Power Reporting User Guide

September 2021

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Overview

Power Reporting leverages Power BI, a business analytics builder service provided by Microsoft, to provide interactive visualization and business intelligence capability with a simple interface for end users to create their own reports and dashboards. The visual representation of data plays a central role in Power BI and offers a wide range of detailed and attractive visualization.

This new reporting feature provides improvements to the existing Report Model module:

- Analyze customer/member data in real time and embed analytical outcomes within customer journeys for fast execution of customer transaction requests and service queries, enabling instant fulfilment.
- User-friendly software with easy-to-use features for creating, publishing, viewing, and sharing reports.
- Rich visualization and powerful built-in data models.
- A true cloud reporting solution that removes the need for on premises installation.
- Dashboard views can be tailored to match Executive Management needs.

Security and Data Segregation

User account provisioning and role management for Power Reporting is managed through the Identity and Access Management portal (IDM). The IDM portal will allow clients users who have the appropriate permissions to add users from only their AAD instance to the platform leveraging Azure B2B as a backing service. These administrative users also have the capability to add these users to any of 3 predefined roles on the platform.

Group	Access Description
PHX-1234-Contributors	Bank Staff that can feature dashboards and reports on colleagues' Home; create, edit, and delete content in the workspace; publish reports to the workspace, delete content; copy a report
PHX-1234-Viewers	Bank Staff that can view and interact with an item; read data stored in workspace dataflows

Power BI Data segregation and security permissions is provided at the workspace level. Each client has access to two workspaces, Contributor and Viewer. See above chart for details. To ensure data segregation, a third workspace exists for each client known as the Data workspace to provide access to the multiple client data sources, such as Production and Staging.

Prerequisites

- Complete the steps in the Azure Active Directory Setup Guide.
- Your institution must have Multi-Factor Authentication (MFA) enabled in your Azure Active Directory.
- You must certify whether PCI data is stored and exposed in external accounts.
- Ensure your web browser is in the list of Supported browsers for Power BI on Microsoft's doc site.
- Power Reporting Professional Services package.
- Users that create and publish reports must license the Power BI Pro subscription directly from Microsoft.

Limitations

- The model used for Power Reporting uses the Report Model as the template, so existing Report Model users will be familiar with the data model in Power Reporting. The major difference between these two models is the removal of groupings (hierarchies) in the Power Reporting data model. The "flattening" of the data model allows Microsoft Power BI to accommodate the data fields.
- Power BI desktop is not supported. Power BI Services web app is the only supported platform.
- Go to Reports and Dashboards in the Troubleshooting section for a detailed list of report and dashboard restrictions.

Getting Started

Understanding Tenant Groups

Each user that is invited to the Power Reporting service must be assigned to a group with set privileges for accessing and editing the workspace, reports, and dashboards.

- Admin: This group manages user accounts.

  Note: This group can create, edit, copy and delete items in Workspace, and publish reports ***if the user has*** a Power BI Pro subscription licensed directly through Microsoft. This subscription is not required for user account management tasks.

  Go to the section Managing Users as an Admin to learn more.

- Contributors: This group can access and interact with reports and dashboards. Additionally, this role can create, edit, copy and delete items in a workspace, and publish reports.

  Note: Contributors must have a Power BI Pro subscription licensed directly through Microsoft.

  Go to the section for Using Power Reporting as a Contributor to learn more.

- Viewers: This group provides read only access to workspace items. Read access includes report and dashboard views along with the ability to interact with visuals.

  Go to the section for Using Power Reporting as a Viewer to learn more.

Need Help?

Power Reporting is built on the Microsoft Power BI platform. As Microsoft continues to enhance Power BI, the look, feel, and features of Power Reporting workspaces may change in ways that are not reflected in this user guide. Microsoft provides up-to-date guided learning and detailed documentation for accessing and using the Power BI service.

The following learning modules, documentation, and tutorials are provided by Microsoft. While this material has been reviewed to provide a foundation, some of the features or functionality may not be supported in Power Reporting.

Learning Modules

Title	Description
Explore what Power BI can do for you	As a viewer, you'll work in the Power BI service to review and interact with content that has been shared with you. This module provides the foundational information that you need to work effectively in the Power BI service. ***Note:*** Microsoft does not currently support dashboard and report subscriptions.
Get started building with Power BI	Learn what Power BI is, including its building blocks and how they work together.

Documentation and Tutorials

Title	Description
What is the Power BI service?	General overview of the Power BI web application.
Power Reporting Training Video	Walkthrough the Power Reporting workspace and follow step by step tutorials to create a new report and dashboard.
Get started with Power BI service	Introduction to some of the features of the Power BI service, including connecting to data, creating a report and a dashboard, and asking questions of your data.
Create quick reports in the Power BI service	Create reports quickly in the Power BI service.

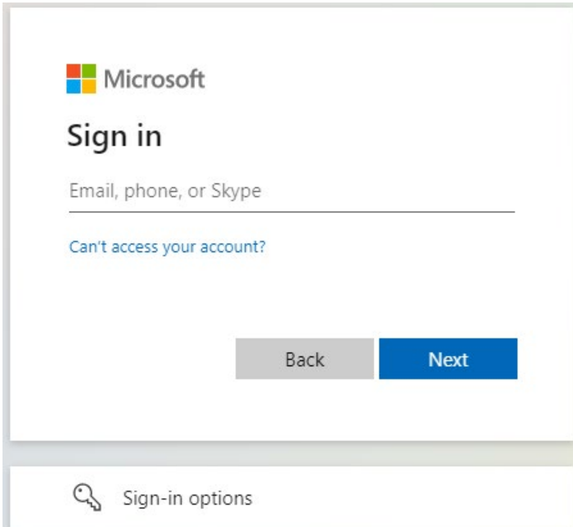
Please contact upport by logging a support case if you have additional questions about Power Reporting.

Managing Users as an Admin

Admins in Power Reporting manage the user list and their tenant groups to ensure all employees have the correct access to their workspaces, reports, and dashboards.

Accessing the User Manager Dashboard

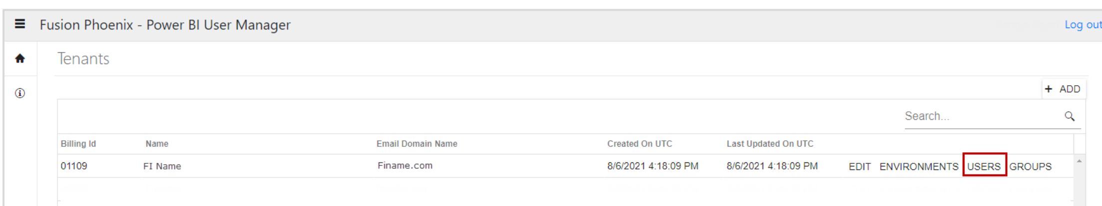
1. Go to the User Manager dashboard site and sign in with your Azure AD email address and password.



