PrecisionPoint ‘Reveal’

User Guide

Copyright PrecisionPoint © 2024

1 Document management 3
1.1 Business Stakeholders 3
1.2 Revision History 3
2 Introduction 4
2.1 Background 4
2.2 Purpose 4
2.3 Related Documents 4
3 Getting Started 5
3.1 Launch the 'Reveal' webpage 5
4 Configure the Connection 7
4.1 Table selection 7
4.1.1 Column Selection 9
5 Actions 10
5.1 How to perform an action 10
5.2 Refresh the Meta Data 12
5.3 Refresh the Data 13
5.3.1 Refresh Type: Full Refresh 13
5.3.2 Refresh Type: Incremental Refresh 16
6 Scheduling 18

1 Document management

1.1 Business Stakeholders

Name	Function	Reviewed	Review Date
R Wendon	Customer Success	☑	02/10/2024

1.2 Revision History

Version	Date	Name	Details of amendments
1.0	06/10/2014	R Wendon	Initial Draft

2 Introduction

2.1 Background

PrecisionPoint 'Reveal' has been created as a SaaS utility to allow for that has simplified the extraction of data that resides behind the Azure Dynamics ERP platforms (Business Central and D365 Finance) into a client specified SQL database e.g. SQL Server, Azure SQL, Azure Managed Instance.

It allows for absolute control of your key Dynamics data, without any interference against the underlying Dynamics database or system itself, by creating a replicated dataset that can be used as required.

2.2 Purpose

The purpose of this document is to explain how to use the PrecisionPoint 'Reveal' SaaS application to configure your data extraction for Dynamics Finance or Dynamics Business Central into your specified SQL database.

Pre-Requisites:

- A Microsoft Entra Account that has been registered with PrecisionPoint Software.
- Your Reseller or Client account has been registered / exists within the PrecisionPoint Reveal service.

To get started contact the PrecisionPoint support desk, support@precision-point.com, or your PecisionPoint Software reseller to configure you as a user of the 'Reveal' application, and to obtain any supporting technical documentation you may require for your implementation.

This guide is intended for non-administrative type users of Reveal and does not detail the Connection creation and set up / SQL installation processes.

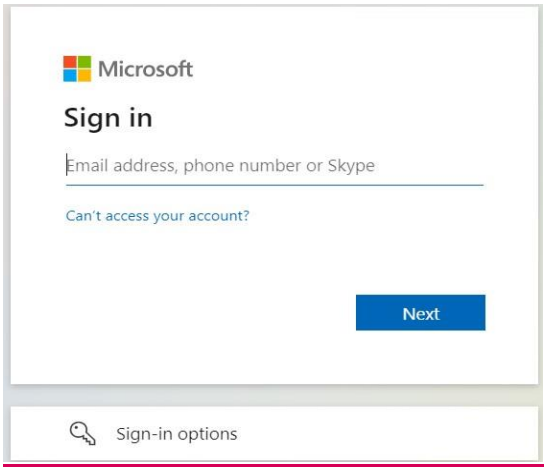
2.3 Related Documents

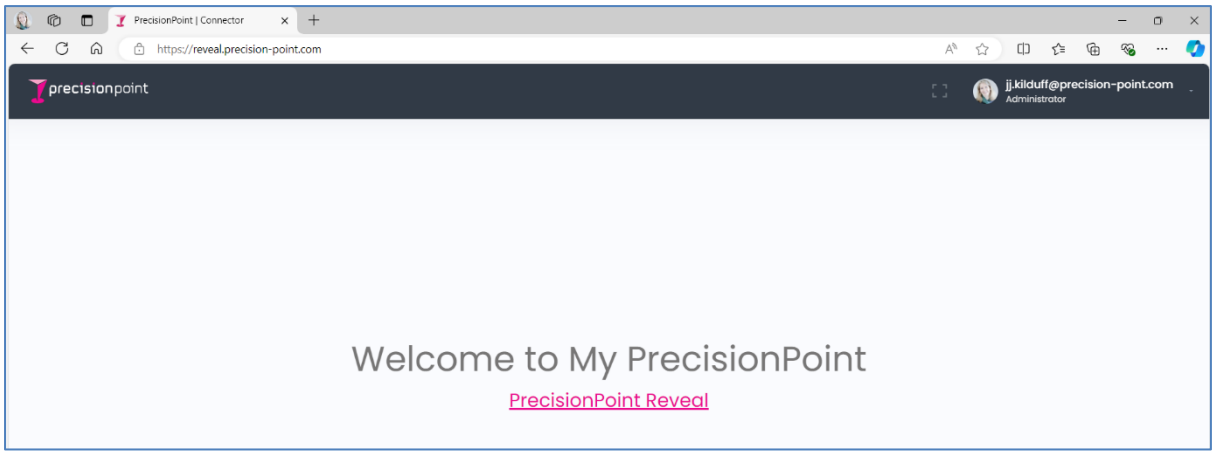
PrecisionPoint 'Reveal' Administrators Guide.

