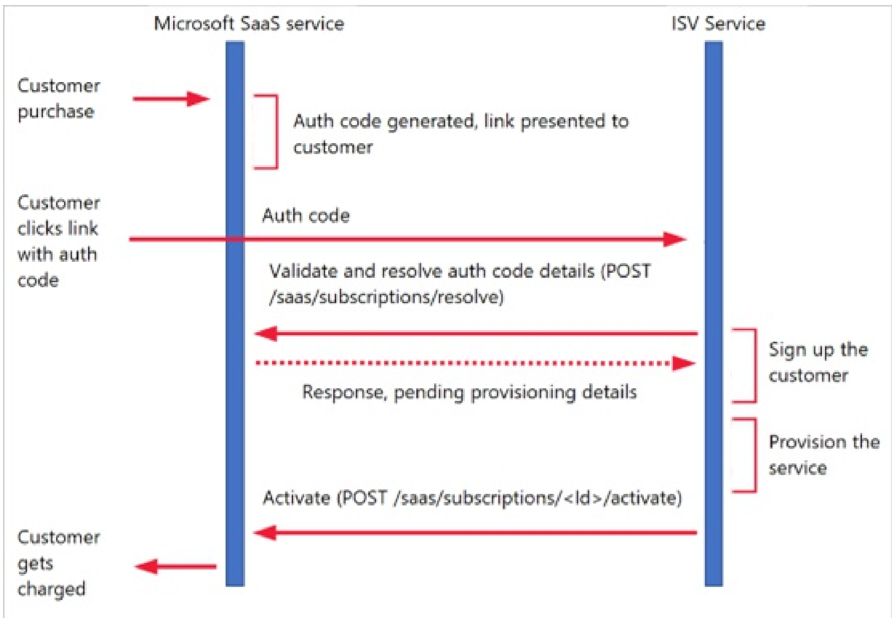
On the landing page, the customer should be signed in to the new or existing SaaS account via Azure Active Directory (Azure AD) single sign-on (SSO).

> **NOTE**
>
> The publisher won't be notified of the SaaS purchase until the customer initiates the configuration process from the Microsoft side.

The publisher should implement SSO to provide the user experience required by Microsoft for this flow. Make sure to use the multitenant Azure AD application and allow both work and school accounts or personal Microsoft accounts when configuring SSO. This requirement applies only to the landing page, for users who are redirected to the SaaS service when already signed in with Microsoft credentials. SSO isn't required for all sign-ins to the SaaS service.

> **NOTE**
>
> If SSO requires that an administrator must grant permission to an app, the description of the offer in Partner Center must disclose that admin-level access is required. This disclosure is to comply with commercial marketplace certification policies.

After sign in, the customer should complete the SaaS configuration on the publisher side. Then the publisher must call the Activate Subscription API to send a signal to Azure Marketplace that the provisioning of the SaaS account is complete. This action will start the customer's billing cycle. If the Activate Subscription API call is not successful, the customer isn't billed for the purchase.



Active (*Subscribed*)

Active (Subscribed) is the steady state of a provisioned SaaS subscription. After the Microsoft side has processed the Activate Subscription API call, the SaaS subscription is marked as *Subscribed*. The customer can now use the SaaS service on the publisher's side and will be billed.

When a SaaS subscription is already active, the customer can select **Manage SaaS experience** from the Azure portal or Microsoft 365 Admin Center. This action also causes Microsoft to call the **landing page URL** with the *token* parameter, as happens in the Activate flow. The publisher should distinguish between new purchases and the management of existing SaaS accounts, and handle this landing page URL call accordingly.

Being updated (*Subscribed*)

This action means that an update to an existing active SaaS subscription is being processed by both Microsoft and the publisher. Such an update can be initiated by:

- The customer from the commercial marketplace.
- The CSP from the commercial marketplace.
- The customer from the publisher's SaaS site (but not for CSP-made purchases).

Two types of updates are available for a SaaS subscription:

- Update plan when the customer chooses another plan for the subscription.
- Update quantity when the customer changes the number of purchased seats for the subscription.

Only an active subscription can be updated. While the subscription is being updated, its state remains Active on the Microsoft side.

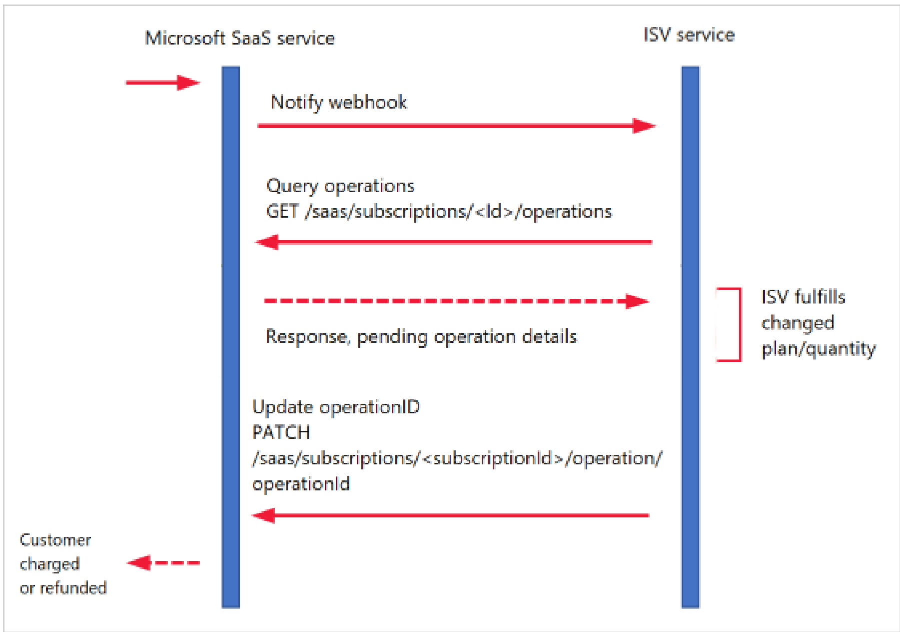
Update initiated from the commercial marketplace

In this flow, the customer changes the subscription plan or quantity of seats from the Azure portal or Microsoft 365 Admin Center.

1. After an update is entered, Microsoft will call the publisher's webhook URL, configured in the **Connection webhook** field on the *Technical configuration* page in Partner Center, with an appropriate value for *action* and other relevant parameters.
2. The publisher side should make the required changes to the SaaS service, and notify Microsoft when finished by calling the Update Status of Operation API.
3. If the patch is sent with *fail* status, the update process won't finish on the Microsoft side. The SaaS subscription will keep the existing plan and quantity of seats.

> **NOTE**
>
> The publisher should invoke PATCH to update the Status of Operation API with a Failure/Success response *within a 10-second time window* after receiving the webhook notification. If PATCH of operation status is not received within the 10 seconds, the change plan is *automatically patched as Success*.

The sequence of API calls for an update scenario that's initiated from the commercial marketplace is shown in the following diagram.



Update initiated from the publisher

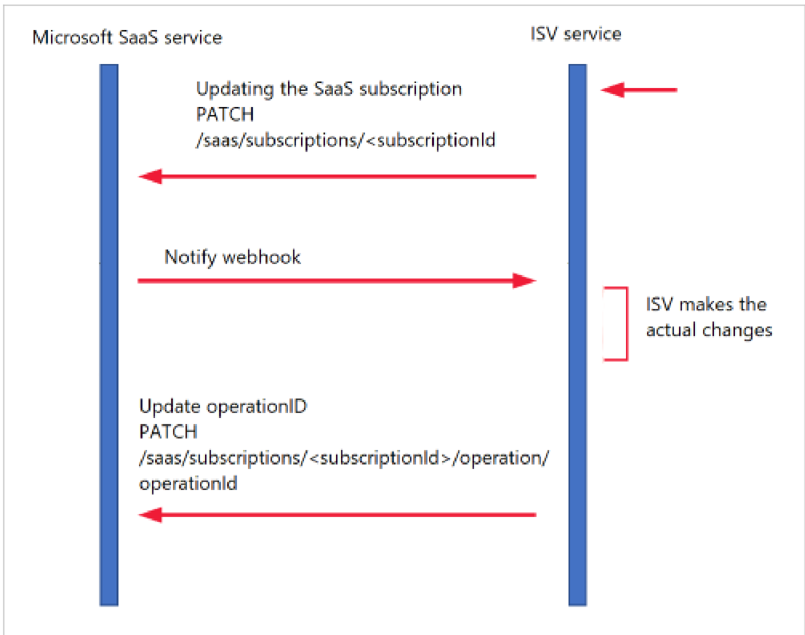
In this flow, the customer changes the subscription plan or quantity of seats purchased from the SaaS service itself.

1. Before making the requested change on the publisher side, the publisher code must call the Change Plan API or the Change Quantity API or both.

2. Microsoft will apply the change to the subscription, and then notify the publisher via **Connection webhook** to apply the same change.

3. Only then should the publisher make the required change to the SaaS subscription, and notify Microsoft when the change is done by calling Update Status of Operation API.

The sequence of API calls for an update scenario that's initiated from the publisher side is shown in the following diagram.



Suspended (*Suspended*)

This state indicates that a customer's payment for the SaaS service was not received. Microsoft will notify the publisher of this change in the SaaS subscription status. The notification is done via a call to webhook with the *action* parameter set to *Suspended*.

The publisher might or might not make changes to the SaaS service on the publisher side. We recommend that the publisher makes this information available to the suspended customer and limits or blocks the customer's access to the SaaS service. There's a probability that the payment will never be received.

> **NOTE**
>
> Microsoft gives the customer a 30-day grace period before automatically canceling the subscription. After the 30-day grace period is over the webhook will receive an `Unsubscribe` action.

When a subscription is in the *Suspended* state:

- The partner or ISV must keep the SaaS account in a recoverable state, so that full functionality can be restored without any loss of data or settings.
- The partner or ISV should expect a request to reinstate the subscription, if the payment is received during the grace period, or a request to de-provision the subscription at the end of the grace period. Both requests will be sent via the webhook mechanism.

The subscription state is changed to Suspended on Microsoft side before the publisher takes any action. Only Active subscriptions can be suspended.

Reinstated (*Suspended*)

This action indicates that the customer's payment instrument has become valid again, a payment has been made for the SaaS subscription, and the subscription is being reinstated. In this case:

1. Microsoft calls webhook with an *action* parameter set to the *Reinstate* value.
2. The publisher makes sure that the subscription is fully operational again on the publisher side.
3. The publisher calls the Patch Operation API with success status.
4. The Reinstate process is successful and the customer is billed again for the SaaS subscription.

If the patch is sent with *fail* status, the reinstatement process won't finish on the Microsoft side and the subscription will remain *Suspended*.

Only a suspended subscription can be reinstated. The suspended SaaS subscription remains in a *Suspended* state while it's being reinstated. After this operation has finished, the subscription's status will become *Active*.

Renewed (*Subscribed*)

The SaaS subscription is automatically renewed by Microsoft at the end of the subscription term of a month or a year. The default for the auto-renewal setting is *true* for all SaaS subscriptions. Active SaaS subscriptions will continue to be renewed with a regular cadence. Microsoft provides inform-only webhook notifications for renew events. A customer can turn off automatic renewal for a SaaS subscription via the Microsoft 365 Admin Portal. In this case, the SaaS subscription will be automatically canceled at the end of the current billing term. Customers can also cancel the SaaS subscription at any time.

Only active subscriptions are automatically renewed. Subscriptions stay active during the renewal process, and if automatic renewal succeeds. After renewal, the start and end dates of the subscription term are updated to the new term's dates.

If an auto-renewal fails because of an issue with payment, the subscription will become *Suspended* and the publisher will be notified.

Canceled (*Unsubscribed*)

Subscriptions reach this state in response to an explicit customer or CSP action by the cancellation of a subscription from the publisher site, the Azure portal, or Microsoft 365 Admin Center. A subscription can also be canceled implicitly, as a result of nonpayment of dues, after being in the *Suspended* state for 30 days.

After the publisher receives a cancellation webhook call, they should retain customer data for recovery on request for at least seven days. Only then can customer data be deleted.

A SaaS subscription can be canceled at any point in its life cycle. After a subscription is canceled, it can't be reactivated.

Next steps

- SaaS fulfillment Subscription APIs v2
- SaaS fulfillment operations APIs v2

SaaS fulfillment Subscription APIs v2 in Microsoft commercial marketplace

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This article describes version 2 of the SaaS fulfillment subscription APIs.

Resolve a purchased subscription

The resolve endpoint enables the publisher to exchange the purchase identification token from the commercial marketplace (referred to as *token* in Purchased but not yet activated) to a persistent purchased SaaS subscription ID and its details.

When a customer is redirected to the partner's landing page URL, the customer identification token is passed as the *token* parameter in this URL call. The partner is expected to use this token and make a request to resolve it. The Resolve API response contains the SaaS subscription ID and other details to uniquely identify the purchase. The *token* provided with the landing page URL call is usually valid for 24 hours. If the *token* that you receive has already expired, we recommend that you provide the following guidance to the end user:

"We couldn't identify this purchase. Please reopen this SaaS subscription in the Azure portal or in Microsoft 365 Admin Center and select "Configure Account" or "Manage Account" again."

Calling the Resolve API will return subscription details and status for SaaS subscriptions in all supported statuses.

Post `https://marketplaceapi.microsoft.com/api/saas/subscriptions/resolve?api-version=<ApiVersion>`

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher making this API call. The format is `"Bearer <accessaccess_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.
`x-ms-marketplace-token`	The purchase identification *token* parameter to resolve. The token is passed in the landing page URL call when the customer is redirected to the SaaS partner's website (for example: `https://contoso.com/signup?token=<token><authorization_token>`). Note that the *token* value being encoded is part of the landing page URL, so it needs to be decoded before it's used as a parameter in this API call. Here's an example of an encoded string in the URL: `contoso.com/signup?token=ab%2Bcd%2Fef`, where *token* is `ab%2Bcd%2Fef`. The same token decoded will be: `Ab+cd/ef`

Response codes:

Code: 200 Returns unique SaaS subscription identifiers based on the `x-ms-marketplace-token` provided.

