AUDIOCODES APPLICATION NOTE

AudioCodes Live Cloud

Taking Service Providers to the Next Level With Microsoft Operator Connect Accelerator

Hybrid work is here to stay, and Microsoft Teams has made it easier than ever for businesses to enhance productivity from anywhere. With over 270 million monthly active users reported as of Jan 2022, more and more organizations are looking to connect Microsoft Teams to their public network quickly and seamlessly. This generates a huge opportunity for service providers to support businesses looking to make a change to their telephony systems.

"Microsoft's commitment to creating a best-in-class, modern calling experience begins with the deployment of Teams Phone. Operator Connect provides you, the operator, with deeper integration into the Teams platform to enhance and streamline the Microsoft Teams Phone experience around networking, provisioning, management, and reporting APIs. Doing this provides customers a simplified Teams Phone experience delivered by operators that has parity with Microsoft offerings. Through this partnership, Microsoft and operators can develop a deeper and more strategic relationship that takes Teams Phone to the next level by delivering higher-quality calling experiences to customers."

Taken from: Microsoft Operator Connect

Microsoft Calling Options

Microsoft offers three different options when it comes to public switched telephone network (PSTN) connectivity: Microsoft Calling Plans, Microsoft Direct Routing and Microsoft Operator Connect.

Operator Connect allows end-customers to choose which operator they would like to work with for their PSTN calling, directly from the Microsoft Teams admin center. Since the list of qualified operators is displayed in each customer's admin center, service providers and carriers strive to be added to the list and grow their business.

> AudioCodes Live Cloud is a SaaS solution that enables service providers to effortlessly onboard customers to Microsoft Operator Connect and/or Microsoft Direct Routing.

Operator Connect enables service providers to scale their Direct Routing services and provides a solution to onboard customers instantly, offering provisioning automation, billing and reporting, allowing them to attract new and existing customers.
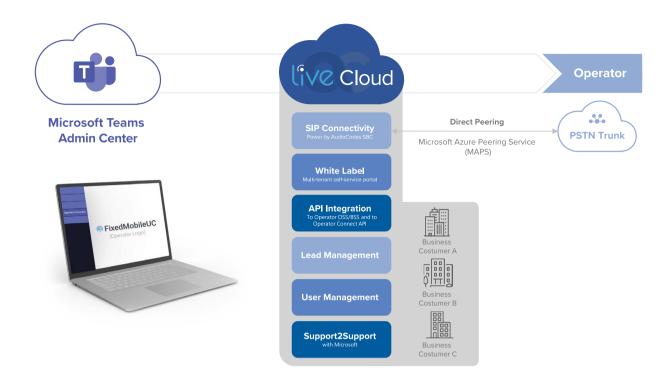
To participate in the Operator Connect Partner Program, service providers first need to pass Microsoft authorized third-party verification and certification. However, a simple and cost effective alternative for service providers would be to use an Operator Connect Accelerator Partner like AudioCodes. Operator Connect Accelerator allows service providers to instantly meet the verification and requirements needed to deliver a successful Operator Connect services.

Operator Connect Requirements

Service providers that have been verified and certified by Microsoft to participate in Operator Connect will need to support the following capabilities:

- **SIP and PSTN –** Service providers need to connect Microsoft Teams customers to the PSTN network, and integrate their infrastructure, via a defined SBC setup.

    Service providers are required to implement and operate the SBCs alongside network connections, as a multi-region SBC and data recovery. These SBCs must be certified for Direct Routing to be approved for Operator Connect connectivity.

- **Operator Connect API Integration –** Integration into the end-customer's tenant in Microsoft Teams is done through a Microsoft API. This requires development skills and automation tools, which demands a high level of technical expertise in PowerShell scripts and is likely to be time-consuming and expensive.