3 Getting Started

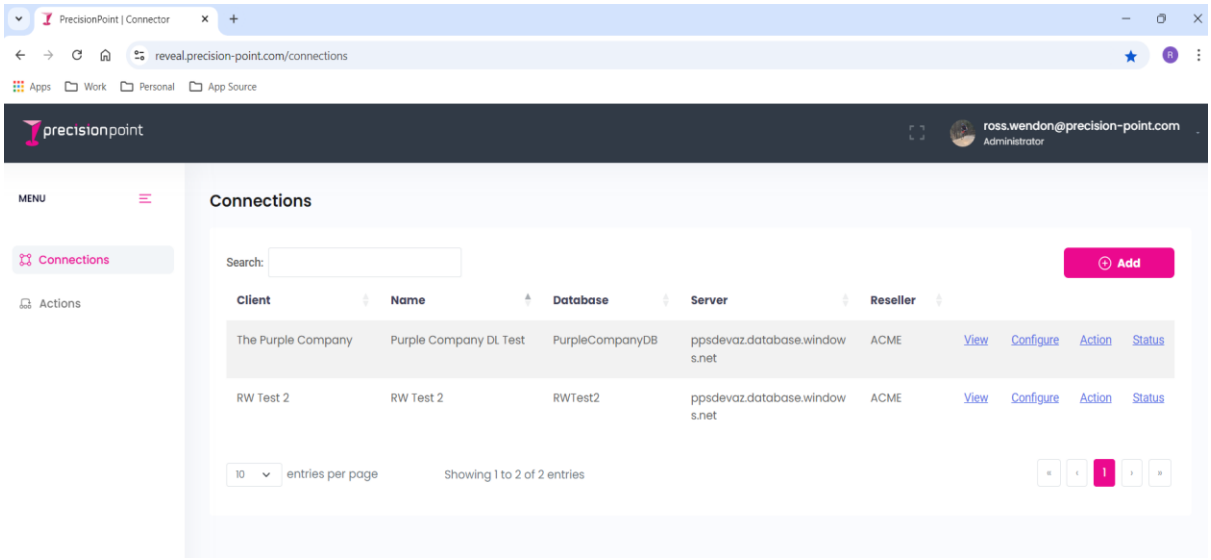
3.1 Launch the 'Reveal' webpage

- Please navigate to: - https://reveal.precision-point.com/
- Login using your Microsoft D365 account.





- Click on the '**PrecisionPoint Reveal**' hyperlink in the middle of the screen.
- This will take you to the connection screen – Once open, you will see your existing client connections.

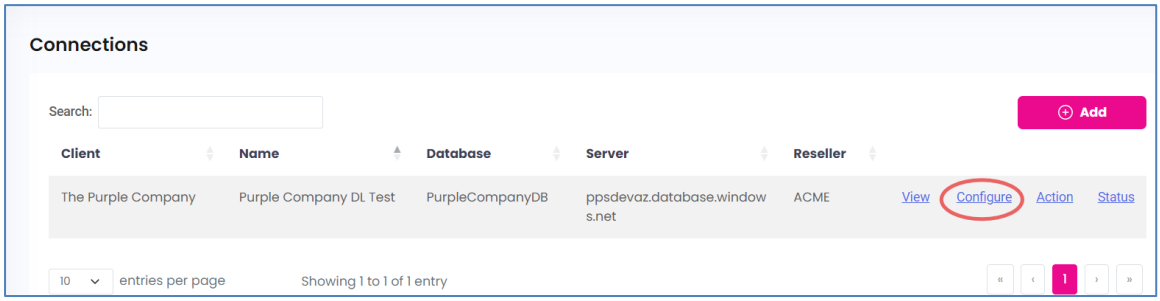


Each Connection represents and data extract process from your source Dynamics system to a designated SQL database.

In **blue** beside each connection are shortcut links to be able View the Connector details, Configure to select the tables and if desired, which columns are to be included in the Reveal data extract, Action to start refresh meta data / data in your destination database, Status to see a list of the lates actions performed against your Reveal connection and their status.

You can also use the Menu on the left-hand side to navigate to the same screens only without the Client and Connection Name preselected.

4 Configure the Connection



The Configure screen is where you can manage what data you want to extract from your Dynamics Source to your SQL destination database.

This option is not available until the Reveal has successfully completed the installation process aka the Run Setup action.

The Connection configuration should be reviewed before performing your first data refresh.

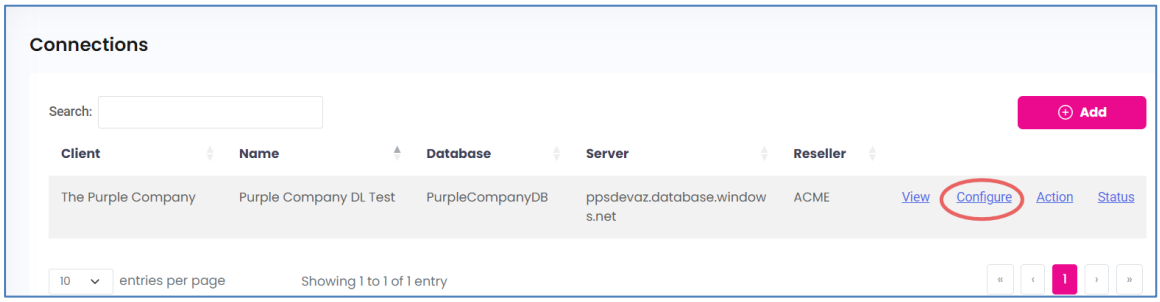
Note: As standard, Reveal will automatically select all tables that are used to build of the PrecisionPoint data warehouse, so it is likely that any tables you may require will already be configured to be included in the Reveal processes.

You can add or remove tables at any time. However, to see the latest up to data changes in the data dictionary that may have occurred since the last all tables refresh data process, you may need to run a Refresh Metadata action first. Please refer to section 5.2 for details.