Response body example:

```
{
  "id": "<guid>", // purchased SaaS subscription ID
  "subscriptionName": "Contoso Cloud Solution", // SaaS subscription name
  "offerId": "offer1", // purchased offer ID
  "planId": "silver", // purchased offer's plan ID
  "quantity": "20", // number of purchased seats, might be empty if the plan is not per seat
  "subscription": { // full SaaS subscription details, see Get Subscription APIs response body for full
description
    "id": "<guid>",
    "publisherId": "contoso",
    "offerId": "offer1",
    "name": "Contoso Cloud Solution",
    "saasSubscriptionStatus": " PendingFulfillmentStart ",
    "beneficiary": {
      "emailId": "test@test.com",
      "objectId": "<guid>",
      "tenantId": "<guid>",
      "pid": "<ID of the user>"
    },
    "purchaser": {
      "emailId": "test@test.com",
      "objectId": "<guid>",
      "tenantId": "<guid>",
      "pid": "<ID of the user>"
    },
    "planId": "silver",
    "term": {
      "termUnit": "P1M",
      "startDate": "2019-05-31",
      "endDate": "2019-06-29"
    },
    "isTest": true,
    "isFreeTrial": false,
    "allowedCustomerOperations": ["Delete", "Update", "Read"],
    "sandboxType": "None",
    "sessionMode": "None"
  }
}
```

Code: 400 Bad request. `x-ms-marketplace-token` is missing, malformed, invalid, or expired.

Code: 403 Forbidden. The authorization token is invalid, expired, or was not provided. The request is attempting to access a SaaS subscription for an offer that was published with a different Azure AD app ID from the one used to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

Activate a subscription

After the SaaS account is configured for an end user, the publisher must call the Activate Subscription API on the Microsoft side. The customer won't be billed unless this API call is successful.

Post

```
https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>/activate?api-version=<ApiVersion>
```

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	The unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`

PARAMETER	VALUE
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This string correlates all events from the client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Request payload example:

```
{  // needed for validation of the activation request
  "planId": "gold", // purchased plan, cannot be empty
  "quantity": "" // purchased number of seats, can be empty if plan is not per seat
}
```

Response codes:

Code: 200 The subscription was marked as Subscribed on the Microsoft side.

There is no response body for this call.

Code: 400 Bad request: validation failed.

- `planId` doesn't exist in request payload.
- `planId` in request payload doesn't match the one that was purchased.
- `quantity` in request payload doesn't match the one that was purchased
- The SaaS subscription is in a *Subscribed* or *Suspended* state.

Code: 403 Forbidden. The authorization token is invalid, expired, or was not provided. The request is attempting to access a SaaS subscription for an offer that was published with a different Azure AD app ID from the one used to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 404 Not found. The SaaS subscription is in an *Unsubscribed* state.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

Get list of all subscriptions

This API retrieves a list of all purchased SaaS subscriptions for all offers that the publisher publishes in the commercial marketplace. SaaS subscriptions in all possible statuses will be returned. Unsubscribed SaaS subscriptions are also returned because this information is not deleted on the Microsoft side.

The API returns paginated results of 100 per page.

Get `https://marketplaceapi.microsoft.com/api/saas/subscriptions?api-version=<ApiVersion>`

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`continuationToken`	Optional parameter. To retrieve the first page of results, leave empty. Use the value returned in `@nextLink` parameter to retrieve the next page.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.

PARAMETER	VALUE
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher that's making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Response codes:

Code: 200 Returns the list of all existing subscriptions for all offers made by this publisher, based on the publisher's authorization token.

Response body example:

```
{
  "subscriptions": [
    {
      "id": "<guid>", // purchased SaaS subscription ID
      "name": "Contoso Cloud Solution", // SaaS subscription name
      "publisherId": "contoso", // publisher ID
      "offerId": "offer1", // purchased offer ID
      "planId": "silver", // purchased plan ID
      "quantity": "10", // purchased amount of seats, will be empty if plan is not per seat
      "beneficiary": { // email address, user ID and tenant ID for which SaaS subscription was purchased.
        "emailId": " test@contoso.com",
        "objectId": "<guid>",
        "tenantId": "<guid>",
        "pid": "<ID of the user>"
      },
      "purchaser": { // email address, user ID and tenant ID that purchased the SaaS subscription. These
could be different from beneficiary information for reseller (CSP) purchase
        "emailId": " test@contoso.com",
        "objectId": "<guid>",
        "tenantId": "<guid>",
        "pid": "<ID of the user>"
      },
      "term": { // The period for which the subscription was purchased.
        "startDate": "2019-05-31", //format: YYYY-MM-DD. This is the date when the subscription was
activated by the ISV and the billing started. This field is relevant only for Active and Suspended
subscriptions.
        "endDate": "2019-06-30", // This is the last day the subscription is valid. Unless stated otherwise,
the automatic renew will happen the next day. This field is relevant only for Active and Suspended
subscriptions.
        "termUnit": "P1M" // where P1M is monthly and P1Y is yearly. Also reflected in the startDate and
endDate values
      },
      "allowedCustomerOperations": ["Read", "Update", "Delete"], // Indicates operations allowed on the SaaS
subscription for beneficiary. For CSP-initiated purchases, this will always be "Read" because the customer
cannot update or delete subscription in this flow.  Purchaser can perform all operations on the
subscription.
      "sessionMode": "None", // not relevant
      "isFreeTrial": true, // true - the customer subscription is currently in free trial, false - the
customer subscription is not currently in free trial. (Optional field -– if not returned, the value is
false.)
      "isTest": false, // not relevant
      "sandboxType": "None", // not relevant
      "saasSubscriptionStatus": "Subscribed" // Indicates the status of the operation. Can be one of the
following: PendingFulfillmentStart, Subscribed, Suspended or Unsubscribed.
    },
    // next SaaS subscription details, might be a different offer
    {
      "id": "<guid1>",
      "name": "Contoso Cloud Solution1",
      "publisherId": "contoso",
      "offerId": "offer2",
      "planId": "gold",
      "quantity": "",
      "beneficiary": {
        "emailId": " test@contoso.com",
        "objectId": "<guid>",
        "tenantId": "<guid>",
        "pid": "<ID of the user>"
      },
      "purchaser": {
        "emailId": "purchase@csp.com ",
        "objectId": "<guid>",
        "tenantId": "<guid>",
        "pid": "<ID of the user>"
      },
      "term": {
        "startDate": "2019-05-31",
        "endDate": "2020-04-30",
        "termUnit": "P1Y"
      },
      "allowedCustomerOperations": ["Read"],
      "sessionMode": "None",
      "isFreeTrial": false,
      "isTest": false,
      "sandboxType": "None",
      "saasSubscriptionStatus": "Suspended"
    }
  ],
  "@nextLink": "https:// https://marketplaceapi.microsoft.com/api/saas/subscriptions/?
continuationToken=%5b%7b%22token%22%3a%22%2bRID%3a%7eYeUDAIahsn22AAAAAAAAAA%3d%3d%23RT%3a1%23TRC%3a2%23ISV%3
a1%23FPC%3aAgEAAAAQALEAwP8zQP9%2fFwD%2b%2f2FC%2fwc%3d%22%2c%22range%22%3a%7b%22min%22%3a%22%22%2c%22max%22%3
a%2205C1C9CD673398%22%7d%7d%5d&api-version=2018-08-31" // url that contains continuation token to retrieve
next page of the SaaS subscriptions list, if empty or absent, this is the last page. ISV can use this url as
is to retrieve the next page or extract the value of continuation token from this url.
}
```

If no purchased SaaS subscriptions are found for this publisher, empty response body is returned.

Code: 403 Forbidden. The authorization token is unavailable, invalid, or expired.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

Get subscription

This API retrieves a specified purchased SaaS subscription for a SaaS offer that the publisher publishes in the commercial marketplace. Use this call to get all available information for a specific SaaS subscription by its ID rather than by calling the API that's used for getting a list of all subscriptions.

Get `https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>?api-version=<ApiVersion>`

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	The unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher that's making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Response codes:

Code: 200 Returns details for a SaaS subscription based on the `subscriptionId` provided.

Response body example:

```
{
  "id": "<guid>", // purchased SaaS subscription ID
  "name": "Contoso Cloud Solution", // SaaS subscription name
  "publisherId": "contoso", // publisher ID
  "offerId": "offer1", // purchased offer ID
  "planId": "silver", // purchased plan ID
  "quantity": "10", // purchased amount of seats, will be empty if plan is not per seat
  "beneficiary": { // email address, user ID and tenant ID for which SaaS subscription is purchased.
    "emailId": "test@contoso.com",
    "objectId": "<guid>",
    "tenantId": "<guid>",
    "pid": "<ID of the user>"
  },
  "purchaser": { // email address ,user ID and tenant ID that purchased the SaaS subscription.  These could
be different from beneficiary information for reseller (CSP) scenario
    "emailId": "test@test.com",
    "objectId": "<guid>",
    "tenantId": "<guid>",
    "pid": "<ID of the user>"
  },
  "allowedCustomerOperations": ["Read", "Update", "Delete"], // Indicates operations allowed on the SaaS
subscription for beneficiary.  For CSP-initiated purchases, this will always be "Read" because the customer
cannot update or delete subscription in this flow.  Purchaser can perform all operations on the
subscription.
  "sessionMode": "None", // not relevant
  "isFreeTrial": false, // true - the customer subscription is currently in free trial, false - the customer
subscription is not currently in free trial. Optional field – if not returned the value is false.
  "isTest": false, // not relevant
  "sandboxType": "None", // not relevant
  "saasSubscriptionStatus": " Subscribed ", // Indicates the status of the operation:
PendingFulfillmentStart, Subscribed, Suspended or Unsubscribed.
  "term": { // the period for which the subscription was purchased
    "startDate": "2019-05-31", //format: YYYY-MM-DD. This is the date when the subscription was activated by
the ISV and the billing started. This field is relevant only for Active and Suspended subscriptions.
    "endDate": "2019-06-29", // This is the last day the subscription is valid. Unless stated otherwise, the
automatic renew will happen the next day. This field is relevant only for Active and Suspended
subscriptions.
    "termUnit": "P1M" //where P1M is monthly and P1Y is yearly. Also reflected in the startDate and endDate
values.
  }
}
```

Code: 403 Forbidden. The authorization token is invalid, expired, or was not provided. The request is attempting to access a SaaS subscription for an offer that's published with a different Azure AD app ID from the one used to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 404 Not found. SaaS subscription with the specified `subscriptionId` cannot be found.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

List available plans

This API retrieves all plans for a SaaS offer identified by the `subscriptionId` of a specific purchase of this offer. Use this call to get a list of all private and public plans that the beneficiary of a SaaS subscription can update for the subscription. The plans returned will be available in the same geography as the already purchased plan.

This call returns a list of plans available for that customer in addition to the one already purchased. The list can be presented to an end user on the publisher site. An end user can change the subscription plan to any one of the plans in the returned list. Changing the plan to one not in the list will fail.

Get

```
https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>/listAvailablePlans?api-version=
<ApiVersion>
```

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	The unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`

PARAMETER	VALUE
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher that's making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Response codes:

Code: 200 Returns a list of all available plans for an existing SaaS subscription including the one already purchased.

Response body example:

```
{
  "plans": [
    {
      "planId": "Platinum001",
      "displayName": "Private platinum plan for Contoso", // display name of the plan as it appears in the
marketplace
      "isPrivate": true //true or false
    },
    {
      "planId": "gold",
      "displayName": "Gold plan for Contoso",
      "isPrivate": false //true or false
    }
  ]
}
```

If `subscriptionId` is not found, empty response body is returned.

Code: 403 Forbidden. The authorization token is invalid, expired, or was not provided. The request may be attempting to access a SaaS subscription for an offer that's published with a different Azure AD app ID from the one used to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

Change the plan on the subscription

Use this API to update the existing plan purchased for a SaaS subscription to a new plan (public or private). The publisher must call this API when a plan is changed on the publisher side for a SaaS subscription purchased in the commercial marketplace.

This API can be called only for *Active* subscriptions. Any plan can be changed to any other existing plan (public or private) but not to itself. For private plans, the customer's tenant must be defined as part of plan's audience in Partner Center.

Patch `https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>?api-version=<ApiVersion>`

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	The unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`

PARAMETER	VALUE
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher that's making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Request payload example:

```
{
  "planId": "gold" // the ID of the new plan to be purchased
}
```

Response codes:

Code: 202 The request to change plan has been accepted and handled asynchronously. The partner is expected to poll the **Operation-Location URL** to determine a success or failure of the change plan request. Polling should be done every several seconds until the final status of *Failed*, *Succeed*, or *Conflict* is received for the operation. Final operation status should be returned quickly, but can take several minutes in some cases.

The partner will also get webhook notification when the action is ready to be completed successfully on the commercial marketplace side. Only then should the publisher make the plan change on the publisher side.

Response headers:

PARAMETER	VALUE
`Operation-Location`	URL to get the operation's status. For example, `https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>/opera api-version=2018-08-31` .

Code: 400 Bad request: validation failures.

- The new plan doesn't exist or isn't available for this specific SaaS subscription.
- The new plan is the same as the current plan.
- The SaaS subscription status isn't *Subscribed*.
- The update operation for a SaaS subscription isn't included in `allowedCustomerOperations`.

Code: 403 Forbidden. The authorization token is invalid, expired, or wasn't provided. The request is attempting to access a SaaS subscription for an offer that's published with a different Azure AD app ID from the one used to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 404 Not found. The SaaS subscription with `subscriptionId` is not found.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

> **NOTE**
> Either the plan or quantity of seats can be changed at one time, not both.

> **NOTE**
> This API can be called only after getting explicit approval for the change from the end user.

Change the quantity of seats on the SaaS subscription

Use this API to update (increase or decrease) the quantity of seats purchased for a SaaS subscription. The publisher must call this API when the number of seats is changed from the publisher side for a SaaS subscription created in the commercial marketplace.