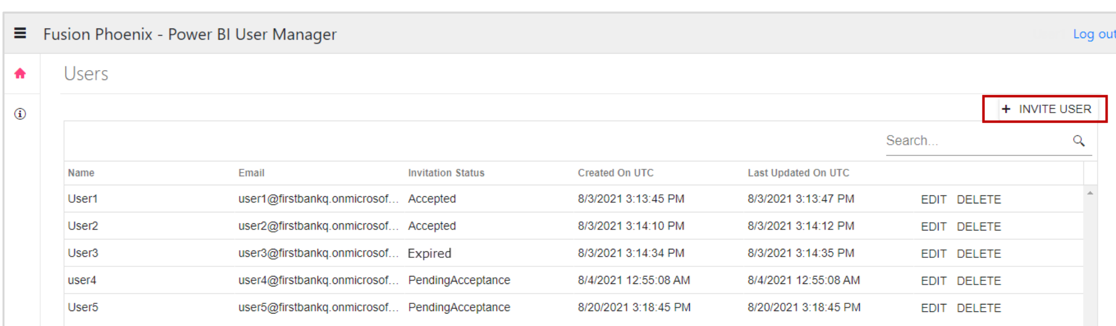
Adding Power Reporting Users

This procedure adds users that already existing in your Azure AD environment to Power Reporting.

1. From the Tenants page, click the Users link to open the Users page.

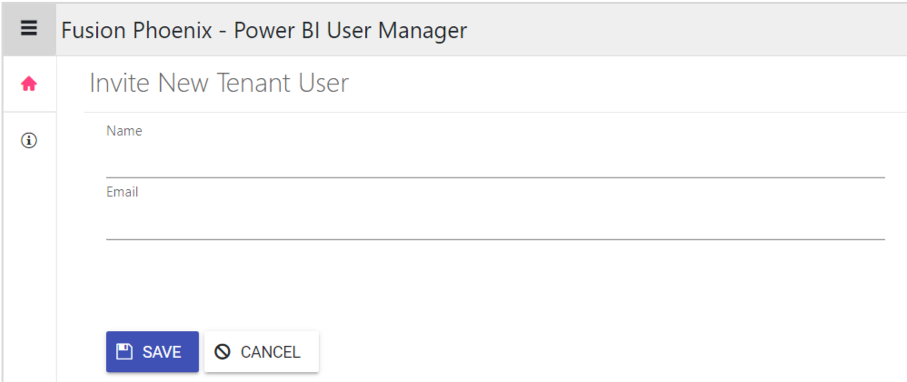


2. Click Invite Users to open the Invite New Tenant User page.



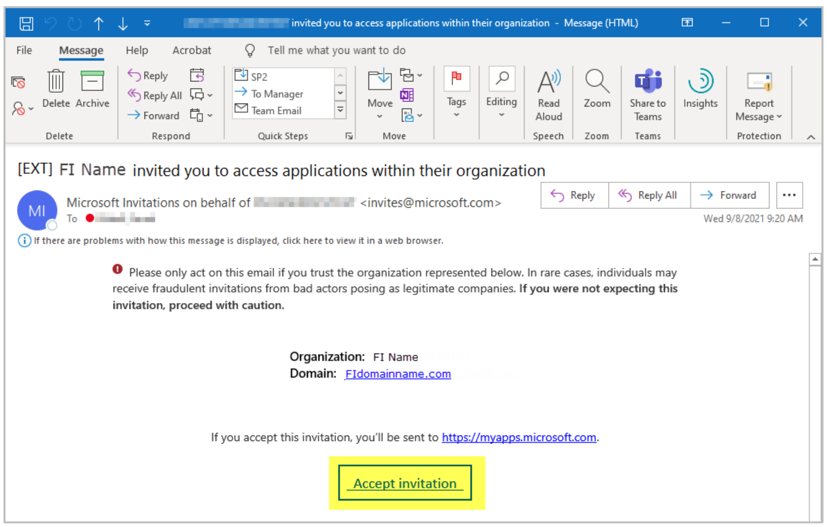
3. Enter the user's name and their Azure AD email address, and then click Save.

   Note: The email domain must match the Azure AD domain assigned to the institution.



   Once the user is saved, an invitation is sent to the user's email with an Accept Invitation button.

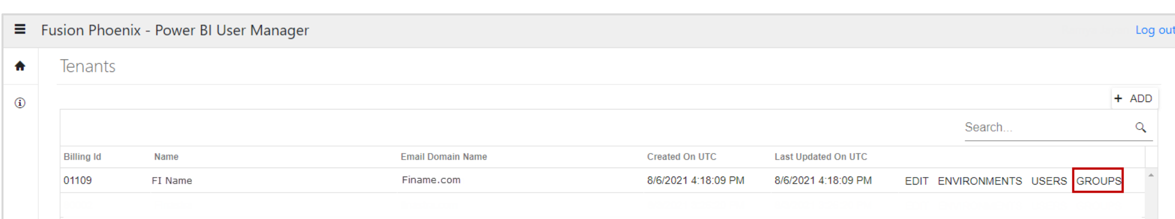
4. The user must click Accept Invitation to access the Power Reporting workspace.



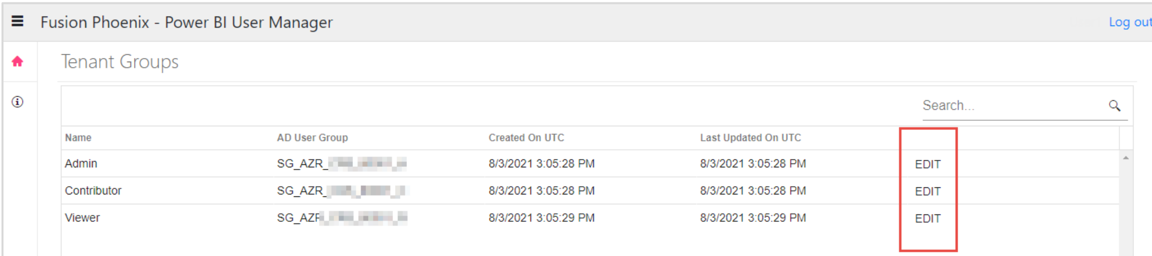
Adding Users to a Tenant Group

Each user must also be assigned to a group that determines their role in Power Reporting. This procedure can be completed even if the Accept Invitation email has not been confirmed by the invitee.

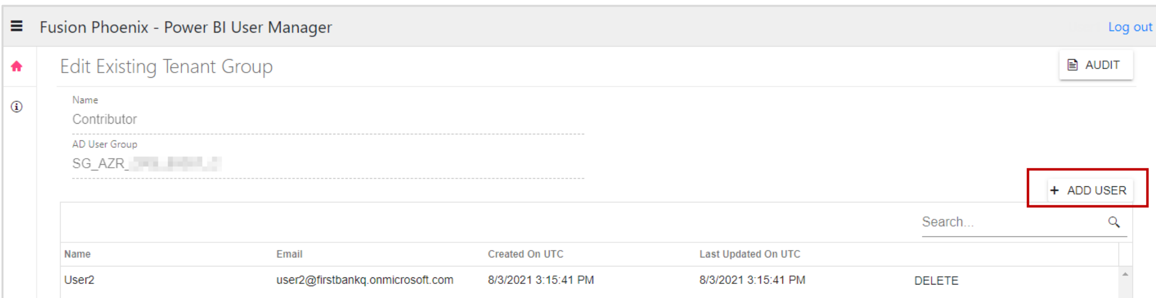
1. From the Tenants page, click the Groups link to open the Tenant Groups page.