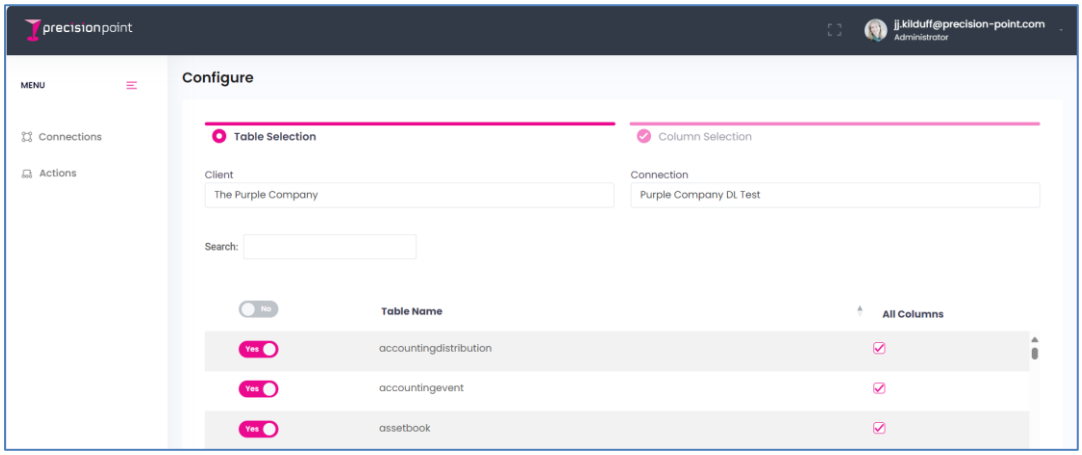
4.1 Table selection

The following process can be used for initial setup, and for any subsequent changes that you may wish to make at a later stage.

- From 'Connections' list click the 'Configure' hyperlink next to the Reveal connection you wish to work with.



- The 'Configure – Table Selection' screen will then open.



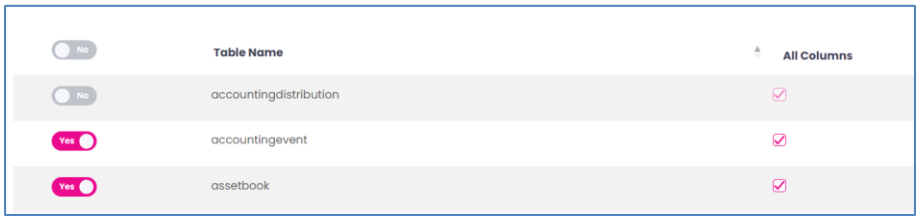
From this screen, you can configure the tables that you wish to include / exclude from your export.

To check the inclusion state of any table, you can either scroll through the list or enter the table name in the 'Search' field and check if the toggle is set to 'Yes' or 'No'.

- To include or exclude a table, simply set the toggle to 'Yes' or 'No' as required.

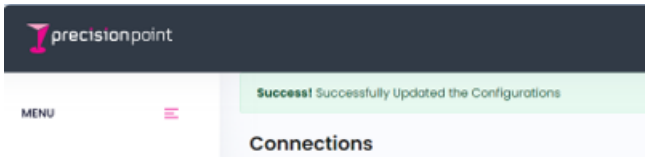
- All Columns check box: You may wish to focus your table extraction process to only include the table columns you need or want. If left checked all the table columns that exist on the source table will be extracted.

By unchecking the 'All Columns' box you will be given the opportunity to filter the list of columns that are extracted for any selected table. If the 'All Columns' box is unchecked for any table this will enable the Column selection screen that we will cover next.



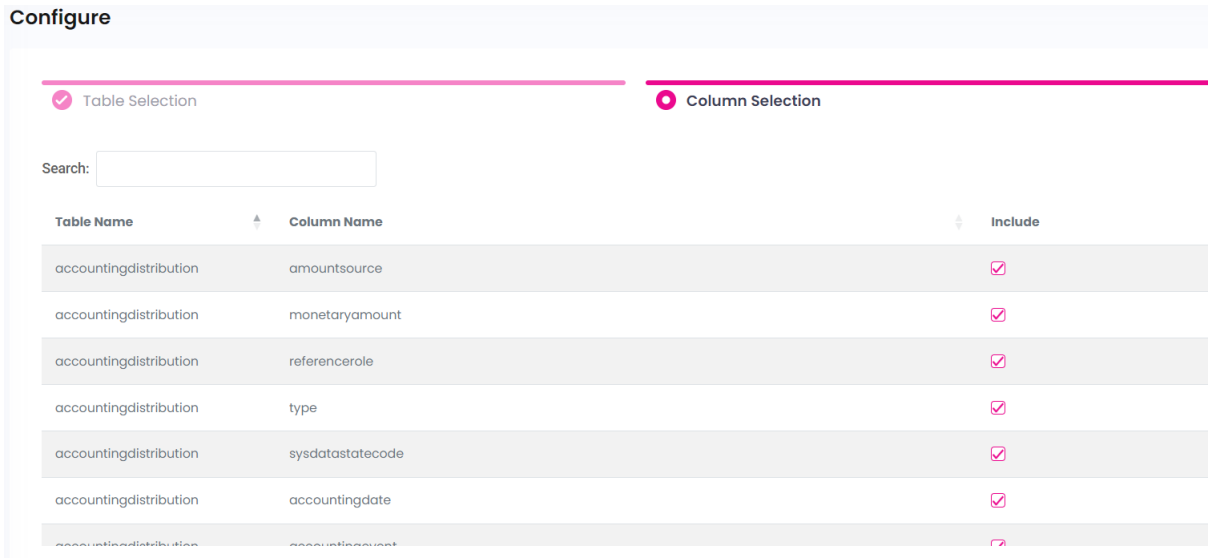
- When your required selections are complete, click 'Finish'.