Operator Connect Accelerator Powered by AudioCodes Live Cloud

- **Multi-Tenant Customer Management Platform –** Once the PSTN interconnection with Teams is ready and the Microsoft Teams API has been developed, the integration between the Microsoft Teams cloud and the service provider is in place. Customer leads coming from Microsoft can now be managed by the service provider.

  At this point, a management system with automation should also be deployed and integrated between the different customers' tenants, the customers' PSTN trunks and the service provider. This allows a smooth and automatic process flow.

  In addition, PSTN calling numbers (DIDs) should be uploaded to the Microsoft tenant. If a customer is already using Microsoft Teams Direct Routing, this should also be considered and integrated into the customer configuration.

- **Multi-Tenant User Management Platform –** A multi-tenant, multi-tier portal for the customers' user management, where move, add, change and delete (MACD) operations can be performed, and calling policies defined, to support end-customers' daily operations. The alternative is to manually configure each operation with PowerShell scripts.

  An optional, but important point to consider is an advanced automation feature to add multiple users, allocate phone numbers in bulk and onboard new employees, without having to recruit PowerShell scripting experts. This enables the easy scaling of the solution to a high number of customers managed directly, or via resellers.

- **Operator Connect SLA Metrics and Operational Excellence –** In order to assure voice quality and customer satisfaction, Microsoft set SLA and quality metrics standards that service providers must meet to achieve Microsoft certification.

Service providers should follow the above requirements, starting from validation and verification from an authorized Microsoft third-party and ending in final approval:

- Discovery: Verify that SIP trunk requirements are aligned with Microsoft specifications.
- Environment Setup: Using Operator's application registration.
- Preproduction Testing: Connect to Microsoft APIs on behalf of the service provider.
- Networking Validation: Assuring the preferred deployment model meets Microsoft strict standards.
- Final Testing: Running test calls, reviewing anomaly detection, matching Microsoft's KPIs and getting approved.
- Microsoft Approval for Logo: Upload the service providers' brand to Microsoft portal.
- Microsoft SLA: Meet Microsoft KPIs and SLA.

Once a service provider meets these requirements, Operator Connect verification approval is obtained from Microsoft by a third party authority.

Investments and Efforts

Microsoft published a rough estimate of the efforts and investments required by service providers based on a three-year TCO of approximately $2.2 million over three years, including:

- The cost of setting up a cluster of SBCs and other hardware infrastructures.

- Integrating the SBC and Teams into OSS/BSS platforms and processes.

- Operating costs for infrastructure and software integration.

- SBC hosting costs and any other associated networking costs (for example, SBCaaS at $0.65 per user and software at $0.15 per user).

- Costs for marketing collateral, training the sales staff, running pilots and more.

- Hiring and training support and operations staff.

However, it does not take the development of Operator Connect API integration with Microsoft Teams services into account. This process is a continuous effort, requiring an estimated ten employees in the first year, plus an average of two software engineers the second year and on, for ongoing development and maintenance. Therefore, another $2 million should be added to the first year and a minimum of $400,000 for the subsequent two years, based on the average software engineer's annual salary of around $200,000. This means the three-year TCO will be more like $4.6 million.

	Year 1 (25k Users)	Year 2 (100k Users)	Year 3 (300K Users)	3 YR Solution Costs	Remarks
Infrastructure Build	$100,000			$100,000	Costs to build SBCs and other hardware infrastructure
Automation and Operation Integration	$100,000			$100,000	Integrating SBCs and Teams into OSS/BSS platforms and processes
Service Operating Costs	$18,750	$75,000	$200,000	$293,750	Operating costs for infrastructure and software integration including SBC hosting costs, and other associated networking costs (SBCaaS at $0.65/ user and software at $0.15/user as examples)
Marketing and GTM	$100,000	$85,000	$85,000	$270,000	Costs for marketing collateral and training of sales staff, pilots etc.
Operations and Support Staff	$300,000	$450,000	$700,000	$1,150,300	Hiring and training support and operations staff
Totals	**$618,750**	**$610,000**	**$985,000**	**$2,210,750**	