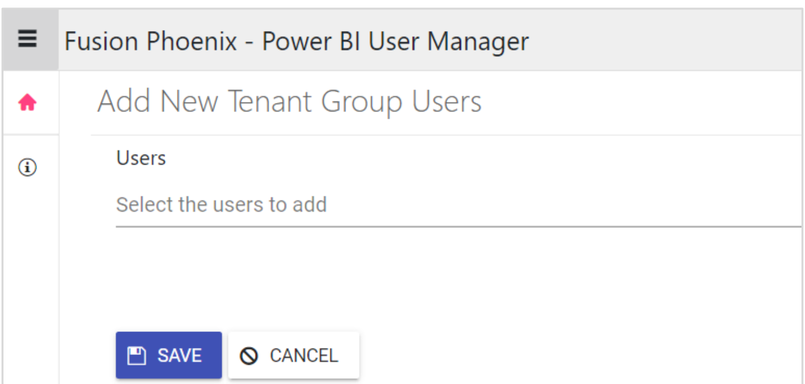
2. Click Edit next to the tenant group that will be assigned to the user.



3. On the Edit Existing Tenant Group page, click Add User.



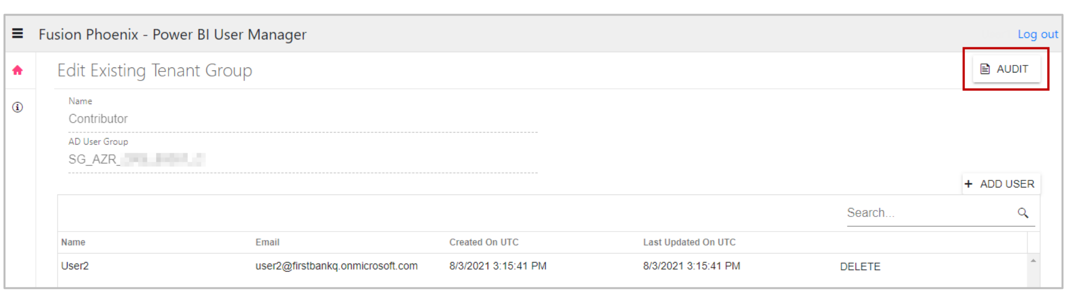
4. On the Add New Tenant Group Users page, start typing the Name of the user to select them from the list that is displayed.



Note: You can add multiple users on this page by selecting a user from the list, and then typing a new name in the Users field.

5. Click Save to add all selected users to the tenant group.

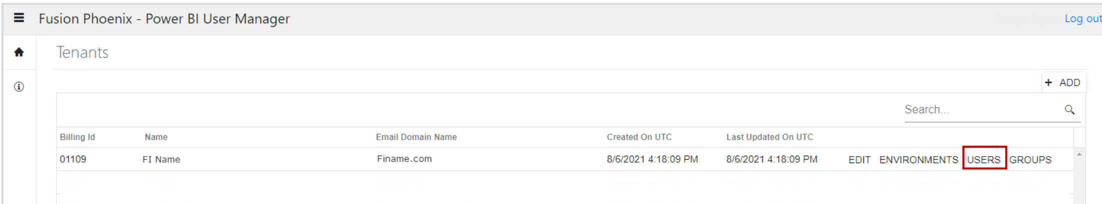
Note: You can view a history of changes to this tenant group by clicking the Audit link on this page.



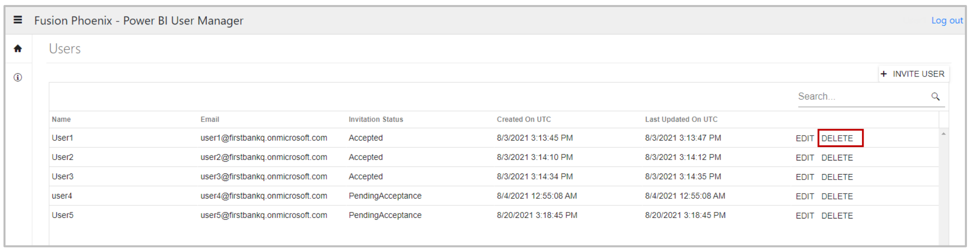
Removing Users

Users that have been removed from Microsoft Azure AD will not be able to access Power Reporting. We still strongly recommend you maintain best practices and also remove these users through the User Management dashboard when the leave your organization.

1. From the Tenants page, click the Users link to open the Users page.



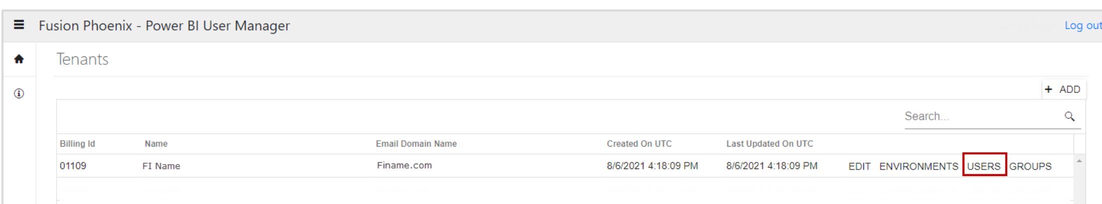
2. Click Delete next to the user to remove all access the Power Reporting workspaces.



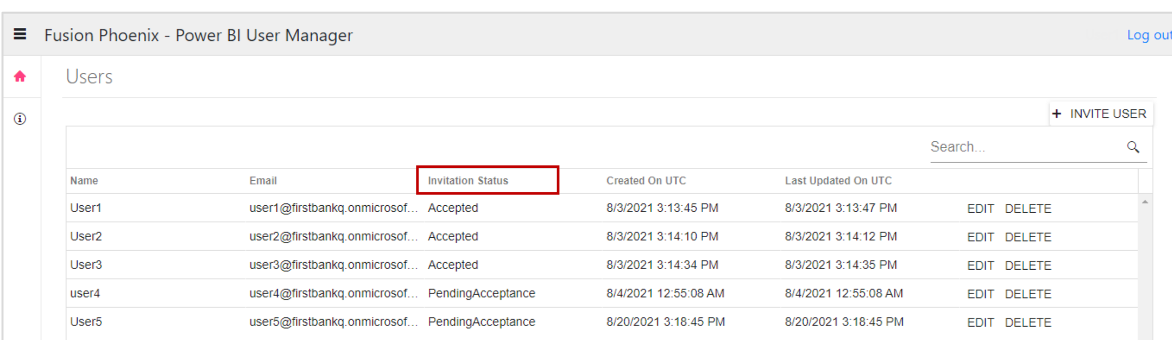
Checking Invitation Status

This procedure checks whether a user has confirmed their invitation to join the Power Reporting workspace.