The application will return to the 'Connections' screen with a 'Success' notification displayed at the top.



4.1.1 Column Selection

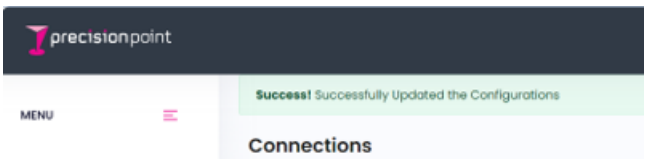
If you have any tables that are selected, 'Yes', and the 'All Columns' box is unchecked, the 'Finish' button on the 'Table selection' screen will change to say 'Next', allowing you to proceed to the 'Column Selection' screen to identify the columns you wish to include or exclude from your destination database.



- Selection is made by simply changing the value in the 'Include' radio box for the desired column – checkmark will include, no checkmark will exclude.

- Once complete, you can scroll to the bottom of the screen and click 'Finish' or if further changes are required, you may select 'Previous' to go back to the 'Table Selection' screen and so on.

- When your required selections are complete, click 'Finish' and you will return to the 'Client Connections' listing with a 'Success' notification displayed at the top of the screen: -

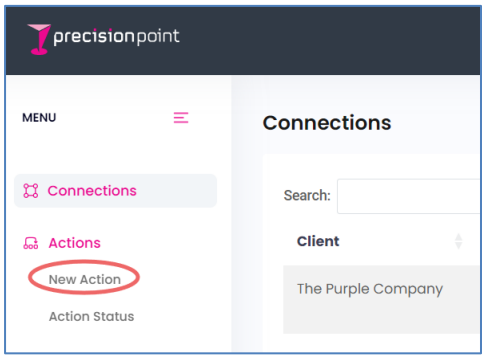


5 Actions

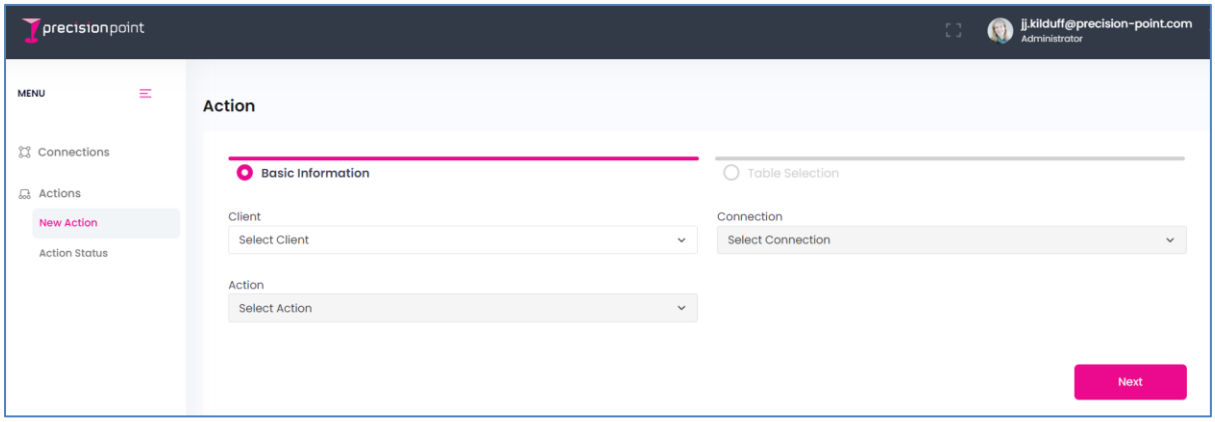
5.1 How to perform an action

There are two ways to perform an action.

The first way is to click the word Action on the left-hand menu, where a sub-menu will appear allowing you to choose **New Action: -**

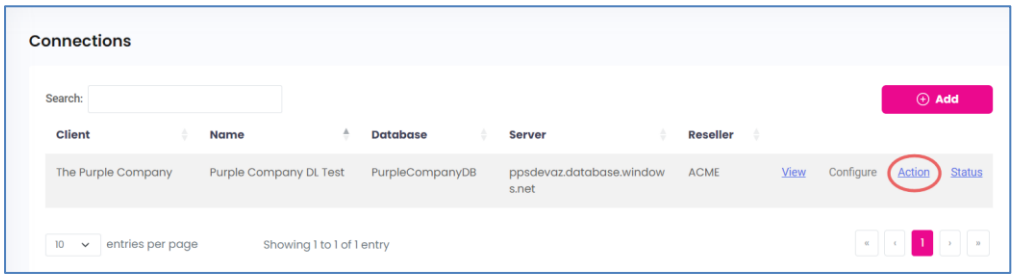


- The 'Action' screen will then open:

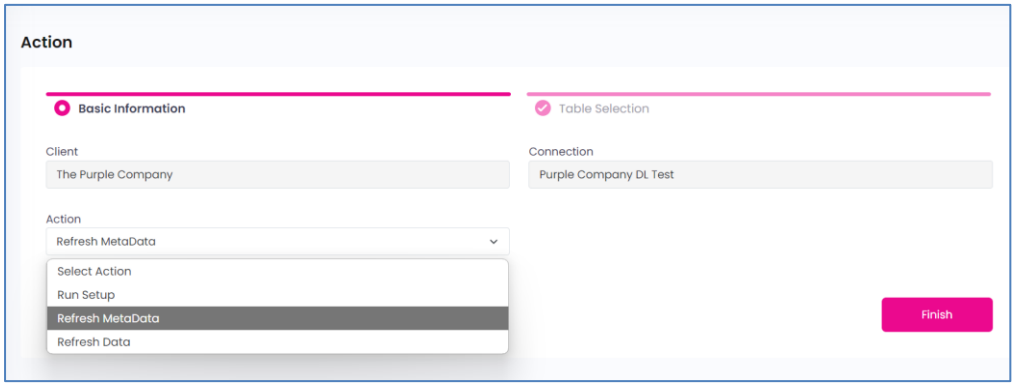


- Select your 'Client' from the drop-down menu. This is the name of client as identified in your Reveal connection.
- Select your 'Connection' from the drop-down menu. This will be the Name of the Reveal Connection that the action is to be performed on.
- Select the 'Action' you wish to run.