The quantity of seats cannot be more than the quantity allowed in the current plan. In this case, the publisher should change the plan before changing the quantity of seats.

Patch `https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>?api-version=<ApiVersion>`

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	A unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher that's making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Request payload example:

```
{
  "quantity": 5 // the new amount of seats to be purchased
}
```

Response codes:

Code: 202 The request to change quantity has been accepted and handled asynchronously. The partner is expected to poll the **Operation-Location URL** to determine a success or failure of the change quantity request. Polling should be done every several seconds until the final status of *Failed*, *Succeed*, or *Conflict* is received for the operation. The final operation status should be returned quickly but can take several minutes in some cases.

The partner will also get webhook notification when the action is ready to be completed successfully on the commercial marketplace side. Only then should the publisher make the quantity change on the publisher side.

Response headers:

PARAMETER	VALUE
`Operation-Location`	Link to a resource to get the operation's status. For example, `https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>/opera api-version=2018-08-31` .

Code: 400 Bad request: validation failures.

- The new quantity is greater or lower than the current plan limit.
- The new quantity is missing.
- The new quantity is the same as the current quantity.
- The SaaS Subscription status is not Subscribed.
- The update operation for a SaaS subscription is not included in `allowedCustomerOperations`.

Code: 403 Forbidden. The authorization token is invalid, expired, or was not provided. The request is attempting to access a subscription that doesn't belong to the current publisher.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 404 Not found. The SaaS subscription with `subscriptionId` is not found.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

NOTE

Only a plan or quantity can be changed at one time, not both.

NOTE

This API can be called only after getting explicit approval from the end user for the change.

Cancel a subscription

Use this API to unsubscribe a specified SaaS subscription. The publisher doesn't have to use this API and we recommend that customers are directed to the commercial marketplace to cancel SaaS subscriptions.

If the publisher decides to implement the cancellation of a SaaS subscription purchased in the commercial marketplace on the publisher's side, they must call this API. After the completion of this call, the subscription's status will become *Unsubscribed* on the Microsoft side.

The customer won't be billed if a subscription is canceled within the following grace periods:

- Twenty-four hours for a monthly subscription after activation.
- Fourteen days for a yearly subscription after activation.

The customer will be billed if a subscription is canceled after the preceding grace periods. The customer will lose access to the SaaS subscription on the Microsoft side immediately after cancellation.

Delete `https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>?api-version=<ApiVersion>`

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	The unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Response codes:

Code: 202 The request to unsubscribe has been accepted and handled asynchronously. The partner is expected to poll the **Operation-Location URL** to determine a success or failure of this request. Polling should be done every several seconds until the final status of *Failed*, *Succeed*, or *Conflict* is received for the operation. The final operation status should be returned quickly but can take several minutes in some cases.

The partner will also get webhook notification when the action is completed successfully on the commercial marketplace side. Only then should the publisher cancel the subscription on the publisher side.

Response headers:

PARAMETER	VALUE

PARAMETER	VALUE
`Operation-Location`	Link to a resource to get the operation's status. For example, `https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>/opera api-version=2018-08-31` .

Code: 400 Bad request. Delete is not in `allowedCustomerOperations` list for this SaaS subscription.

Code: 403 Forbidden. The authorization token is invalid, expired, or is not available. The request is attempting to access a SaaS subscription for an offer that's published with a different Azure AD app ID from the one used to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 404 Not found. The SaaS subscription with `subscriptionId` is not found.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

Next steps

See the commercial marketplace metering service APIs for more options for SaaS offers in the commercial marketplace.

Review and use the clients for different programming languages and samples.

SaaS fulfillment operations APIs v2 in the Microsoft commercial marketplace

11/22/2021 • 5 minutes to read • Edit Online

This article describes version 2 of the SaaS fulfillment operations APIs.

List outstanding operations

Get list of the pending operations for the specified SaaS subscription. The publisher should acknowledge returned operations by calling the Operation Patch API.

Get

```
https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>/operations?api-version=<ApiVersion>
```

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	The unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Response codes:

Code: 200 Returns pending operations on the specified SaaS subscription.

Response payload example:

```
{
  "operations": [
    {
      "id": "<guid>", //Operation ID, should be provided in the operations patch API call
      "activityId": "<guid>", //not relevant
      "subscriptionId": "<guid>", // subscriptionId of the SaaS subscription that is being reinstated
      "offerId": "offer1", // purchased offer ID
      "publisherId": "contoso",
      "planId": "silver", // purchased plan ID
      "quantity": "20", // purchased amount of seats, will be empty is not relevant
      "action": "Reinstate",
      "timeStamp": "2018-12-01T00:00:00", // UTC
      "status": "InProgress" // the only status that can be returned in this case
    }
  ]
}
```

Returns empty json if no operations are pending.

Code: 400 Bad request: validation failures.

Code: 403 Forbidden. The authorization token is invalid, expired, or was not provided. The request is attempting to access a SaaS subscription for an offer that's published with a different Azure AD app ID from the one used to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 404 Not found. The SaaS subscription with `subscriptionId` is not found.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

Get operation status

This API enables the publisher to track the status of the specified async operation: **Unsubscribe**, **ChangePlan**, or **ChangeQuantity**.

The `operationId` for this API call can be retrieved from the value returned by **Operation-Location**, the get pending Operations API call, or the `<id>` parameter value received in a webhook call.

Get

```
https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>/operations/<operationId>?api-version=<ApiVersion>
```

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	The unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.
`operationId`	The unique identifier of the operation being retrieved.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Response codes:

Code: 200 Gets details for the specified SaaS operation.

Response payload example:

```
Response body:
{
  "id  ": "<guid>", //Operation ID, should be provided in the patch operation API call
  "activityId": "<guid>", //not relevant
  "subscriptionId": "<guid>", // subscriptionId of the SaaS subscription for which this operation is
relevant
  "offerId": "offer1", // purchased offer ID
  "publisherId": "contoso",
  "planId": "silver", // purchased plan ID
  "quantity": "20", // purchased amount of seats
  "action": "ChangePlan", // Can be ChangePlan, ChangeQuantity or Reinstate
  "timeStamp": "2018-12-01T00:00:00", // UTC
  "status": "InProgress", // Possible values: NotStarted, InProgress, Failed, Succeeded, Conflict (new
quantity / plan is the same as existing)
  "errorStatusCode": "",
  "errorMessage": ""
}
```

Code: 403 Forbidden. The authorization token is invalid, expired, or was not provided. The request is attempting to access a SaaS subscription for an offer that's published with a different Azure AD app ID from the one used to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 404 Not found.

- Subscription with `subscriptionId` is not found.
- Operation with `operationId` is not found.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

Update the status of an operation

Use this API to update the status of a pending operation to indicate the operation's success or failure on the publisher side.

The `operationId` for this API call can be retrieved from the value returned by **Operation-Location**, the get pending Operations API call, or the `<id>` parameter value received in a webhook call.

Patch

```
https://marketplaceapi.microsoft.com/api/saas/subscriptions/<subscriptionId>/operations/<operationId>?api-version=<ApiVersion>
```

Query parameters:

PARAMETER	VALUE
`ApiVersion`	Use 2018-08-31.
`subscriptionId`	The unique identifier of the purchased SaaS subscription. This ID is obtained after resolving the commercial marketplace authorization token by using the Resolve API.
`operationId`	The unique identifier of the operation that's being completed.

Request headers:

PARAMETER	VALUE
`content-type`	`application/json`
`x-ms-requestid`	A unique string value for tracking the request from the client, preferably a GUID. If this value isn't provided, one will be generated and provided in the response headers.
`x-ms-correlationid`	A unique string value for operation on the client. This parameter correlates all events from client operation with events on the server side. If this value isn't provided, one will be generated and provided in the response headers.
`authorization`	A unique access token that identifies the publisher that's making this API call. The format is `"Bearer <access_token>"` when the token value is retrieved by the publisher as explained in Get a token based on the Azure AD app.

Request payload example:

```
{
  "status": "Success" // Allowed Values: Success/Failure. Indicates the status of the operation on ISV side.
}
```

Response codes:

Code: 200 A call to inform of completion of an operation on the partner side. For example, this response could signal the completion of change of seats or plans on the publisher side.

Code: 403

- Forbidden. The authorization token is not available, is invalid, or expired. The request may be attempting to access a subscription that doesn't belong to the current publisher.
- Forbidden. The authorization token is invalid, expired, or was not provided. The request is attempting to access a SaaS subscription for an offer that's published with a different Azure AD app ID from the one used

to create the authorization token.

This error is often a symptom of not performing the SaaS registration correctly.

Code: 404 Not found.

- Subscription with `subscriptionId` is not found.
- Operation with `operationId` is not found.

Code: 409 Conflict. For example, a newer update is already fulfilled.

Code: 500 Internal server error. Retry the API call. If the error persists, contact Microsoft support.

Next steps

See the commercial marketplace metering service APIs for more options for SaaS offers in the commercial marketplace.

Review and use the clients for different programming languages and samples.

Implementing a webhook on the SaaS service

11/22/2021 • 3 minutes to read • Edit Online

When creating a transactable SaaS offer in Partner Center, the partner provides the **Connection webhook** URL to be used as an HTTP endpoint. This webhook is called by Microsoft by using the POST HTTP call to notify the publisher side of following events that happen on the Microsoft side:

- When the SaaS subscription is in *Subscribed* status:
  - ChangePlan
  - ChangeQuantity
  - Renew
  - Suspend
  - Unsubscribe
- When SaaS subscription is in *Suspended* status:
  - Reinstate
  - Unsubscribe

The publisher must implement a webhook in the SaaS service to keep the SaaS subscription status consistent with the Microsoft side. The SaaS service is required to call the Get Operation API to validate and authorize the webhook call and payload data before taking action based on the webhook notification. The publisher should return HTTP 200 to Microsoft as soon as the webhook call is processed. This value acknowledges that the webhook call has been received successfully by the publisher.

> **IMPORTANT**
> The webhook URL service must be up and running 24x7, and ready to receive new calls from Microsoft time at all times. Microsoft does have a retry policy for the webhook call (500 retries over 8 hours), but if the publisher doesn't accept the call and return a response, the operation that webhook notifies about will eventually fail on the Microsoft side.

Webhook payload example of a purchase event:

```
// end user changed a quantity of purchased seats for a plan on Microsoft side
{
  "id": "<guid>", // this is the operation ID to call with get operation API
  "activityId": "<guid>", // do not use
  "subscriptionId": "guid", // The GUID identifier for the SaaS resource which status changes
  "publisherId": "contoso", // A unique string identifier for each publisher
  "offerId": "offer1", // A unique string identifier for each offer
  "planId": "silver", // the most up-to-date plan ID
  "quantity": "25", // the most up-to-date number of seats, can be empty if not relevant
  "timeStamp": "2019-04-15T20:17:31.7350641Z", // UTC time when the webhook was called
  "action": "ChangeQuantity", // the operation the webhook notifies about
  "status": "Success" // Can be either InProgress or Success
}
```

Webhook payload example of a subscription reinstatement event:

```
// end user's payment instrument became valid again, after being suspended, and the SaaS subscription is
being reinstated
{
  "id": "<guid>",
  "activityId": "<guid>",
  "subscriptionId": "<guid>",
  "publisherId": "contoso",
  "offerId": "offer2 ",
  "planId": "gold",
  "quantity": "20",
  "timeStamp": "2019-04-15T20:17:31.7350641Z",
  "action": "Reinstate",
  "status": "InProgress"
}
```

Webhook payload example of a renewal event:

```
// end user's payment instrument became valid again, after being suspended, and the SaaS subscription is
being reinstated
{
  "id": "<guid>",
  "activityId": "<guid>",
  "subscriptionId": "<guid>",
  "publisherId": "contoso",
  "offerId": "offer1 ",
  "planId": "silver",
  "quantity": "25",
  "timeStamp": "2019-04-15T20:17:31.7350641Z",
  "action": "Renew",
  "status": "Success"
}
```

Development and testing

To start the development process, we recommend creating dummy API responses on the publisher side. These responses can be based on sample responses provided in this article.

When the publisher is ready for the end to end testing:

- Publish a SaaS offer to a limited preview audience and keep it in preview stage.
- Set the plan price to 0, to avoid triggering actual billing expense while testing. Another option is to set a non-zero price and cancel all test purchases within 24 hours.
- Ensure all flows are invoked end to end, to simulate a real customer scenario.
- If the partner wants to test full purchase and billing flow, do so with offer that's priced above $0. The purchase will be billed, and an invoice will be generated.

A purchase flow can be triggered from the Azure portal or Microsoft AppSource sites, depending on where the offer is being published.

Change plan, *change quantity*, and *unsubscribe* actions are tested from the publisher side. From the Microsoft side, *unsubscribe* can be triggered from both the Azure portal and Admin Center (the portal where Microsoft AppSource purchases are managed). *Change quantity and plan* can be triggered only from Admin Center.

Get support

See Support for the commercial marketplace program in Partner Center for publisher support options.

Next steps

See the commercial marketplace metering service APIs for more options for SaaS offers in the commercial marketplace.

Review and use the clients for different programming languages and samples.

SaaS Fulfillment APIs version 1 (deprecated)

11/22/2021 • 2 minutes to read • Edit Online

WARNING

This initial version of the SaaS Fulfillment API is deprecated; instead, use SaaS Fulfillment API V2. This initial version of the API is currently being maintained only to serve existing publishers.

The documentation for this version of the API is no longer available. If you feel that you need to access it, please contact saas-api-v1@microsoft.com.

For all new developments, move to V2 version of the API even if you already use V1. This version will be completely deprecated in the future.