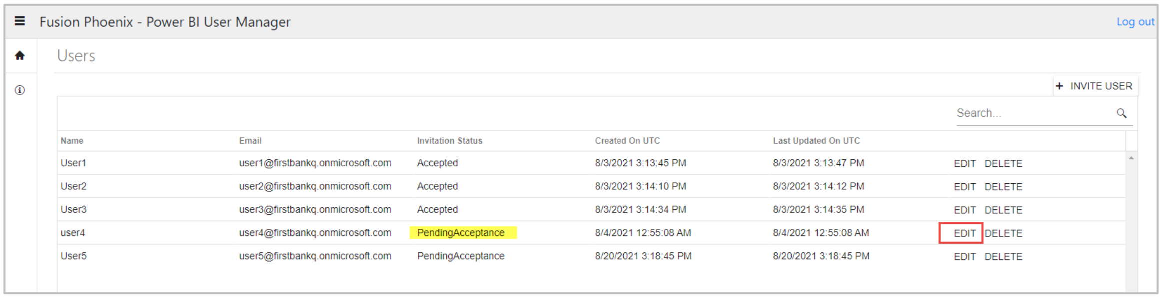
1. From the Tenants page, click the Users link to open the Users page.



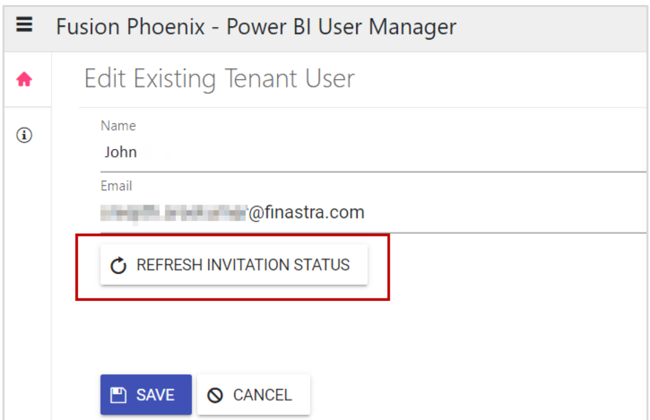
2. The Invitation Status column on the Users page displays Accepted or Pending Acceptance.



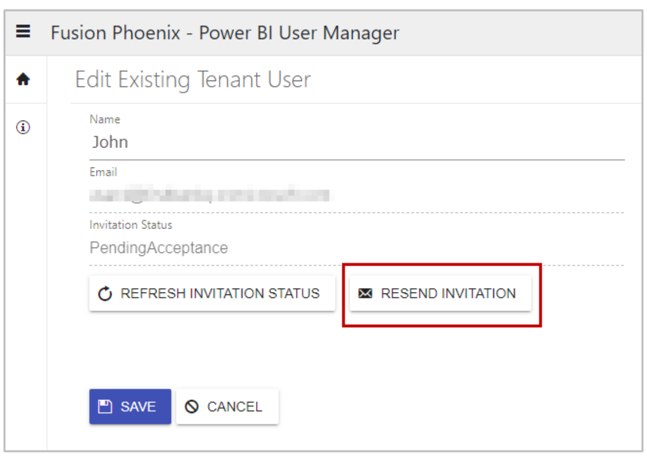
3. If the Status displays Pending Acceptance, the user may not have accepted their invitation. Click Edit to open the Edit Existing Tenant User page.



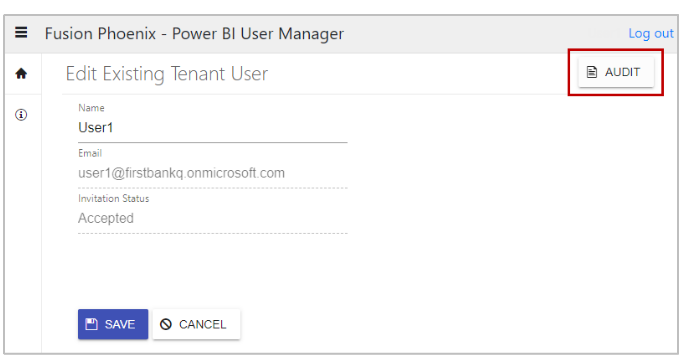
4. Click the Refresh Invitation Status button to check the current invitation status.



5. If the Invitation Status still displays Pending Acceptance, click Resend Invitation to send a new request email to the user with the Accept Invitation link.



Note: You can view a history of changes to this user by clicking the Audit link on this page.



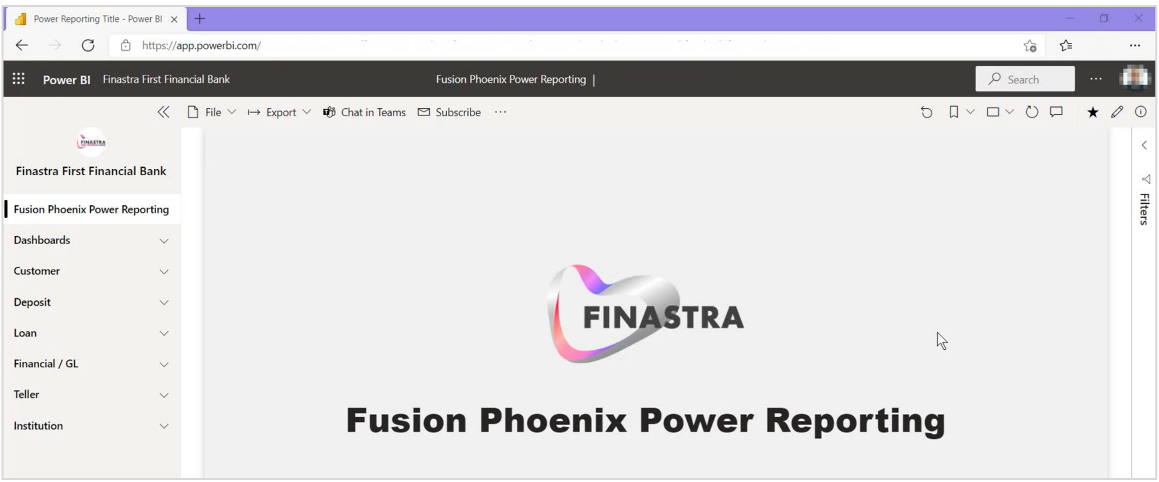
Using Power Reporting as a Contributor

Power Reporting contributors are report and dashboard creators and distributors. As a contributor, they also curate the feature dashboards and reports that display on viewers' home page.

Note: Report and Dashboard interactions are not permanently saved to the dashboard. Each time you reload reports and dashboards, the information and graphics displayed are automatically updated with the most recent information available from the database.