The second way to perform an Action, is to click on the 'Action' hyperlink next to the connection you want to work with:

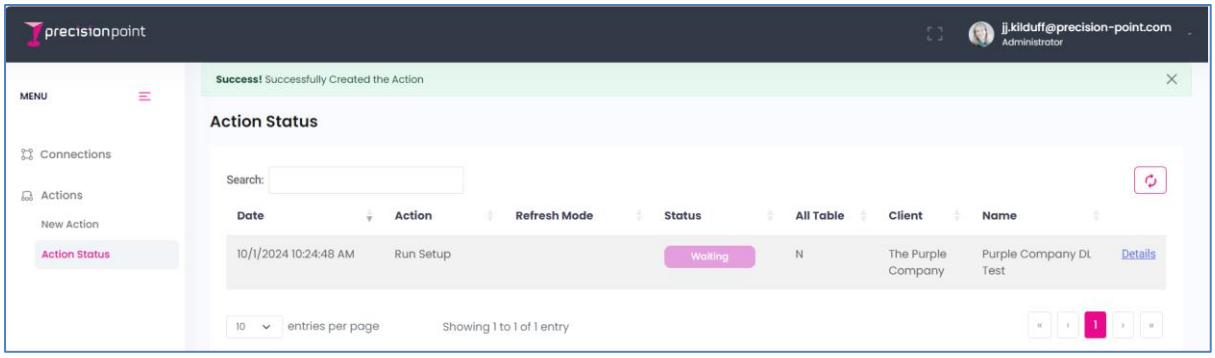


- If using this method, the Client / Connection is pre-selected.
- Select the 'Action' you wish to run.



- Click 'Finish'

When using either method, once you have clicked Finish on the action – the Action Status screen confirms success, and shows the Action and related Status, as shown below:



- Clicking the refresh icon in the top right corner will show update the status and show when the process is completed.

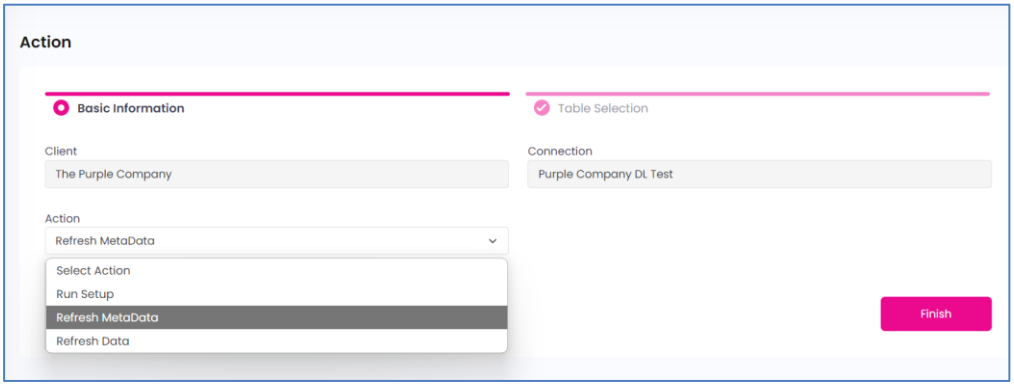
5.2 Refresh the Meta Data

After selection of your tables / fields, it is necessary to run a 'Refresh Metadata' action to build out the selected data structures within your destination server.

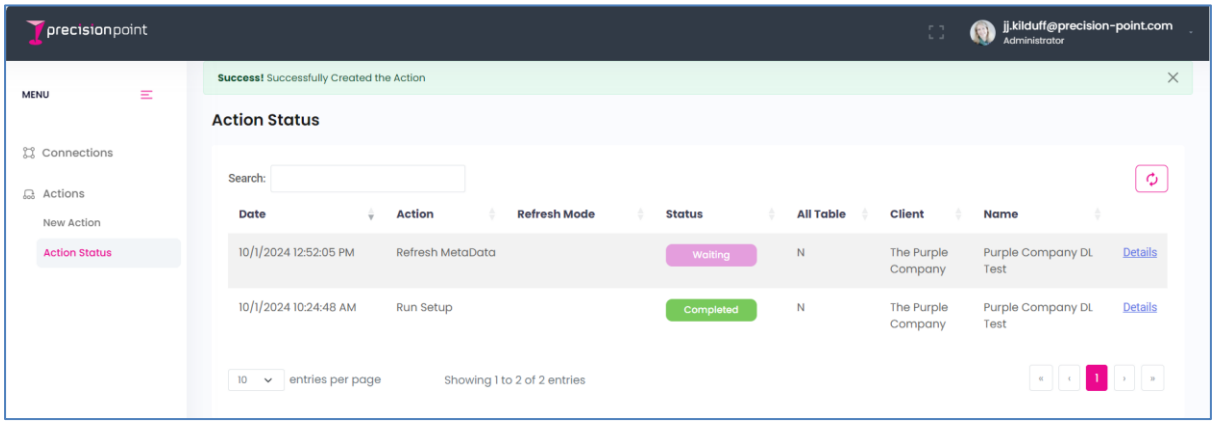
For Dynamics Business Central clients this reads their data dictionary and for Dynamics Finance it reads all the manifests for tables configured in your Data Lake or Synapse Link installation.