Microsoft Teams Partner Guide for Operators - Offerings and Services deck

- Example cost for 3 years- $2.2M
- Onboarded users in Year 3- $300k total
- $10/u/month result in profit margin of 30%
- Does not take into account benefits from economies of scale for cost reduction

AudioCodes Live Cloud – Taking Service Providers to the Next Level With Microsoft Operator Connect Accelerator

Introducing AudioCodes Live Cloud Solution for Operator Connect Accelerator

AudioCodes Live Cloud, a certified SaaS solution for Microsoft Operator Connect Accelerator gives service providers the ability to onboard and deliver a managed multi-tenant Microsoft Teams voice service offering for their customers. This white-label solution facilitates Microsoft Teams connectivity directly from Azure, enabling Operator Connect, as well as Direct Routing as a service.

Live Cloud empowers service providers to elevate their business strategy offerings for both new and existing customers using an accelerated onboarding process for their business customer's SIP trunk connectivity, creating a seamless, rapid, and cost-effective migration to Microsoft Teams. It delivers high-quality voice and video collaborations on a per-user per-month subscription basis, while reducing TCO.

In addition, service providers deploying Live Cloud for Microsoft Teams voice connectivity can also offer a range of AudioCodes solutions that complete their customers' Teams experience. These include certified business phones and meeting room solutions also available as DaaS.

> ## AudioCodes Live Cloud is a quick route to deliver Microsoft Operator Connect as well as Direct Routing as a service with a multi-tenant, white label, SaaS solution directly from Azure!

AudioCodes Live Cloud Plans

AudioCodes Live Cloud is available in three different plans:
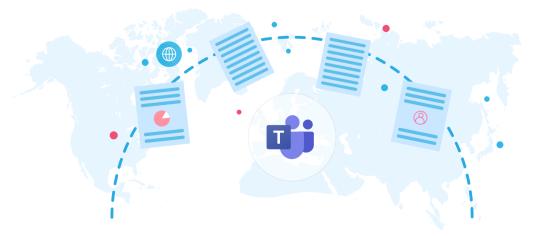
- **Hosted Essentials**

  - Operator Connect API integration, saving service providers the need to develop Microsoft API frameworks.

  - Provider verification for instant access to Microsoft's Operator Connect.

  - A self-service, multi-tenant portal created to simplify business customer onboarding and management.

  - 24/7 monitoring and maintenance via AudioCodes NOC to keep your network secured.

- **Hosted Essentials+ with the addition of:**

  - PSTN connectivity configuration and automation for both Operator Connect and Direct Routing.

  - A multi-tier, self-service portal for end-customer MACD operations which enhances the end-customers' experience and eliminates the need to hire expensive PowerShell experts to perform tasks manually through custom scripts.

- **Hosted Essentials Pro - Essentials+, with the addition of:**

  - Proactive lifecycle management and an advanced telephony portal with intuitive user interface which allows service providers to view customer calling data.

  - User policy and automation management makes it easy for service providers to keep track and regulate their customers.

  - Monitoring and Teams QoE reporting using powerful AudioCodes applications, giving end-customers the optimal Operator Connect experience.

The Key to Productivity in the Hybrid Workplace

With the new era of hybrid workplace and the rapid growth of Microsoft Teams, today's service providers can't afford to fall behind by offering Direct Routing without Operator Connect.

The big question service providers face comes down to if they want to invest in developing Operator Connect integration and maintaining it on their own? Or do they want to leverage a SaaS platform from an expert team to cover for them?

AudioCodes Live Cloud is the simple and effortless way to instantly deliver a multi-tenant Microsoft Teams voice service offering. It helps service providers ride the accelerating growth of Microsoft Teams and invest their budget and efforts on the business side, while giving their customers more flexibility with regards to connectivity options.

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For more information, please contact us.