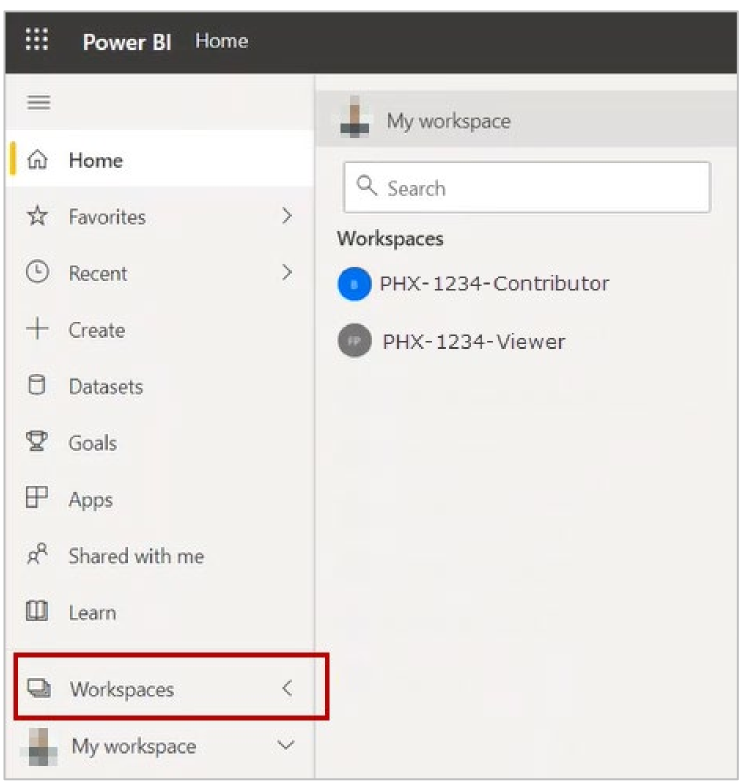
Accessing the Power Reporting Workspace

1. Go to https://app.powerbi.com/home?ctid=9b1da743-32e4-4d61-9763-10593f4c9e9c.



2. Click Workspaces in the left-navigation pane to select the Contributor or Viewer workspace.

   Note: Viewers are not able to see the Contributor workspace.

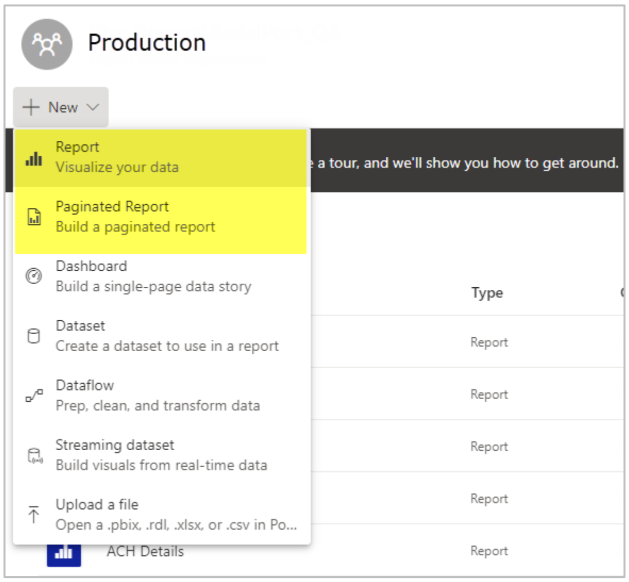


Creating and Editing Reports

his procedure describes how to create a new report for a workspace. There are many settings and options you can use to customize reports with Microsoft Power BI service.

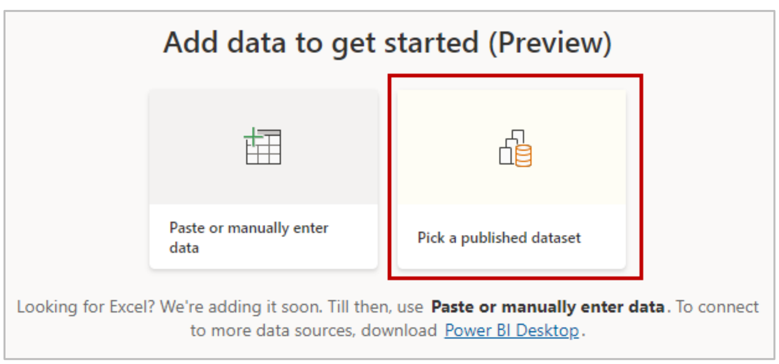
Go to [Create reports and dashboards in Power BI] in the Microsoft docs for report tutorials and samples.

1. From the **Contributor** workspace home page, click New and select either:
   - Report: Report data with visualizations.
   - Paginated Report: Table formatted report data.

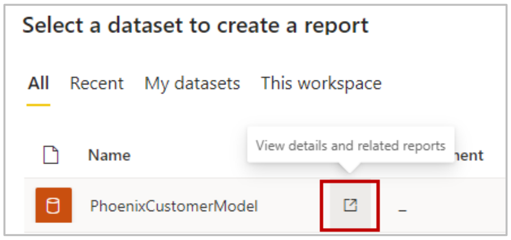


2. Click Pick a published dataset to select the database used to populate this report.

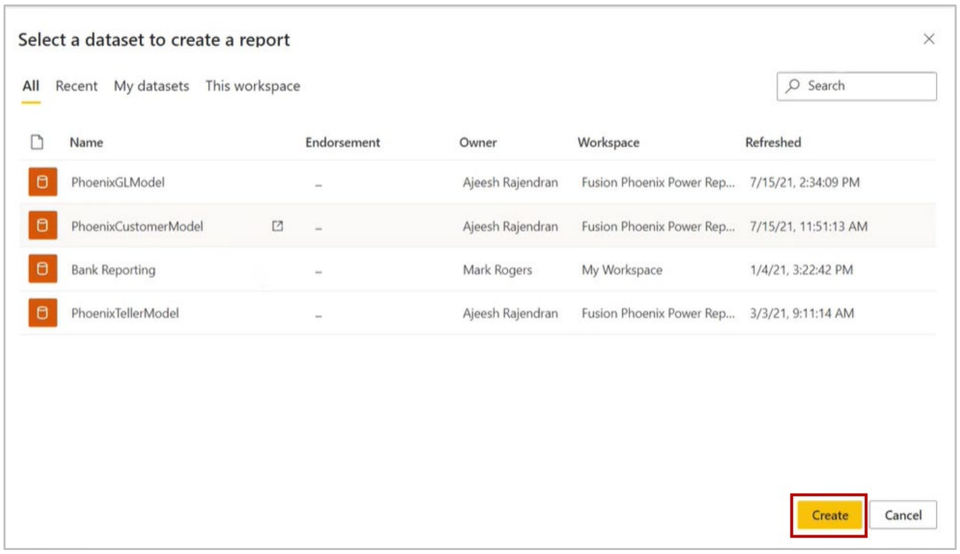
   IMPORTANT! The selected dataset cannot be changed once the report is created. This includes not allowing reports to be moved between Production and Month-End datasets.