To perform this action, please use the following steps: -

- Navigate to the 'Action' screen using one of the methods detailed in section 5.1.
- Enter or Confirm the Client and Connection is as desired.
- Select 'Refresh Metadata' from the 'Action' drop down box.
- Click 'Finish'



- You will then return to the main 'Action Status' screen' where you will see a 'Success message' displayed, along with the status of your Refresh.

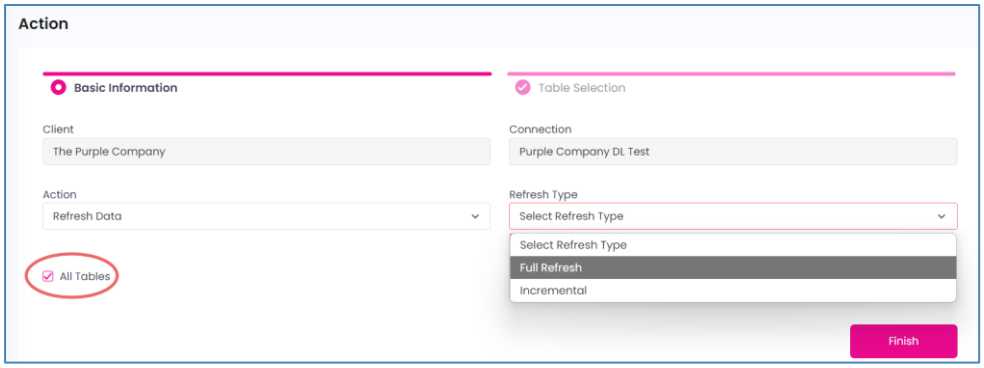


- Once it has finished, the status will update to 'Completed.'

5.3 Refresh the Data

The Refresh Data action will start an on-demand extraction of data. It is the action that will move the data from your source Dynamics system to into your SQL database.

The application allows you to choose whether you want to refresh the data for all your tables or only a selected few and how you want that data to be refreshed. You can pull all the table data (Full Refresh) or only pull the latest changes and data (incremental), where applicable.



Note: A table must have completed on Full Refresh before an Incremental refresh can be performed. If a full refresh has not been completed for a table, the system will automatically perform a Full Refresh for that table irrespective of the Refresh Type specified.

The first data extraction performed for any Connection must be a 'Full Refresh' to ensure that the full dataset you require is extracted to your destination database.

For Dynamics Business Central installation, for any table identified to be included in the refresh, the table will be refreshed for all the companies included in the installation.

5.3.1 Refresh Type: Full Refresh

This action will perform the following processes:

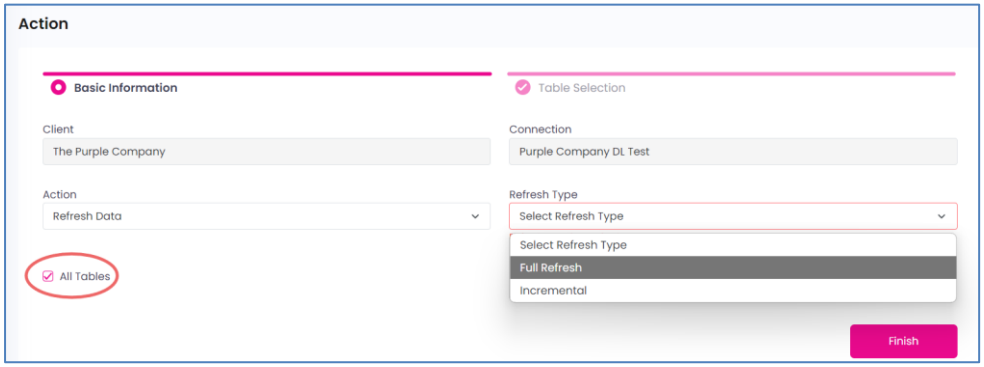
1. It will run a Refresh MetaData to ensure the table and table information Reveal has been up to date before it begins its data extraction.
2. Extract the data from the Dynamics source.
3. Drop the existing table in the SQL database.
4. Create and populate the table in the SQL database.

To perform this action, please use the following steps: -

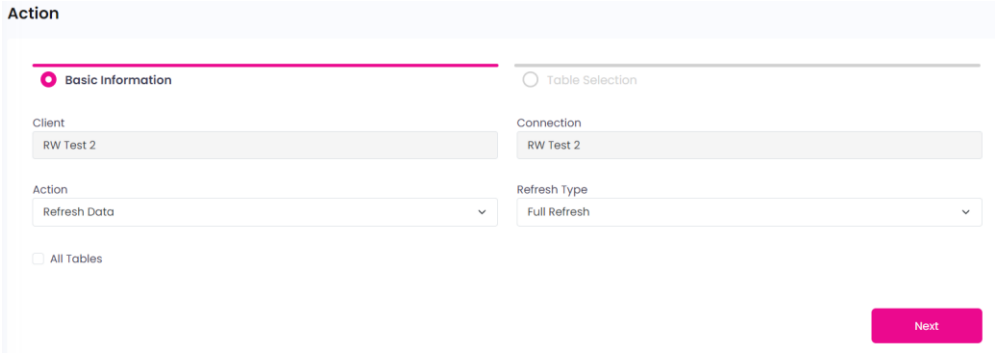
- Navigate to the 'Action' screen using one of the methods detailed in section 5.1.
- Select or confirm the Client and Connection is as desired.
- Select 'Refresh Data' from the 'Action' drop down box. This will then enable a new drop-down option 'Refresh Type.'
- Select 'Full Refresh' from the 'Refresh Type' drop down list.
- Specify 'All Tables' by clicking the box to add a checkmark in the box if you want to refresh 'All Tables' in the connection. By default, this is **NOT** selected.