Support for the commercial marketplace program in Partner Center

11/22/2021 • 4 minutes to read • Edit Online

Microsoft provides support for a wide variety of products and services. Finding the right support team is important to ensure an appropriate and timely response. Consider the following scenarios, which should help you route your query to the appropriate team:

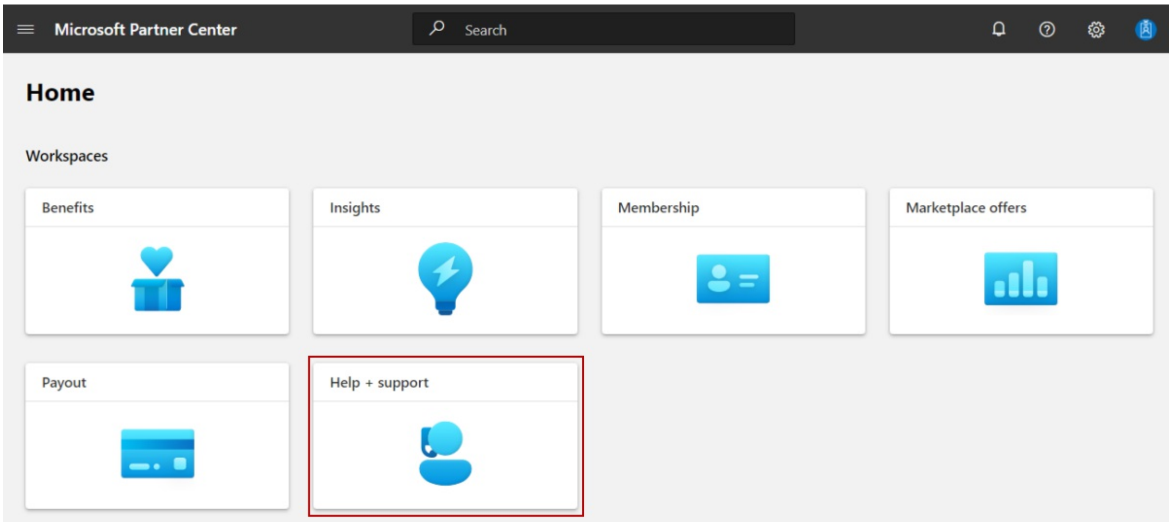
- If you're a publisher and have a question from a customer, ask your customer to request support using the support links in theAzure portal.
- If you’re a publisher and have detected a security issue with an application running on Azure, see How to log a security event support ticket. Publishers must report suspected security events, including security incidents and vulnerabilities of their Azure Marketplace software and service offerings, at the earliest opportunity.
- If you're a publisher and have a question relating to your app or service, review the following support options.

Get help or open a support ticket

- Workspaces view
- Current view

1. Sign in to Partner Center with your work account. If you have not yet done so, you will need to create a Partner Center account.

2. On the Home page, select the **Help + support** tile.



3. Under **My support requests**, select **+ New request**.

4. In the **Problem summary** box, enter a brief description of the issue.

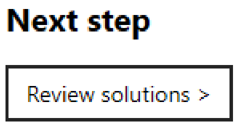
5. In the **Problem type** box, do one of the following:

   - **Option 1**: Enter keywords such as: Marketplace, Azure app, SaaS offer, account management, lead management, deployment issue, payout, or co-sell offer migration. Then select a problem type from the recommended list that appears.

   - **Option 2**: Select **Browse topics** from the **Category** list and then select **Commercial**

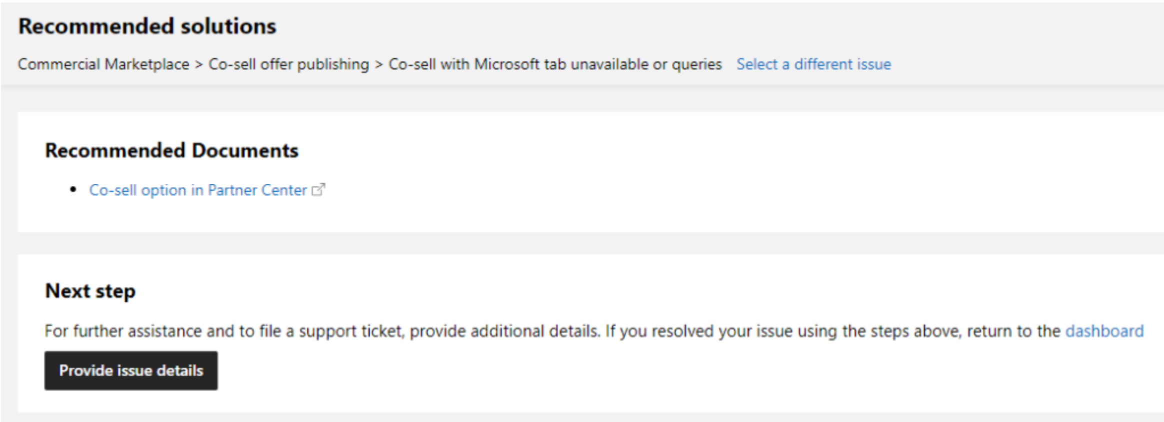
Marketplace. Then select the appropriate **Topic** and **Subtopic**.

6. After you have found the topic of your choice, select **Review Solutions**.



The following options are shown:

- To select a different topic, click **Select a different issue**.
- To help solve the issue, review the recommended steps and documents, if available.



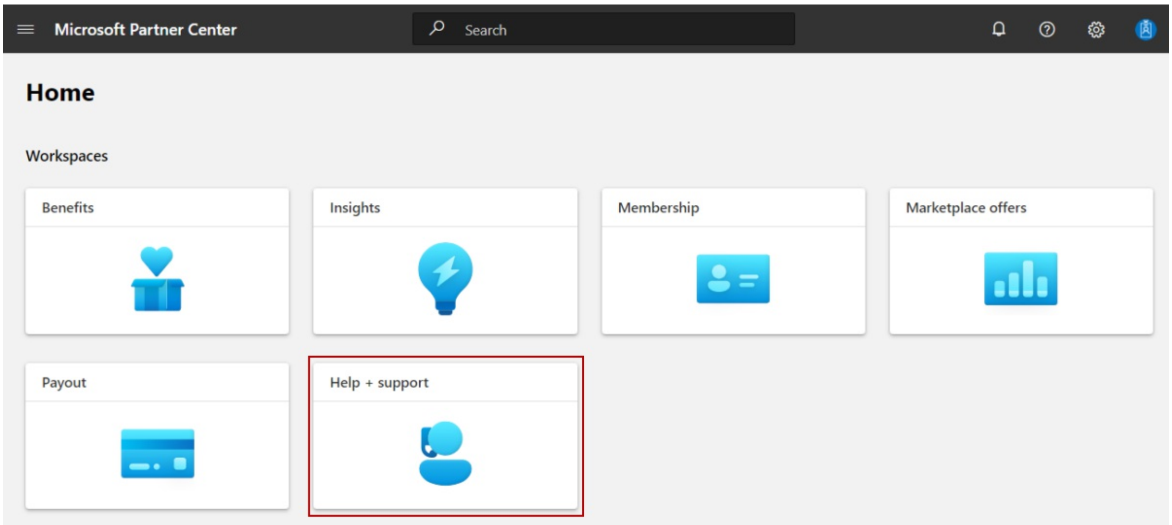
If you cannot find your answer in the self help, select **Provide issue details**. Complete all required fields to speed up the resolution process, then select **Submit**.

> **NOTE**
> If you have not signed in to Partner Center, you may be required to sign in before you can create a ticket.

Track your existing support requests

- Workspaces view
- Current view

1. To review your open and closed tickets, sign in to Partner Center with your work account.
2. On the Home page, select the **Help + support** tile.



Record issue details with a HAR file

To help support agents troubleshoot your issue, consider attaching an HTTP Archive format (HAR) file to your support ticket. HAR files are logs of network requests in a web browser.

> **WARNING**
>
> HAR files may record sensitive data about your Partner Center account.

Microsoft Edge and Google Chrome

To generate a HAR file using **Microsoft Edge** or **Google Chrome**:

1. Go to the web page where you're experiencing the issue.

2. In the top right corner of the window, select the ellipsis icon, then **More tools** > **Developer tools**. You can press F12 as a shortcut.

3. In the Developer tools pane, select the **Network** tab.

4. Select **Stop recording network log** and **Clear** to remove existing logs. The record icon will turn grey.

5. Select **Record network log** to start recording. When you start recording, the record icon will turn red.

6. Reproduce the issue you want to troubleshoot.

7. After you've reproduced the issue, select **Stop recording network log**.

8. Select **Export HAR**, marked with a downward-arrow icon, and save the file.

Mozilla Firefox

To generate a HAR file using **Mozilla Firefox**:

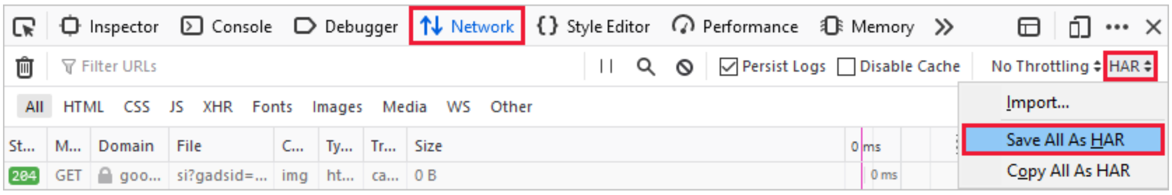
1. Go to the web page where you're experiencing the issue.

2. In the top right corner of the window, select the ellipsis icon, then **Web Developer** > **Toggle Tools**. You can press F12 as a shortcut.

3. Select the **Network** tab, then select **Clear** to remove existing logs.

4. Reproduce the issue you want to troubleshoot.

5. After you've reproduced the issue, select **HAR Export/Import** > **Save All As HAR**.



Apple Safari

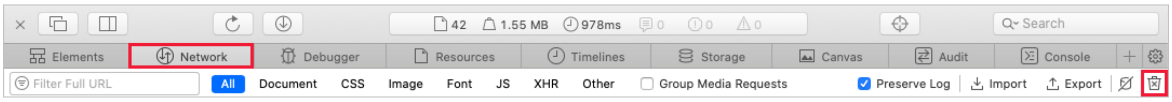
To generate a HAR file using **Safari**:

1. Enable the developer tools in Safari: select **Safari** > **Preferences**. Go to the **Advanced** tab, then select **Show Develop menu in menu bar**.

2. Go to the web page where you're experiencing the issue.

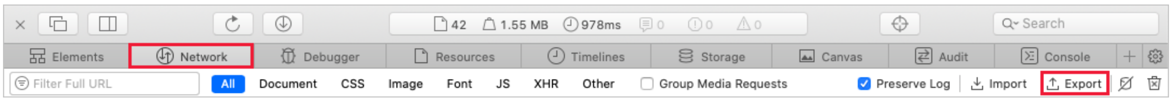
3. Select **Develop**, then select **Show Web Inspector**.

4. Select the **Network** tab, then select **Clear Network Items** to remove existing logs.



5. Reproduce the issue you want to troubleshoot.

6. After you've reproduced the issue, select **Export** and save the file.



Next steps

- Update an existing offer in the Commercial Marketplace

Geographic availability and currency support for the commercial marketplace

11/22/2021 • 6 minutes to read • Edit Online

Supported geographic locations

Commercial marketplace offerings can be purchased in 141 geographies as defined by the customer's billing address, and transactions can be completed in 17 currencies. The following table lists each supported geographic location, its ISO 3166 two-digit alpha code, and the assigned currency.

A CSP can purchase an offer in Partner Center in their end customer's currency so they can bill them in that same currency. For additional information on this, refer to these FAQs.

COUNTRY/REGION NAME	ISO-2	CURRENCY (ALL OFFER TYPES)	CURRENCY (CONSULTING SERVICE OFFERS ONLY)
Afghanistan	AF	USD	AFN, EUR, USD
Albania	AL	USD	ALL, EUR, USD
Algeria	DZ	USD	DZD, EUR, USD
Andorra	AD	EUR	EUR, USD
Angola	AO	USD	AOA, EUR, USD
Argentina	AR	USD	ARS, EUR, USD
Armenia	AM	USD	AMD, EUR, USD
Australia	AU	AUD	AUD, EUR, USD
Austria	AT	EUR	EUR, USD
Azerbaijan	AZ	USD	AZN, EUR, USD
Bahrain	BH	USD	BHD, EUR, USD
Bangladesh	BD	USD	BDT, EUR, USD
Barbados	BB	USD	BBD, EUR, USD
Belarus	BY	USD	BYN, EUR, USD
Belgium	BE	EUR	EUR, USD
Belize	BZ	USD	BZD, EUR, USD

COUNTRY/REGION NAME	ISO-2	CURRENCY (ALL OFFER TYPES)	CURRENCY (CONSULTING SERVICE OFFERS ONLY)
Bermuda	BM	USD	BMD, EUR, USD
Bolivia	BO	USD	BOB, EUR, USD
Bosnia and Herzegovina	BA	USD	BAM, EUR, USD
Botswana	BW	USD	BWP, EUR, USD
Brazil	BR	BRL*	BRL, EUR, USD
Brunei	BN	USD	BND, EUR, SGD, USD
Bulgaria	BG	EUR	BGN, EUR, USD
Cabo Verde	CV	USD	CVE, EUR, USD
Cameroon	CM	USD	EUR, USD, XAF
Canada	CA	CAD	CAD, EUR, USD
Cayman Islands	KY	USD	EUR, KYD, USD
Chile	CL	USD	CLP, EUR, USD
China**	CN	N/A	N/A
Colombia	CO	USD	COP, EUR, USD
Costa Rica	CR	USD	CRC, EUR, USD
Côte d'Ivoire	CI	USD	EUR, USD, XOF
Croatia	HR	EUR	EUR, HRK, USD
Curaçao	CW	USD	ANG, EUR, USD
Cyprus	CY	EUR	EUR, USD
Czechia	CZ	EUR	CZK, EUR, USD
Denmark	DK	DKK	DKK, EUR, USD
Dominican Republic	DO	USD	DOP, EUR, USD
Ecuador	EC	USD	EUR, USD
Egypt	EG	USD	EGP, EUR, USD
El Salvador	SV	USD	EUR, USD