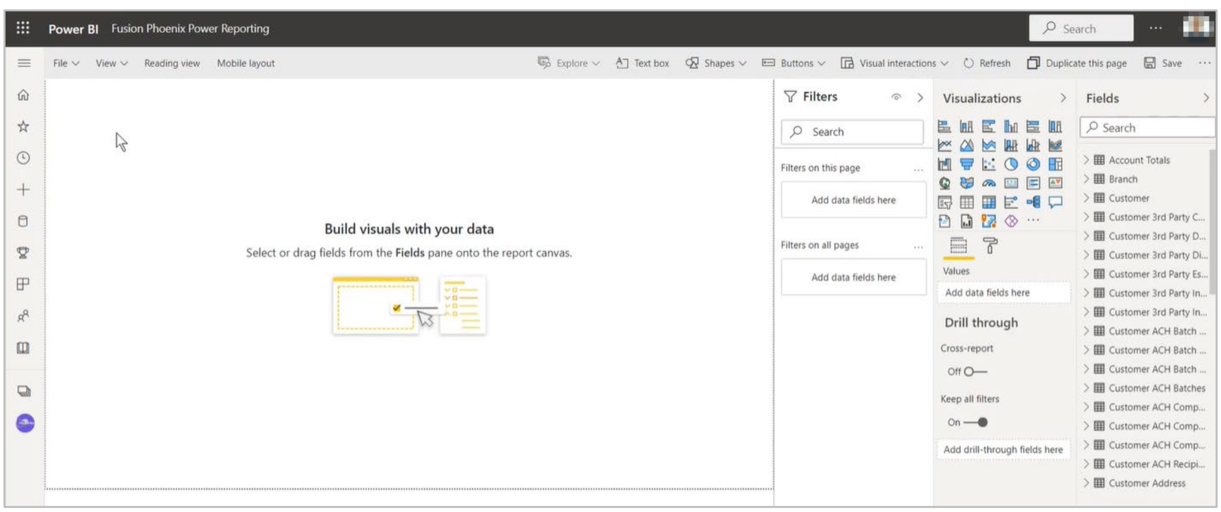
3. You can click the Detail icon next to the data model to view details, including data fields included in the model.



4. Highlight the data model the new report will pull from, and click Create.



5. Power Reporting opens the interactive report builder so you can customize how the data model information is displayed.



Creating and Editing Dashboards

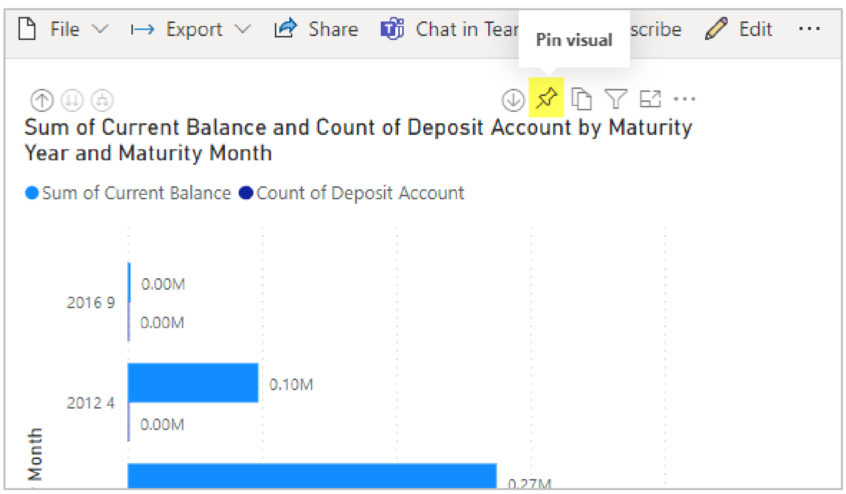
This procedure describes how to create a new dashboard by pinning a report. There are other ways to create a dashboard, such as duplicating a new dashboard from an existing dashboard.

Go to [Create reports and dashboards in Power BI] in the Microsoft docs for dashboard creation tutorials and samples.

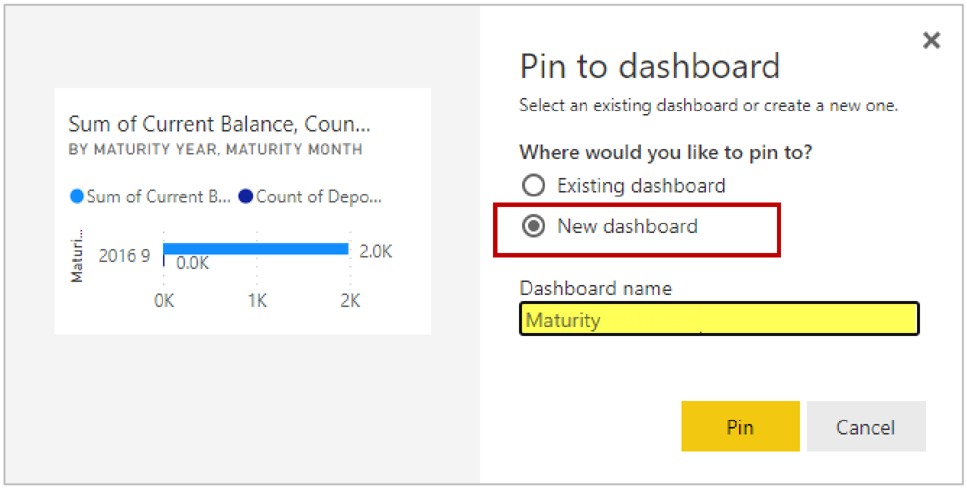
1. From the home page, expand tabs to view and select from the list of available reports.

Redacted

2. Once the report loads, select a visualization in the report and click the Pin icon in the top-right.



3. Select New Dashboard and enter a name that describes this report, and the other reports and visualization that will be added to this new dashboard.

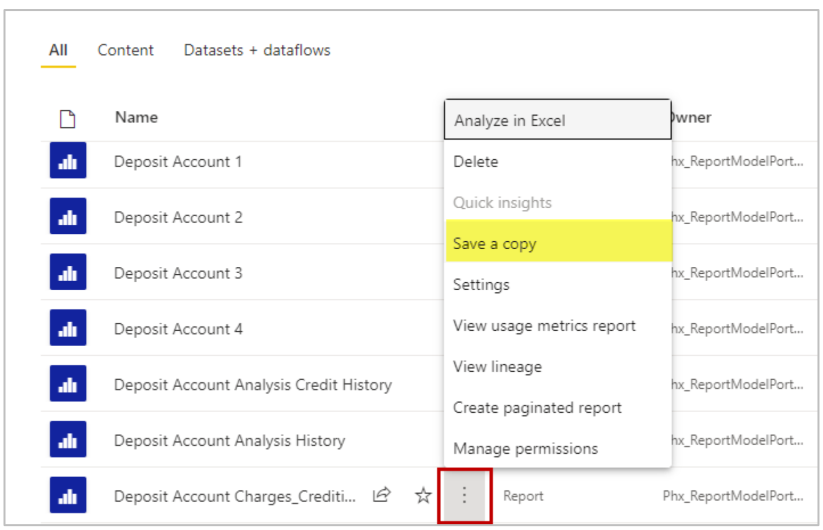


4. Click Pin to create a new dashboard in your Contributor workspace.
5. Once you've completed a dashboard, go to the next section to copy it out to the Viewer workspace.