  If you only want to refresh data on specified tables uncheck the 'All Tables' box.

  This is located under the Action dropdown box.

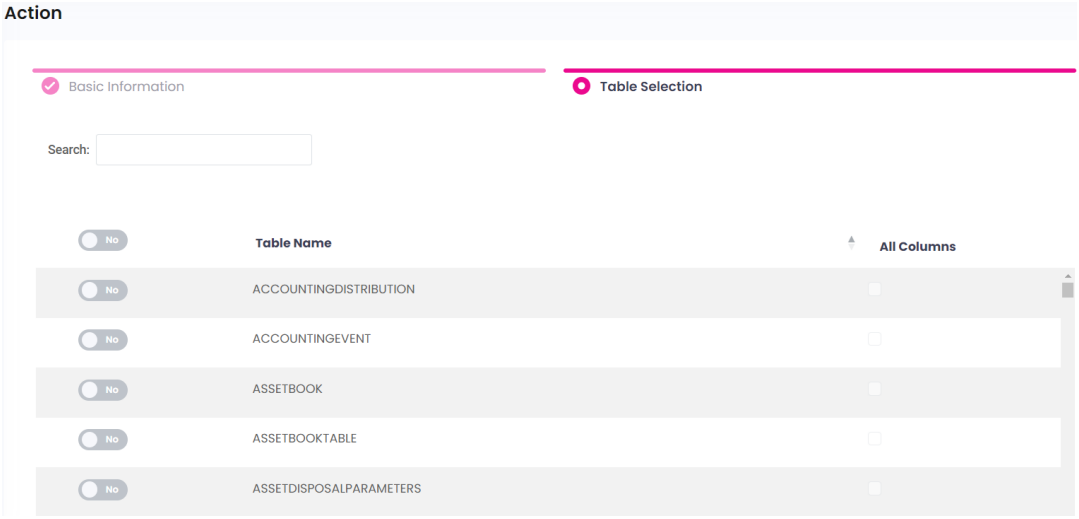


➔ If you do select 'All Tables,' the button on the bottom of the screen will say 'Finish'. Click 'Finish' to complete and start the refresh data process.



➔ If you do not select 'All Tables' the button on the bottom of the screen will say 'Next'. You **must** click 'Next'.

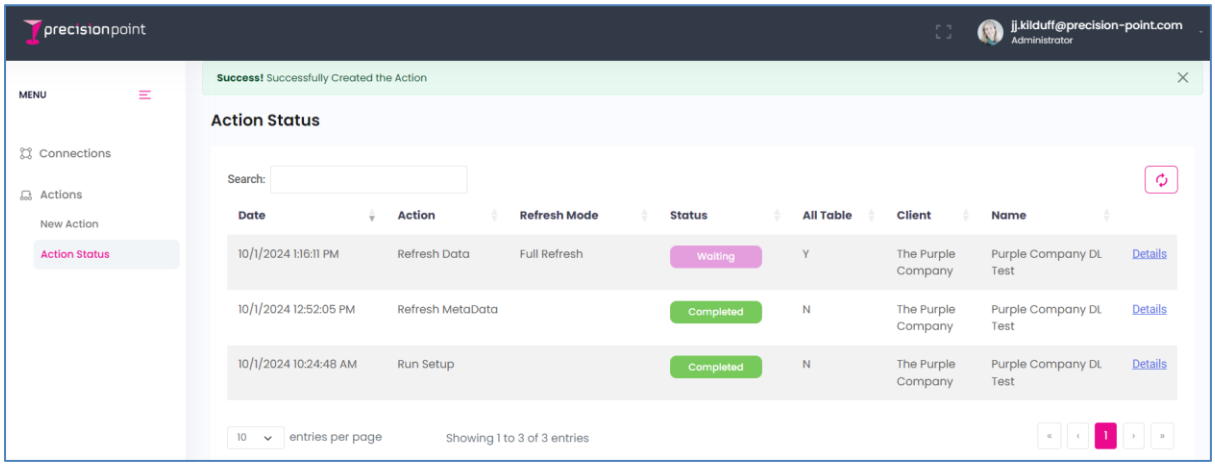
This will bring you to the Table Selection screen. You will be presented with a list of the tables that have been configured in your Connection to be extracted to your destination database.



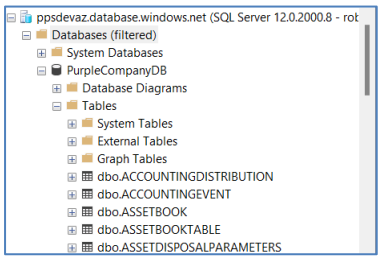
- Toggle the Yes/No button next to the desired table(s) to Yes to include them in your Refresh Data Action. (You can use the search box above to help find your desired table(s))

- Once you have completed your selection clicked on 'Finish'

The refresh data action will start you will return to the 'Action Status' screen, which will display the status of the data refresh.



- When the refresh shows as 'Completed', you will be able to see your tables and the associated data in your destination database:



NOTE: Depending on data volume, the 'Full refresh' process may take some time to complete.

5.3.2 Refresh Type: Incremental Refresh

The Refresh Type Incremental will pull only new or modified data since the last data refresh was performed.