COUNTRY/REGION NAME	ISO-2	CURRENCY (ALL OFFER TYPES)	CURRENCY (CONSULTING SERVICE OFFERS ONLY)
Estonia	EE	EUR	EUR, USD
Ethiopia	ET	USD	ETB, EUR, USD
Faroe Islands	FO	DKK	DKK, EUR, USD
Fiji	FJ	AUD	AUD, EUR, FJD, USD
Finland	FI	EUR	EUR, USD
France	FR	EUR	EUR, USD
Georgia	GE	USD	EUR, GEL, USD
Germany	DE	EUR	EUR, USD
Ghana	GH	USD	EUR, GHS, USD
Greece	GR	EUR	EUR, USD
Guatemala	GT	USD	EUR, GTQ, USD
Honduras	HN	USD	EUR, HNL, USD
Hong Kong SAR	HK	USD	EUR, HKD, USD
Hungary	HU	EUR	EUR, HUF, USD
Iceland	IS	EUR	EUR, ISK, USD
India	IN	INR	EUR, INR, USD
Indonesia	ID	USD	EUR, IDR, USD
Iraq	IQ	USD	EUR, IQD, USD
Ireland	IE	EUR	EUR, USD
Israel	IL	USD	EUR, ILS, USD
Italy	IT	EUR	EUR, USD
Jamaica	JM	USD	EUR, JMD, USD
Japan	JP	JPY	EUR, JPY, USD
Jordan	JO	USD	EUR, JOD, USD
Kazakhstan	KZ	USD	EUR, KZT, USD

COUNTRY/REGION NAME	ISO-2	CURRENCY (ALL OFFER TYPES)	CURRENCY (CONSULTING SERVICE OFFERS ONLY)
Kenya	KE	USD	EUR, KES, USD
Korea (South)	KR	KRW	EUR, KRW, USD
Kuwait	KW	USD	EUR, KWD, USD
Kyrgyzstan	KG	USD	EUR, KGS, USD
Latvia	LV	EUR	EUR, USD
Lebanon	LB	USD	EUR, LBP, USD
Libya	LY	USD	EUR, LYD, USD
Liechtenstein	LI	EUR	CHF, EUR, USD
Lithuania	LT	EUR	EUR, USD
Luxembourg	LU	EUR	EUR, USD
Macao SAR	MO	USD	EUR, MOP, USD
Malaysia	MY	USD	EUR, MYR, USD
Malta	MT	EUR	EUR, USD
Mauritius	MU	USD	EUR, MUR, USD
Mexico	MX	USD	EUR, MXN, USD
Moldova	MD	USD	EUR, MDL, USD
Monaco	MC	EUR	EUR, USD
Mongolia	MN	USD	EUR, MNT, USD
Montenegro	ME	USD	EUR, USD
Morocco	MA	USD	EUR, MAD, USD
Namibia	NA	USD	EUR, NAD, USD, ZAR
Nepal	NP	USD	EUR, NPR, USD
Netherlands	NL	EUR	EUR, USD
New Zealand	NZ	NZD	EUR, NZD, USD
Nicaragua	NI	USD	EUR, NIO, USD

COUNTRY/REGION NAME	ISO-2	CURRENCY (ALL OFFER TYPES)	CURRENCY (CONSULTING SERVICE OFFERS ONLY)
Nigeria	NG	USD	EUR, NGN, USD
North Macedonia	MK	USD	EUR, MKD, USD
Norway	NO	NOK	EUR, NOK, USD
Oman	OM	USD	EUR, OMR, USD
Pakistan	PK	USD	EUR, PKR, USD
Palestinian Authority	PS	USD	EUR, ILS, JOD, USD
Panama	PA	USD	EUR, PAB, USD
Paraguay	PY	USD	EUR, PYG, USD
Peru	PE	USD	EUR, PEN, USD
Philippines	PH	USD	EUR, PHP, USD
Poland	PL	EUR	EUR, PLN, USD
Portugal	PT	EUR	EUR, USD
Puerto Rico	PR	USD	EUR, USD
Qatar	QA	USD	EUR, QAR, USD
Romania	RO	EUR	EUR, RON, USD
Russia	RU	RUB	EUR, RUB, USD
Rwanda	RW	USD	EUR, RWF, USD
Saint Kitts and Nevis	KN	USD	EUR, USD, XCD
Saudi Arabia	SA	USD	EUR, SAR, USD
Senegal	SN	USD	EUR, USD, XOF
Serbia	RS	USD	EUR, RSD, USD
Singapore	SG	USD	BND, EUR, SGD, USD
Slovakia	SK	EUR	EUR, USD
Slovenia	SI	EUR	EUR, USD
South Africa	ZA	USD	EUR, USD, ZAR

COUNTRY/REGION NAME	ISO-2	CURRENCY (ALL OFFER TYPES)	CURRENCY (CONSULTING SERVICE OFFERS ONLY)
Spain	ES	EUR	EUR, USD
Sri Lanka	LK	USD	EUR, LKR, USD
Sweden	SE	SEK	EUR, SEK, USD
Switzerland	CH	CHF	CHF, EUR, USD
Taiwan	TW	TWD	EUR, TWD, USD
Tajikistan	TJ	USD	EUR, TJS, USD
Tanzania	TZ	USD	EUR, TZS, USD
Thailand	TH	USD	EUR, THB, USD
Trinidad and Tobago	TT	USD	EUR, TTD, USD
Tunisia	TN	USD	EUR, TND, USD
Turkey	TR	USD	EUR, TRY, USD
Turkmenistan	TM	USD	EUR, TMT, USD
Uganda	UG	USD	EUR, UGX, USD
Ukraine	UA	USD	EUR, RUB, UAH, USD
United Arab Emirates	AE	USD	AED, EUR, USD
United Kingdom	GB	GBP	EUR, GBP, USD
United States	US	USD	EUR, USD
U.S. Virgin Islands	VI	USD	EUR, USD
Uruguay	UY	USD	EUR, USD, UYU
Uzbekistan	UZ	USD	EUR, USD, UZS
Vatican City (Holy See)	VA	EUR	EUR, USD
Venezuela	VE	USD	EUR, USD, VES
Vietnam	VN	USD	EUR, USD, VND
Yemen	YE	USD	EUR, USD, YER
Zambia	ZM	USD	EUR, USD, ZMW

COUNTRY/REGION NAME	ISO-2	CURRENCY (ALL OFFER TYPES)	CURRENCY (CONSULTING SERVICE OFFERS ONLY)
Zimbabwe	ZW	USD	EUR, USD

* For customers in Brazil, the commercial marketplace through Cloud Solution Providers (CSP) uses USD.

** Free and BYOL VM images only.

How we convert currency

For all paid offer types, you have the option of entering prices in USD or uploading prices in local currency. Prices entered in USD are automatically converted to local currency when the page is saved. The rates Partner Center uses are updated daily. You can export the prices and review the converted equivalents.

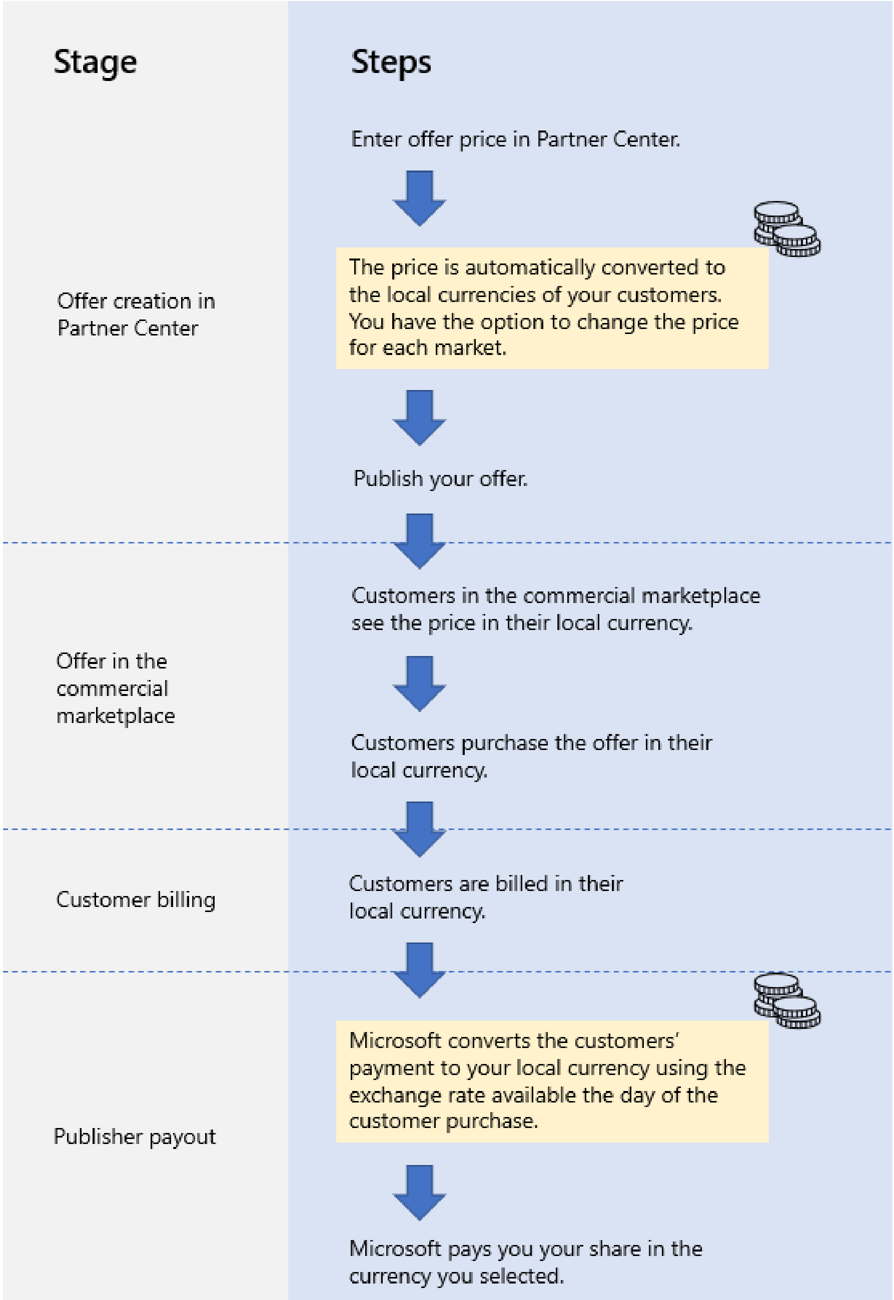
To adjust any price before you publish, just export the pricing spreadsheet, modify it, and upload it with changes.

> **NOTE**
> After a price for a market in your plan is published, it can't be changed. To ensure that the prices are right before you publish them, export the pricing spreadsheet and review the prices in each market.

The price of an offer is always shown to customers in their local currency. The price you select in Partner Center is converted to the local currency of customers according to the exchange rate at the time you saved the price in Partner Center. The price shown to customers in the online stores doesn't change, unless you republish your offer.

Microsoft receives payments from customers in their local currency, and pays you in the currency you selected in Partner Center. Microsoft converts the customer local currency using the exchange rate of the day of purchase.

> **NOTE**
> Microsoft converts offer prices using the Microsoft Treasury exchange rates.



Retrieving currency information by API

Individual prices (which, depending on how they were set, may have been influenced by the exchange rates on the day they were saved) can be retrieved using an API; currency information can't.

For details on how to enter prices for specific offer types, refer to these articles:

- Create an Azure application offer
- Create an Azure container offer
- Create an Azure virtual machine offer
- Create a consulting service offer
- Create a Dynamics 365 for Customer Engagement & Power Apps offer
- Create a Dynamics 365 for Operations offer
- Create a Dynamics 365 Business Central offer
- Create an IoT Edge module offer
- Create a Managed Service offer
- Create a Power BI app
- Create a SaaS offer

Find Tenant ID, Object ID, and partner association details

11/22/2021 • 2 minutes to read • Edit Online

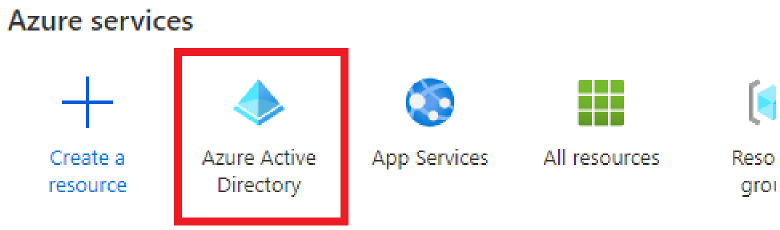
This article describes how to find the Tenant ID, Object ID, and partner association details, along with their respective subscription IDs.

If you need to get screenshots of these items in Azure Cloud Shell to use for debugging assistance, jump down to Find Tenant, Object, and Partner ID association for debugging.

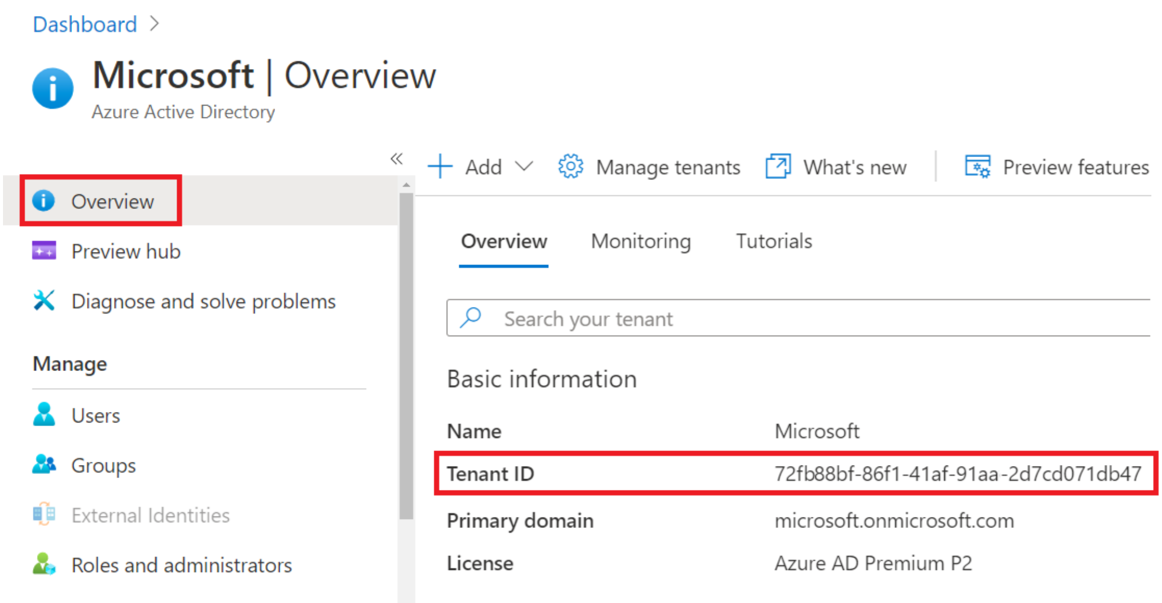
NOTE
Only the owner of a subscription has the privileges to perform these steps.