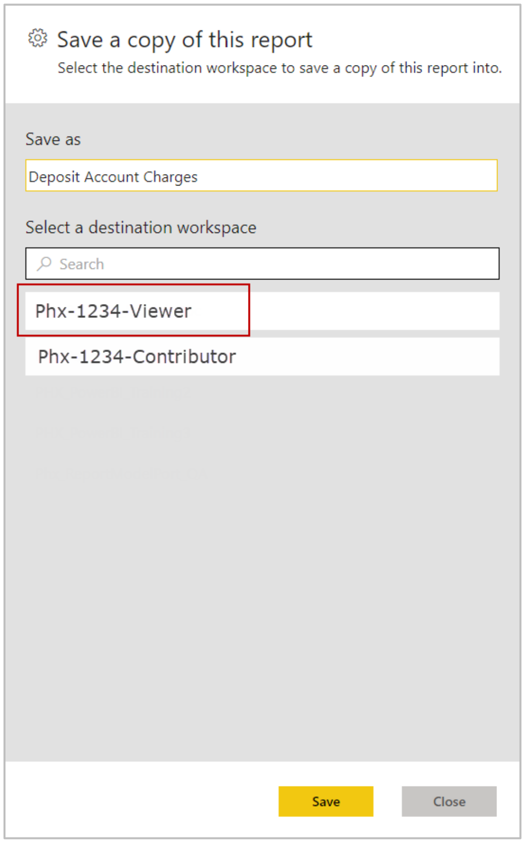
Copying Finished Reports and Dashboards to Viewer Workspace

Once a custom report is completed and ready to be made available to Viewers, copy the report from the Contributor workspace to the Viewer workspace.

1. From the home page, click the Options icon and select Save a copy.



2. Select the Viewer workspace and click Save.



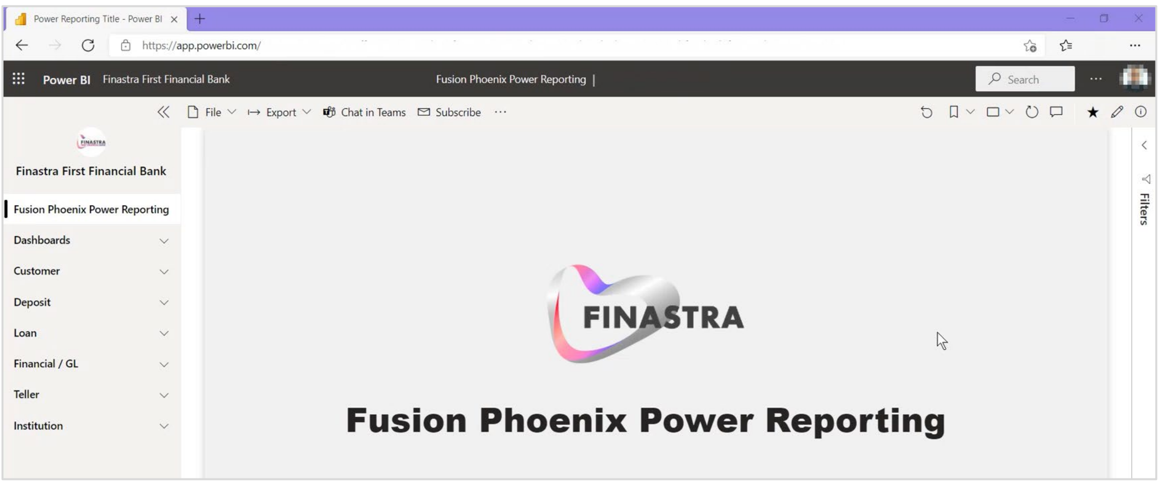
Using Power Reporting as a Viewer

Power Reporting viewers are the end consumers of the design and distribution work completed by Contributors. This group can view reports and dashboards, and they can interact with dashboards to drill down into dashboard content to effectively analyze and action report dashboards.

Note: Report and Dashboard interactions are not permanently saved to the dashboard. Each time you reload reports and dashboards, the information and graphics displayed are automatically updated with the most recent information available from the database.