A table must have completed a Full Refresh before an Incremental refresh can be performed. If a full refresh has not been completed for a table, the system will automatically perform a Full Refresh for that table irrespective of the Refresh Type specified.

For example, you set your action to Refresh Data, Incremental, All Tables and there are 100 tables in your configuration but 2 have not completed a Full Refresh and thus been initialised, then this action will refresh the incremental 'delta' data 98 tables and preform a 'Full Refresh' no the two tables that are not ready for incremental refreshes.

This action will perform the following processes:

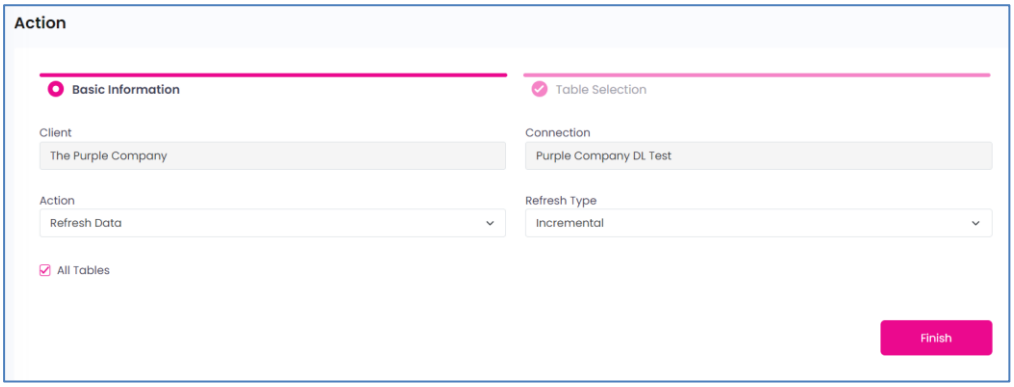
1. It will run a Refresh MetaData to ensure the table and table information Reveal has been up to date before it begins its data extraction.
2. Extract the data from the Dynamics source system.
3. Populate the table in the SQL database.

To perform this action, please use the following steps: -

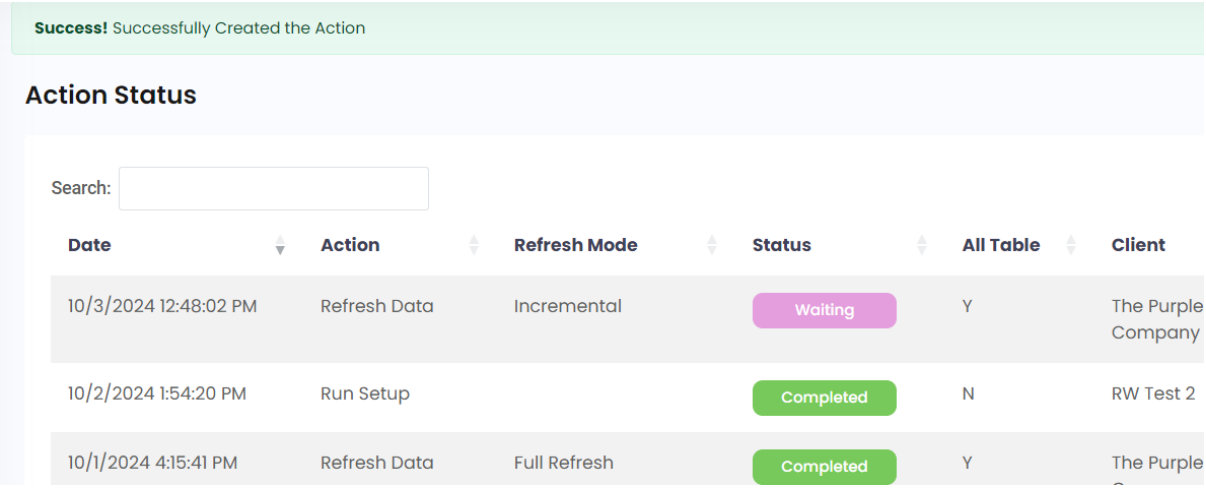
- Navigate to the 'Action' screen using one of the methods detailed in section 5.1.
- Select or confirm the Client and Connection is as desired.
- Select 'Refresh Data' from the 'Action' drop down box. This will then enable a new drop-down option 'Refresh Type'.
- Select 'Incremental from the 'Refresh Type' drop down list.
- Specify 'All Tables' by clicking the box to add a checkmark in the box if you want to refresh 'All Tables' in the connection. By default, this is **NOT** selected.

  If you only want to refresh data on specified tables uncheck the 'All Tables' box.

  This is located under the Action dropdown box.



- Once you have completed your table selection or have clicked on 'Finish' if no selection is required, you will return to the 'Action Status' screen, which will display the status of the data refresh.



- When the refresh shows as 'Completed', your data will be updated with the latest changes from the source tables and fields that have been selected.

NOTE: Running the 'Incremental' refresh in this section of the document assumes that no changes have been made to the Tables / Fields that are to be extracted.

If an incremental refresh is run and the source database table structures/meta data has changed, then the refresh for that table may fail depending on the nature of the change and your table configuration. This is by design so you can determine what changes need to be made to the destination table and its existing data set given the change in the underlying source data tables e.g. add or remove columns.

6 Scheduling

Whilst any refresh can be carried out through the Action functionality within ‘Reveal’, should you wish to schedule a refresh to run to a schedule this can be configured via PrecisionPoint support.

We would suggest that this is only set up once the first full data refresh has been completed and a benchmark has been obtained for incremental refresh times. This will help determine the window that is required for a refresh to take place, and the schedule can be set accordingly.