Find Tenant ID

1. Go to the Azure portal.
2. Select **Azure Active Directory**.



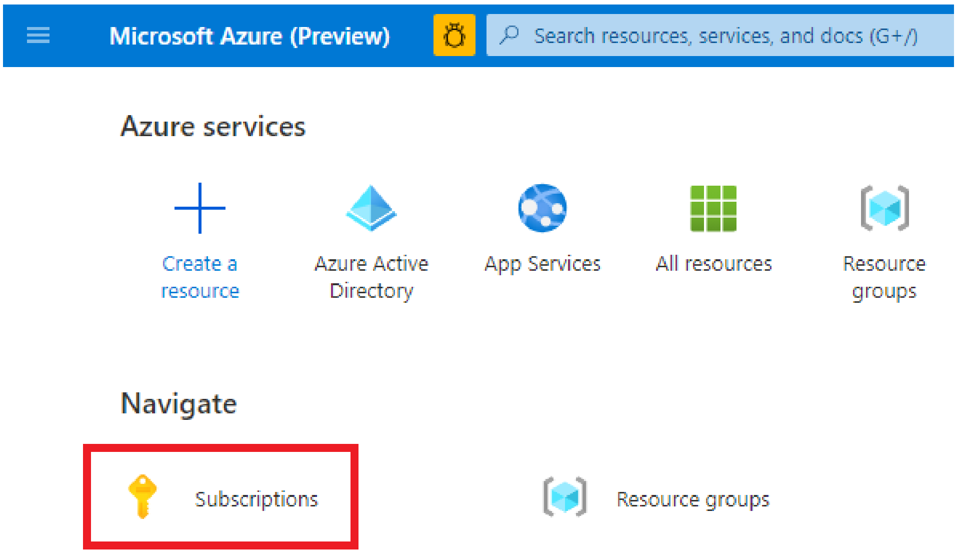
3. Select **Overview**. Your Tenant ID should appear under **Basic information**.



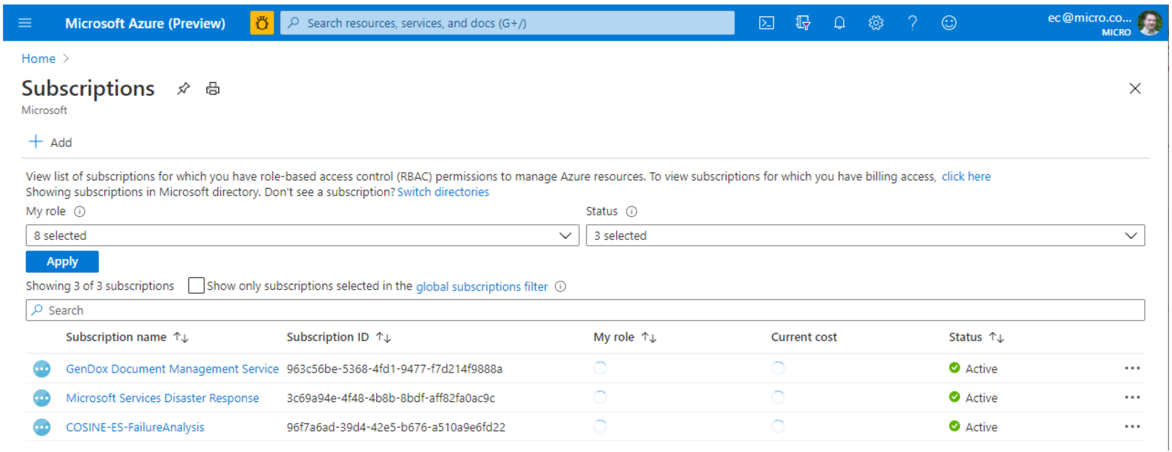
Find subscriptions and roles

1. Go to the Azure portal and select **Azure Active Directory** as noted in steps 1 and 2 above.

2. Select **Subscriptions**.



3. View subscriptions and roles.

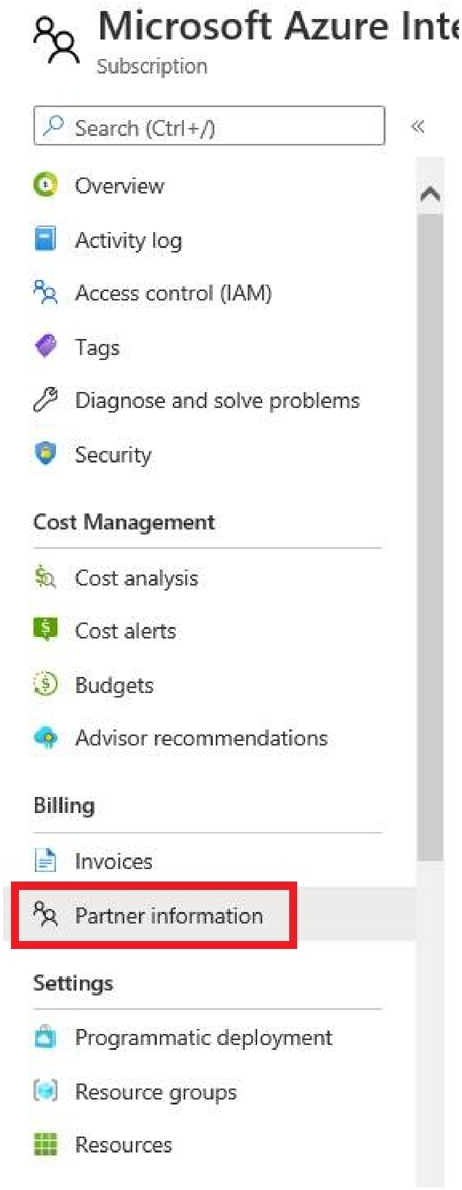


Find Partner ID

1. Navigate to the Subscriptions page as described in the previous section.

2. Select a subscription.

3. Under **Billing**, select **Partner information**.



Find User (Object ID)

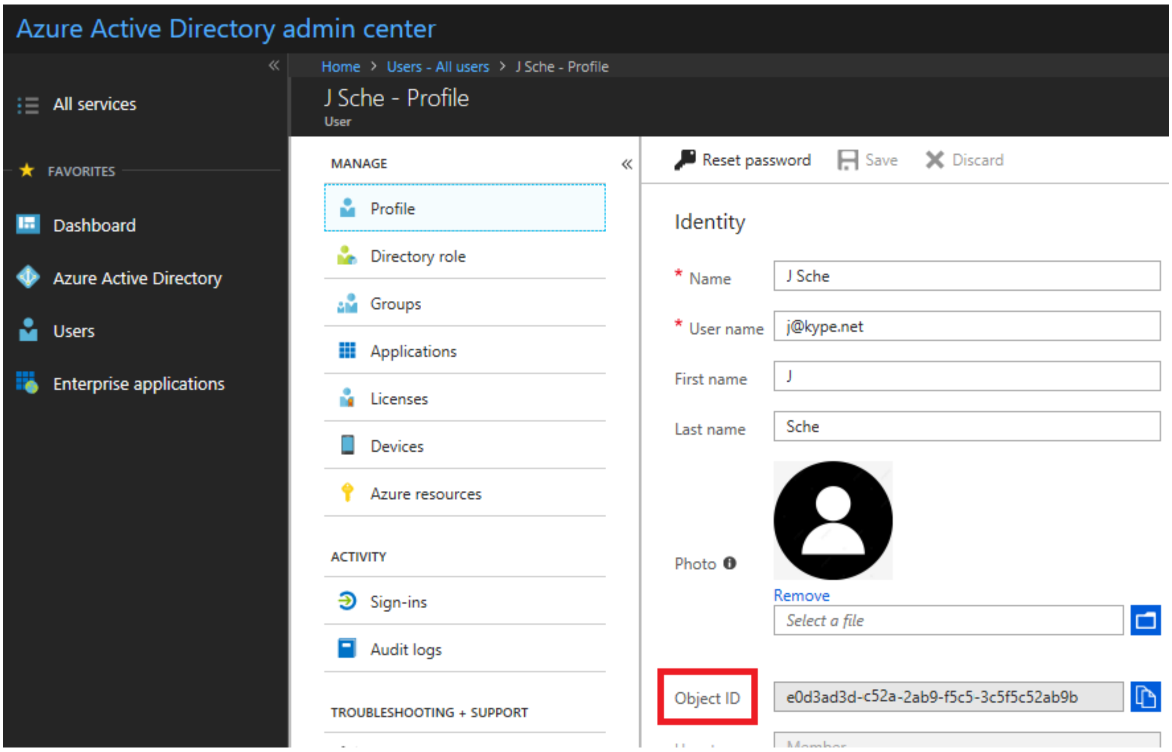
1. Sign in to the Office 365 Admin Portal with an account in the desired tenant with the appropriate administrative rights.

2. In the left-side menu, expand the **Admin Centers** section at the bottom and then select the Azure Active Directory option to launch the admin console in a new browser window.

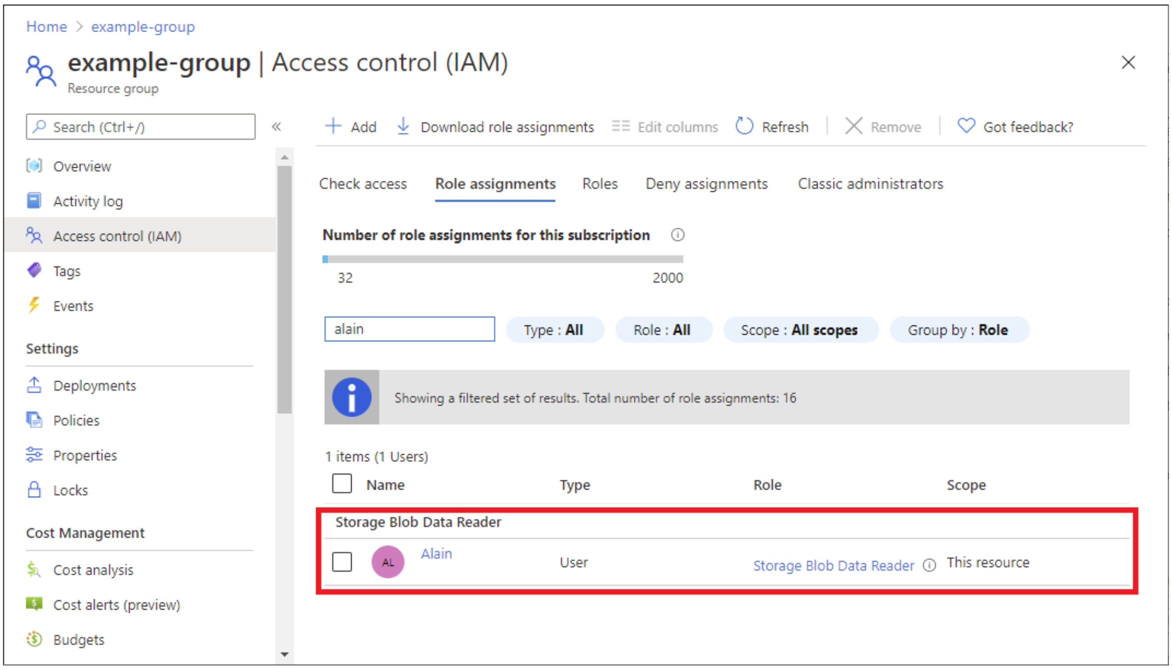
3. Select **Users**.

4. Browse to or search for the desired user, then select the account name to view the user account's profile information.

5. The Object ID is located in the Identity section on the right.



6. Find **role assignments** by selecting **Access control (IAM)** in the left menu, then **Role assignments**.

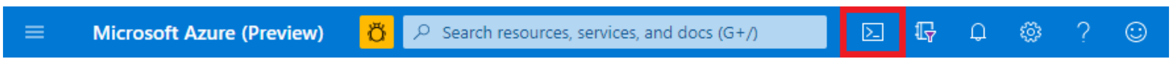


Find IDs for debugging

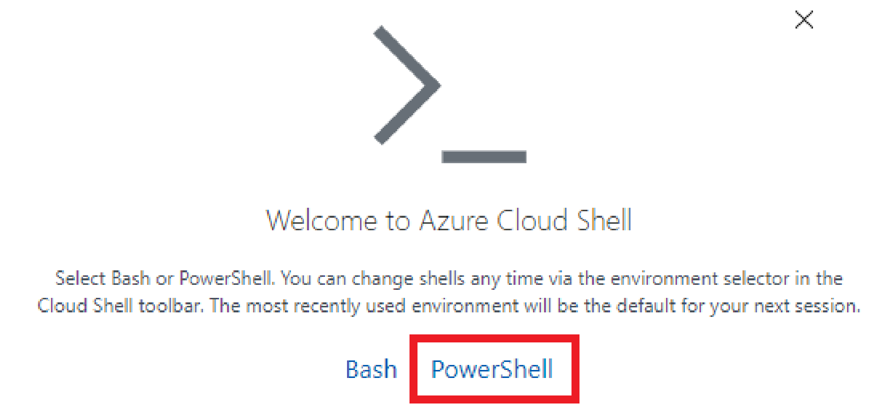
This section describes how to find tenant, object, and partner ID association for debugging purposes.

1. Go to the Azure portal.

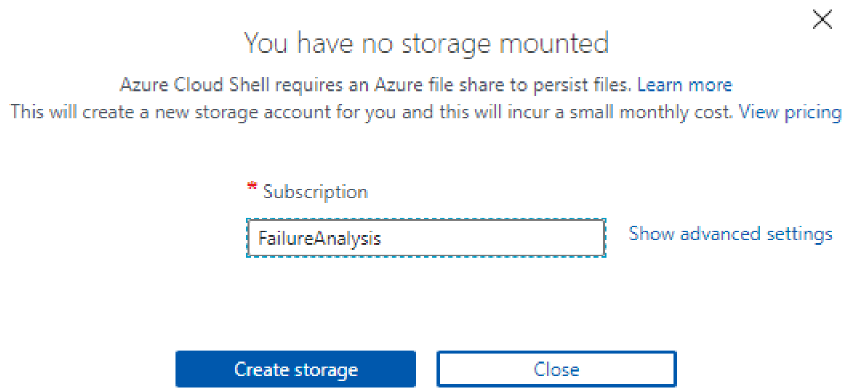
2. Open Azure Cloud Shell by selecting the PowerShell icon at the top-right.



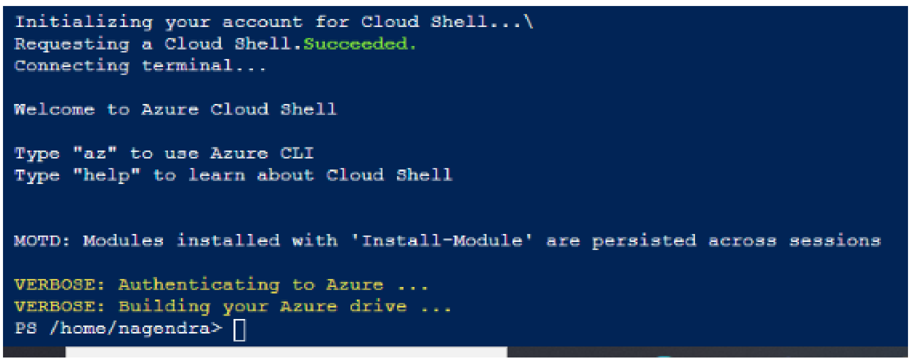
3. Select **PowerShell**.



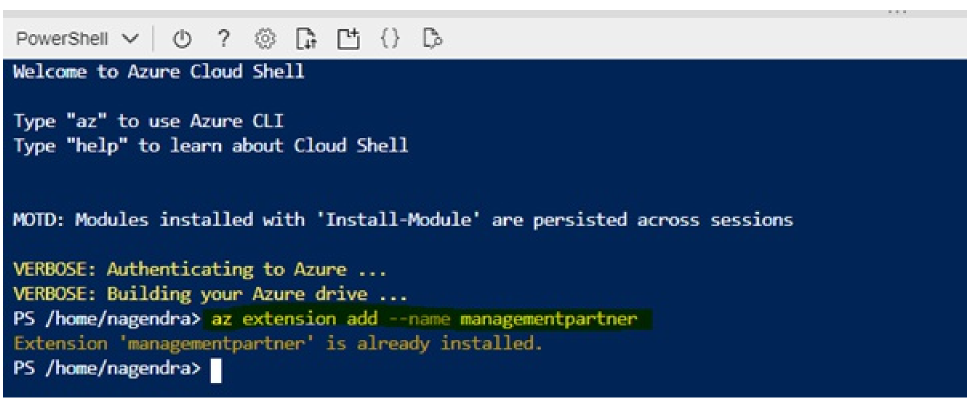
4. Select the **Subscription** box to choose the one to which the partner is linked, then **Create Storage**. This is a one-time action; if you already have storage set up, proceed to the next step.



5. Creating (or already having) storage opens the Azure Cloud Shell window.



6. For partner association details, install the extension with this command: `az extension add --name managementpartner`. Azure Cloud Shell will note if the extension is already installed:



7. Check partner details using this command:

```
az managementpartner show --partner-id xxxxxx
```

Example: `az managementpartner show --partner-id 4760962` .

Snap a screenshot of the command results, which will look similar to this:

```
robo@azure:~$ az managementpartner show
{
  "objectID": "f6203a25-847e-4011-b21c-4ac11c2451c2",
  "partnerId": "2217726",
  "partnerName": "AMP MANAGEMENT SERVICES SPA",
  "state": "Active",
  "tenantId": "d7c0140e-e82f-51e7-a978-c537fd865fad"
}
robo@azure:~$ azure account list
info:    Executing command account list
info:    Name                                                Id                                    Current  State
info:    --------------------------------------------------  ------------------------------------  -------  -------
info:    Microsoft Azure                                     48abef1f-1400-5a07-9488-08b6e8ea099b  true     Enabled
info:    Accesso ad Azure Active Directory(Converted to EA)  db339d17-89d7-474b-963f-9f0ee833cd1f  false    Enabled
info:    account list command OK
robo@azure:~$ info:
```

NOTE

If multiple subscriptions require a screenshot, use this command to switch between subscriptions:

```
az account set --subscription "My Demos"
```

Next steps

- Supported countries and regions

Supported publisher countries and regions

11/22/2021 • 2 minutes to read • Edit Online

To publish an offer to the Microsoft commercial marketplace, your company must legally reside in one of the following countries or regions:

- Afghanistan
- Åland Islands
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antarctica
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Bolivia
- Bonaire, Sint Eustatius and Saba
- Bosnia and Herzegovina
- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- British Virgin Islands
- Brunei
- Bulgaria
- Burkina Faso
- Burundi

- Cabo Verde
- Cambodia
- Cameroon
- Canada
- Cayman Islands
- Central African Republic
- Chad
- Chile
- Christmas Island
- Cocos (Keeling) Islands
- Colombia
- Comoros
- Congo
- Congo (DRC)
- Cook Islands
- Costa Rica
- Croatia
- Curaçao
- Cyprus
- Côte d’Ivoire
- Czechia
- Denmark
- Djibouti
- Dominica
- Dominican Republic
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Ethiopia
- Falkland Islands
- Faroe Islands
- Fiji
- Finland
- France
- French Guiana
- French Polynesia
- French Southern Territories
- Gabon
- Gambia
- Georgia
- Germany
- Ghana
- Gibraltar

- Greece
- Greenland
- Grenada
- Guadeloupe
- Guam
- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Heard Island and McDonald Islands
- Honduras
- Hong Kong SAR
- Hungary
- Iceland
- India
- Indonesia
- Iraq
- Ireland
- Isle of Man
- Israel
- Italy
- Jamaica
- Japan
- Jersey
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kosovo
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Macao SAR
- Madagascar
- Malawi
- Malaysia

- Maldives
- Mali
- Malta
- Marshall Islands
- Martinique
- Mauritania
- Mauritius
- Mayotte
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Myanmar
- Namibia
- Nauru
- Nepal
- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Niue
- Norfolk Island
- North Macedonia
- Northern Mariana Islands
- Norway
- Oman
- Pakistan
- Palau
- Palestinian Authority
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Pitcairn Islands
- Poland
- Portugal
- Puerto Rico
- Qatar

- Romania
- Russia
- Rwanda
- Réunion
- Saba
- Saint Barthélemy
- Saint Kitts and Nevis
- Saint Lucia
- Saint Martin
- Saint Pierre and Miquelon
- Saint Vincent and the Grenadines
- Samoa
- San Marino
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Sint Eustatius
- Sint Maarten
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Georgia and South Sandwich Islands
- South Korea (Republic of Korea)
- South Sudan
- Spain
- Sri Lanka
- St Helena, Ascension, Tristan da Cunha
- Suriname
- Svalbard and Jan Mayen
- Swaziland
- Sweden
- Switzerland
- São Tomé and Príncipe
- Taiwan
- Tajikistan
- Tanzania
- Thailand
- Timor-Leste
- Togo
- Tokelau
- Tonga

- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Turks and Caicos Islands
- Tuvalu
- U.S. Outlying Islands
- U.S. Virgin Islands
- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- United States
- Uruguay
- Uzbekistan
- Vanuatu
- Vatican City
- Venezuela
- Vietnam
- Wallis and Futuna
- Yemen
- Zambia
- Zimbabwe

Co-sell country and region codes

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Use these two-letter country/region codes when providing contact info on your offer's Co-sell page.

If the contact covers all Countries/Regions, use the three letter code "OOO".

If a contact covers more than one Country/Region, enter each of the two letter codes separated by a comma (for example, enter "US, CA, FR" without quotation marks).

Country/Region table

COUNTRY/REGION NAME	ISO-2
Global contacts	OOO
Afghanistan	AF
Åland Islands	AX
Albania	AL
Algeria	DZ
American Samoa	AS
Andorra	AD
Angola	AO
Antarctica	AQ
Antigua and Barbuda	AG
Argentina	AR
Armenia	AM
Aruba	AW
Australia	AU
Austria	AT
Azerbaijan	AZ
Bahamas	BS
Bahrain	BH

COUNTRY/REGION NAME	ISO-2
Bangladesh	BD
Barbados	BB
Belarus	BY
Belgium	BE
Belize	BZ
Benin	BJ
Bermuda	BM
Bhutan	BT
Bolivia	BO
Bonaire	BQ
Bosnia and Herzegovina	BA
Botswana	BW
Bouvet Island	BV
Brazil	BR
British Indian Ocean Territory	IO
British Virgin Islands	VG
Brunei	BN
Bulgaria	BG
Burkina Faso	BF
Burundi	BI
Cabo Verde	CV
Cambodia	KH
Cameroon	CM
Canada	CA
Cayman Islands	KY

COUNTRY/REGION NAME	ISO-2
Central African Republic	CF
Chad	TD
Czechia	CZ
Chile	CL
China	CN
Christmas Island	CX
Cocos (Keeling) Islands	CC
Colombia	CO
Comoros	KM
Congo	CG
Congo (DRC)	CD
Cook Islands	CK
Costa Rica	CR
Côte d'Ivoire	CI
Croatia	HR
Cuba	CU
Curaçao	CW
Cyprus	CY
Denmark	DK
Djibouti	DJ
Dominica	DM
Dominican Republic	DO
Ecuador	EC
Egypt	EG
El Salvador	SV

COUNTRY/REGION NAME	ISO-2
Equatorial Guinea	GQ
Eritrea	ER
Estonia	EE
eSwatini	SZ
Ethiopia	ET
Faroe Islands	FO
Fiji	FJ
Finland	FI
France	FR
French Guiana	GF
French Polynesia	PF
French Southern Territories	TF
Gabon	GA
Gambia	GM
Georgia	GE
Germany	DE
Ghana	GH
Gibraltar	GI
Greece	GR
Greenland	GL
Grenada	GD
Guadeloupe	GP
Guam	GU
Guatemala	GT
Guernsey	GG

COUNTRY/REGION NAME	ISO-2
Guinea	GN
Guinea-Bissau	GW
Guyana	GY
Haiti	HT
Heard Island and McDonald Islands	HM
Honduras	HN
Hong Kong SAR	HK
Hungary	HU
Iceland	IS
India	IN
Indonesia	ID
Iran	IR
Iraq	IQ
Ireland	IE
Isle of Man	IM
Israel	IL
Italy	IT
Jamaica	JM
Japan	JP
Jersey	JE
Jordan	JO
Kazakhstan	KZ
Kenya	KE
Kiribati	KI
Korea (South)	KR

COUNTRY/REGION NAME	ISO-2
Kuwait	KW
Kyrgyzstan	KG
Laos	LA
Latvia	LV
Lebanon	LB
Lesotho	LS
Liberia	LR
Libya	LY
Liechtenstein	LI
Lithuania	LT
Luxembourg	LU
Macao SAR	MO
Madagascar	MG
Malawi	MW
Malaysia	MY
Maldives	MV
Mali	ML
Malta	MT
Marshall Islands	MH
Martinique	MQ
Mauritania	MR
Mauritius	MU
Mayotte	YT
Mexico	MX
Micronesia	FM

COUNTRY/REGION NAME	ISO-2
Moldova	MD
Monaco	MC
Mongolia	MN
Montenegro	ME
Montserrat	MS
Morocco	MA
Mozambique	MZ
Myanmar	MM
Namibia	NA
Nauru	NR
Nepal	NP
Netherlands	NL
New Caledonia	NC
New Zealand	NZ
Nicaragua	NI
Niger	NE
Nigeria	NG
Niue	NU
Norfolk Island	NF
North Korea	KP
Northern Mariana Islands	MP
North Macedonia	MK
Norway	NO
Oman	OM
Pakistan	PK

COUNTRY/REGION NAME	ISO-2
Palau	PW
Palestinian Authority	PS
Panama	PA
Papua New Guinea	PG
Paraguay	PY
Peru	PE
Philippines	PH
Pitcairn Islands	PN
Poland	PL
Portugal	PT
Puerto Rico	PR
Qatar	QA
Réunion	RE
Romania	RO
Russia	RU
Rwanda	RW
Saint Barthélemy	BL
Saint Kitts and Nevis	KN
Saint Lucia	LC
Saint Martin	MF
Saint Pierre and Miquelon	PM
Saint Vincent and the Grenadines	VC
Samoa	WS
San Marino	SM
São Tomé and Príncipe	ST

COUNTRY/REGION NAME	ISO-2
Saudi Arabia	SA
Senegal	SN
Serbia	RS
Seychelles	SC
Sierra Leone	SL
Singapore	SG
Sint Maarten	SX
Slovakia	SK
Slovenia	SI
Solomon Islands	SB
Somalia	SO
South Africa	ZA
South Georgia and South Sandwich Islands	GS
South Sudan	SS
Spain	ES
Sri Lanka	LK
St Helena, Ascension, Tristan da Cunha	SH
Sudan	SD
Suriname	SR
Svalbard	SJ
Sweden	SE
Switzerland	CH
Syria	SY
Taiwan	TW
Tajikistan	TJ

COUNTRY/REGION NAME	ISO-2
Tanzania	TZ
Thailand	TH
Timor-Leste	TL
Togo	TG
Tokelau	TK
Tonga	TO
Trinidad and Tobago	TT
Tunisia	TN
Turkey	TR
Turkmenistan	TM
Turks and Caicos Islands	TC
Tuvalu	TV
Uganda	UG
Ukraine	UA
United Arab Emirates	AE
United Kingdom	GB
United States	US
Uruguay	UY
U.S. Outlying Islands	UM
U.S. Virgin Islands	VI
Uzbekistan	UZ
Vanuatu	VU
Vatican City	VA
Venezuela	VE
Vietnam	VN

COUNTRY/REGION NAME	ISO-2
Wallis and Futuna	WF
Yemen	YE
Zambia	ZM
Zimbabwe	ZW

Next steps

- Learn about the co-sell option in the commercial marketplace.

Co-sell state and province codes in Azure Marketplace

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This article lists the available state and province codes when providing contact info on your offer's Co-sell page. If applicable, use these codes to provide State/Province info when providing contact info on your offer's Co-sell page.

US states and territories

STATE AND TERRITORY NAME	CODE
Alabama	US-AL
Alaska	US-AK
Arizona	US-AZ
Arkansas	US-AR
California	US-CA
Colorado	US-CO
Connecticut	US-CT
Delaware	US-DE
Florida	US-FL
Georgia	US-GA
Hawaii	US-HI
Idaho	US-ID
Illinois	US-IL
Indiana	US-IN
Iowa	US-IA
Kansas	US-KS
Kentucky	US-KY
Louisiana	US-LA

STATE AND TERRITORY NAME	CODE
Maine	US-ME
Maryland	US-MD
Massachusetts	US-MA
Michigan	US-MI
Minnesota	US-MN
Mississippi	US-MS
Missouri	US-MO
Montana	US-MT
Nebraska	US-NE
Nevada	US-NV
New Hampshire	US-NH
New Jersey	US-NJ
New Mexico	US-NM
New York	US-NY
North Carolina	US-NC
North Dakota	US-ND
Ohio	US-OH
Oklahoma	US-OK
Oregon	US-OR
Pennsylvania	US-PA
Rhode Island	US-RI
South Carolina	US-SC
South Dakota	US-SD
Tennessee	US-TN
Texas	US-TX

STATE AND TERRITORY NAME	CODE
Utah	US-UT
Vermont	US-VT
Virginia	US-VA
Washington	US-WA
West Virginia	US-WV
Wisconsin	US-WI
Wyoming	US-WY
District of Columbia	US-DC
American Samoa	US-AS
Guam	US-GU
Northern Mariana Islands	US-MP
Puerto Rico	US-PR
United States Minor Outlying Islands	US-UM
U.S. Virgin Islands	US-VI

Canadian provinces and territories

PROVINCE AND TERRITORY NAME	CODE
Alberta	CA-AB
British Columbia	CA-BC
Manitoba	CA-MB
New Brunswick	CA-NB
Newfoundland and Labrador	CA-NL
Nova Scotia	CA-NS
Ontario	CA-ON
Prince Edward Island	CA-PE
Quebec	CA-QC

PROVINCE AND TERRITORY NAME	CODE
Saskatchewan	CA-SK
Northwest Territories	CA-NT
Nunavut	CA-NU
Yukon	CA-YT

Australian states and territories

STATE AND TERRITORY NAME	CODE
New South Wales	AU-NSW
Queensland	AU-QLD
South Australia	AU-SA
Tasmania	AU-TAS
Victoria	AU-VIC
Western Australia	AU-WA
Australian Capital Territory	AU-ACT
Northern Territory	AU-NT

Next steps

- Learn about the co-sell option in the commercial marketplace.

Categories and subcategories in the commercial marketplace

11/22/2021 • 3 minutes to read • Edit Online

Categories and subcategories are mapped to one or both of the commercial marketplace online stores based on the solution type. When you create a commercial marketplace offer in Partner Center, it may be listed on either or both online stores based on the offer type, categories, and other options you select. In the rare case that the offer is relevant to the users of both online stores, it can appear in both.

Select the categories and subcategories that best align with your solution. Assigning the categories and subcategories that are appropriate for your offer will help customers find your offer in the commercial marketplace.

You can select:

- At least one and up to two categories. You can choose a primary and a secondary category.
- Up to two subcategories for each primary category. If you don't select any subcategories, your offer will still be discoverable under the selected category.

Azure Marketplace categories and subcategories

This table shows the primary categories and subcategories that map to Azure Marketplace.

PRIMARY CATEGORY	SUBCATEGORY
AI + Machine Learning	Automated ML Bot Services Business/Robotic Process Automation Cognitive Services Data Labeling Data Preparation Knowledge Mining ML Operations ML Service
Analytics	Big Data Data Analytics Data Insights Predictive Analytics Real-time/Streaming Analytics
Blockchain	App Accelerators Multi-node Ledger Single-node Ledger Tools
Compute	Application Infrastructure Cache Operating Systems
Containers	Container Apps Container Images Get Started with Containers

PRIMARY CATEGORY	SUBCATEGORY
Database	Data Lakes Data Warehouse Ledger/Blockchain Databases NoSQL Databases Relational Databases
Developer Tools	Developer Service Scripts Tools
DevOps	N/A
Identity	Access Management
IT & Management Tools	Management Solutions Business Applications
Internet of Things	IoT Analytics & Data IoT Connectivity IoT Core Services IoT Edge Modules Iot & IIot Platforms IoT Security IoT Solutions
Media	Content Protection Live & On-Demand Streaming Media Services
Migration	Data Migration
Mixed Reality	N/A
Monitoring & Diagnostics	N/A
Networking	Appliance Managers Connectivity Firewalls Load Balancers
Security	Identity & Access Management Information Protection Threat Protection
Storage	Backup & Recovery Block File & Object Sharing Data Management Enterprise Hybrid Storage
Web	Blogs & CMS Ecommerce Starter Web Apps Web Apps Web Apps Frameworks

Microsoft AppSource categories and subcategories

This table shows the primary categories and subcategories that map to Microsoft AppSource.

PRIMARY CATEGORY	SUBCATEGORY
AI + Machine Learning	AI for Business Bot Apps
Analytics	Advanced Analytics Dashboard & Data Visualization
Collaboration	Chat Contact Management Meeting & Calendar Management Site Design & Management Voice & Video Conferencing
Commerce	E-Commerce, Social Commerce, & Marketplaces Loyalty & Gifting Product Information & Content Management Personalization, Ratings, & Reviews Store Management Subscription & Post Purchase Services
Compliance & Legal	Data, Governance, & Privacy Health & Safety Legal Tax & Audit
Customer Service	Back Office & Employee Service Contact Center Face to Face Service Knowledge & Case Management Social Media & Omnichannel Engagement
Finance	Accounting Analytics, Consolidation & Reporting Asset Management Compliance & Risk Management Payments, Credit, & Collections
Geolocation	Maps News & Weather Address Validation
Human Resources	HR Operations Talent Acquisition Talent Management People Analytics & Insights
Internet of Things	Asset Management & Operations Connected Products Intelligent Supply Chain Predictive Maintenance Remote Monitoring Safety & Security Smart Infrastructure & Resources Vehicles & Mobility

PRIMARY CATEGORY	SUBCATEGORY
IT & Management Tools	Business Applications Management Solutions
Marketing	Advertisement Analytics Campaign Management & Automation Email Marketing Events & Resource Management Pricing Optimization Research & Analytics Social Media
Operations & Supply Chain	Asset & Production Management Demand Forecasting Information Management & Connectivity Planning, Purchasing & Reporting Quality & Service Management Sales & Order Management Transportation & Warehouse Management
Productivity	Blogs Content Creation & Management Document & File management Email Management Gamification Language & Translation Search & Reference Workflow Automation
Project Management	Project Accounting & Revenue Recognition Project Invoicing Project Time & Expense Reporting Project Resource Planning & Utilization Metrics Project Planning & Tracking Project Sales Proposals & Bids
Sales	Business Data Management Configure, Price, Quote (CPQ) Contract Management CRM Sales Enablement Telesales

HTML tags supported in commercial marketplace offer descriptions

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Use HTML tags to format your description so it's more engaging. Most tags require both an opening and closing component, as shown in this table.

TO DO THIS	USE	LIKE THIS	TO GET THIS
Bold	 & 	 Example : Free trial	**Example**: Free trial
Italics	<i> & </i>	Select the <i> first </i> row.	Select the *first* row.
New line	 	This is my first line. This is my second line.	This is my first line. This is my second line.
Paragraphs	&	This is my first paragraph. This is my second paragraph.	This is my first paragraph. This is my second paragraph.
Bullets	& , &	 - Your bullet item - Your bullet item - Your bullet item 	• Your bullet item • Your bullet item • Your bullet item
Numbering	& , &	 - Your numbered item - Your numbered item - Your numbered item 	1. Your numbered item 2. Your numbered item 3. Your numbered item
New line without new number (or bullet)	& , & , 	 - add text here - add text here add text here 	1. add text here 2. add text here add text here

TO DO THIS	USE	LIKE THIS	TO GET THIS
New paragraph without new number (or bullet)	`<ol> & </ol>, <li> & </li>,  `	`<ol>` `<li>` add text here `</li>` `<li>` add text here `  ` add text here `</li>` `</ol>`	1. add text here 2. add text here add text here

Use headings	`<h1> & </h1>, <h2> & </h2>`
	, up to `<h6> & </h6>`
		`<h1>` This is heading 1
		`</h1>`
		`<h2>` This is heading 2
		`</h2>`
		`<h3>` This is heading 3
		`</h3>`
			This is heading 1
			This is heading 2
			This is heading 3

Reference architecture diagram

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The reference architecture diagram is a model that represents the infrastructure your offer relies on. For Azure IP solutions, the diagram should also show how your offer uses Microsoft's cloud services per the technical requirements of IP Co-sell. It is not designed to assess the quality of the architecture. It is designed to show how your solution uses Microsoft services.

The reference architecture diagram can be created via multiple tools. We recommend Microsoft Visio, as it has multiple stencils that depict Azure architecture models.

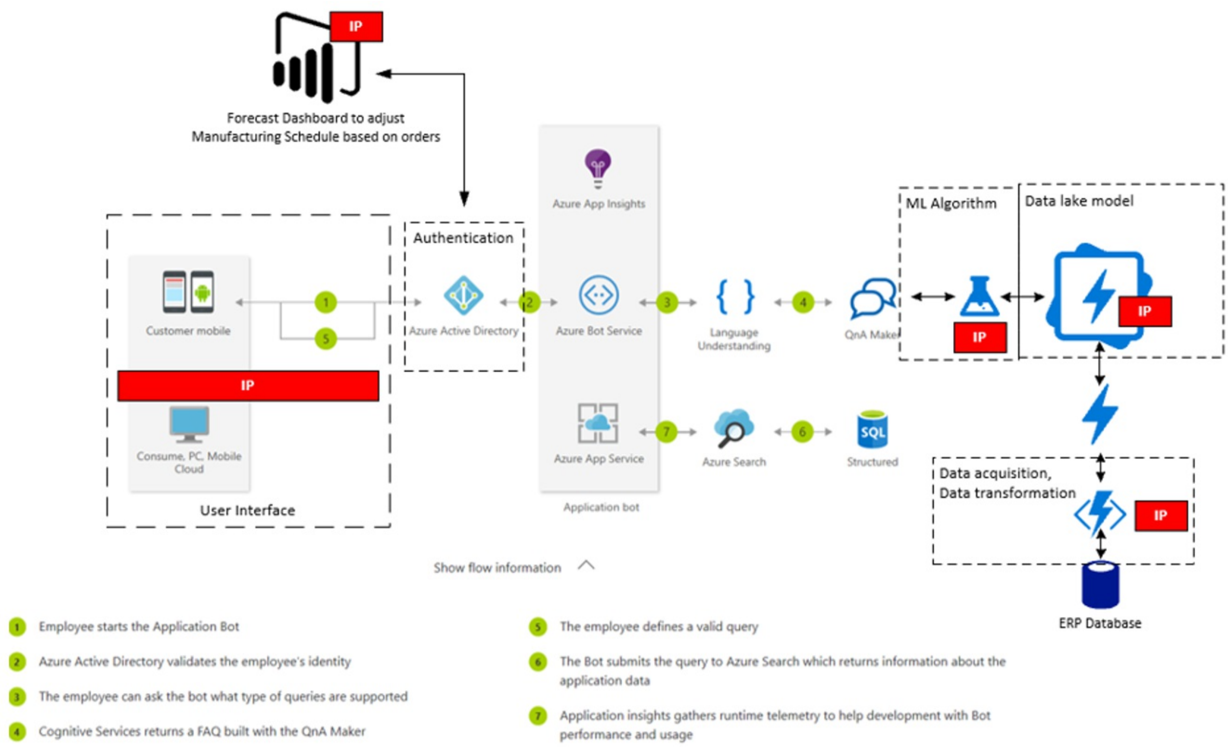
A helpful starting point for building reference architecture diagrams is to leverage the Azure Architecture models.

Typical components of a reference architecture diagram

The diagram must clearly identify your IP as solution, application, or service code both deployed on and driving consumption of Microsoft Azure. This code must be highly reusable and not depend on extensive customization per deployment.

- Cloud services that host and interact with your offer, including ones that consume Azure resources
- Data connections, data layers, and data services being consumed by your offer
- Cloud services used to control security, authentication, and users of the offer
- User interfaces and other services that expose the offer to users
- Hybrid or on-premises connectivity and integrations or a combination of both

This screenshot shows an example of a reference architecture diagram.



This example reference architecture diagram is for a vertical industry chatbot that can be integrated with intranet sites to help with forecast demand scenarios via a machine learning algorithm. This solution uses supply chain and manufacturing schedule data from different ERP systems. The bot is designed to address questions about when a salesperson can commit on possible delivery dates for an order.

Next steps

- Configure Co-sell for a commercial marketplace offer