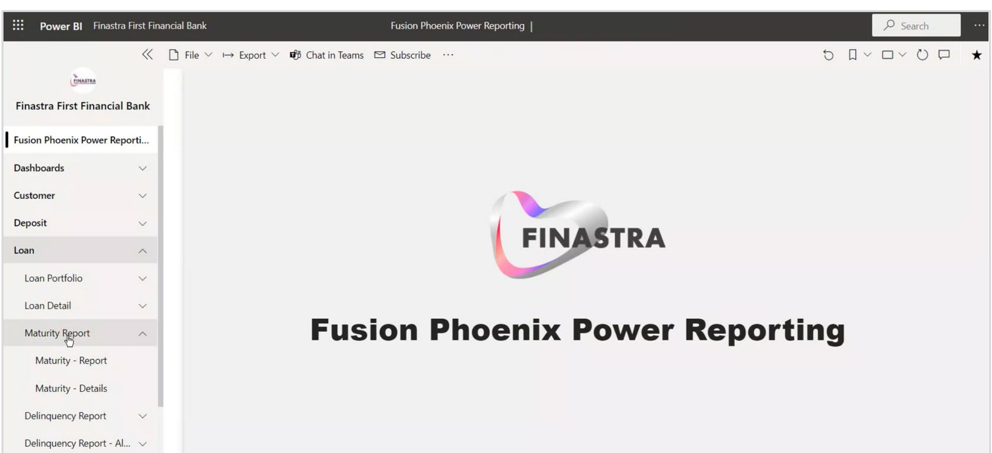
Accessing the Power Reporting Workspace

1. Go to https://app.powerbi.com/home?ctid=9b1da743-32e4-4d61-9763-10593f4c9e9c.



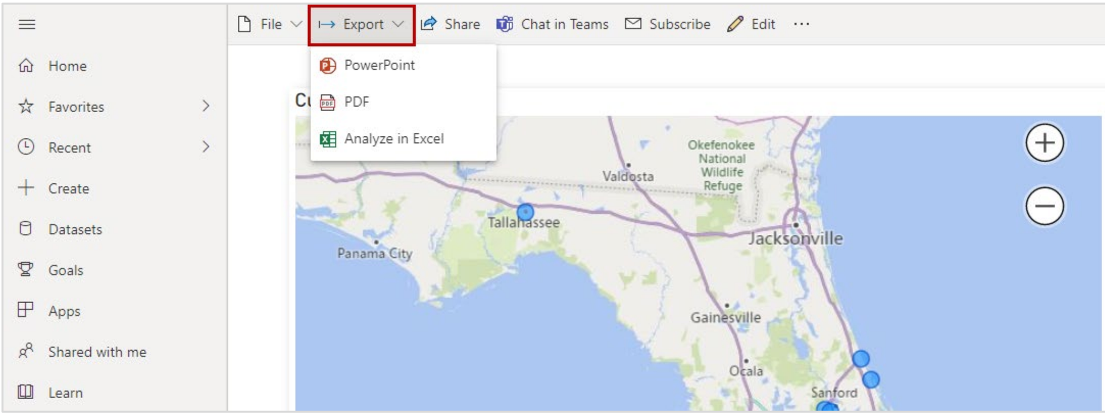
Viewing and Saving Reports

1. From the home page, expand tabs to view and select from the list of available reports.



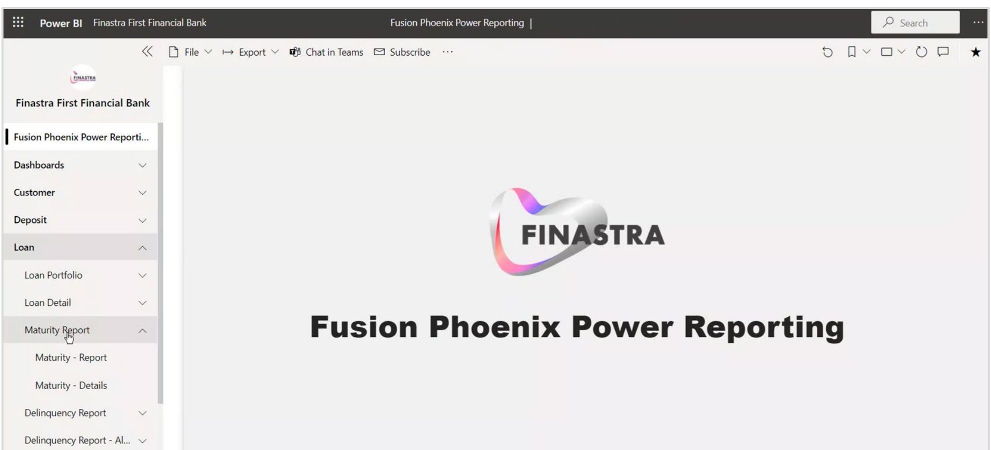
2. Once the report or dashboard loads, click Export and select how you'd like to output the data.

   Note: Excel output requires the installation of the Microsoft Analysis Services OLE DB Provider (MSOLAP). When you select Excel, a dialog displays to prompt you to download and update Excel with an update package.

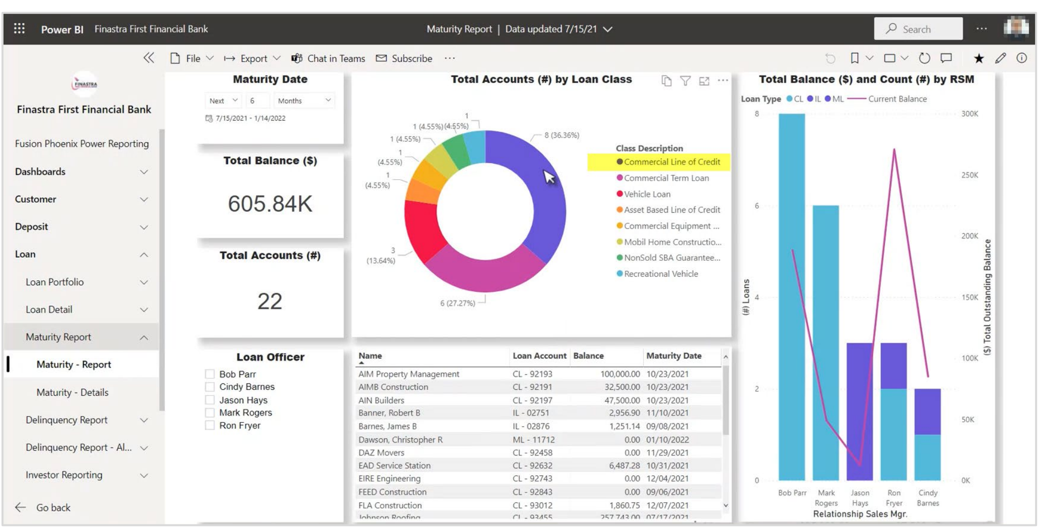


Interacting with Dashboards

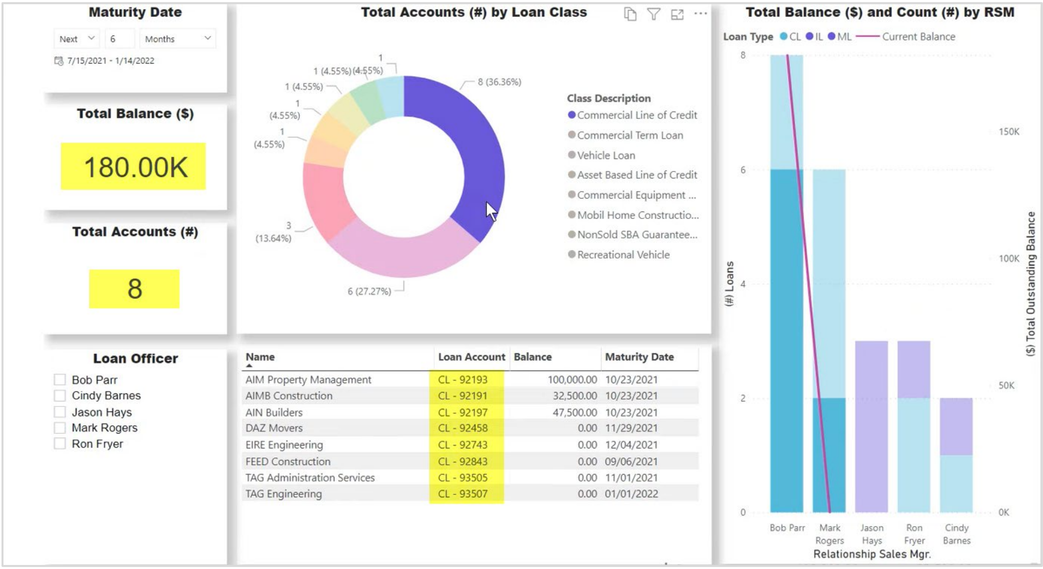
1. From the home page, expand tabs to view and select from the list of available reports.



2. Once the report or dashboard loads, you can click any of the information sets in the tiles and widgets to drill down into the data.



3. The dashboard updates on the fly to present only the information you selected.



Name	Loan Account	Balance	Maturity Date
AIM Property Management	CL - 92193	100,000.00	10/23/2021
AIMB Construction	CL - 92191	32,500.00	10/23/2021
AIN Builders	CL - 92197	47,500.00	10/23/2021
DAZ Movers	CL - 92458	0.00	11/29/2021
EIRE Engineering	CL - 92743	0.00	12/04/2021
FEED Construction	CL - 92843	0.00	09/06/2021
TAG Administration Services	CL - 93505	0.00	11/01/2021
TAG Engineering	CL - 93507	0.00	01/01/2022

Troubleshooting

Installation and Setup

Q. What set up is required by the Financial Institution?

A. Financial Institutions will need to ensure they have Microsoft Azure Active Directory configured.

Go to the Azure Active Directory Setup Guide to setup this Microsoft dependency. Then, you will need to add users in the Power Reporting User Management dashboard.

Q. Is there a limit to the number of users that can access Power Reporting?

A. There is no limit to the number of users that can view reports.

Q. Can I connect to databases besides production?

A. Yes, we support all databases the client maintains.

Q. What staging databases will I have access to? Will there be any performance impact?

A. For hosted clients, all databases will be available with Power Reporting. Since staging databases reside separately from production, production should not be impacted.

Q. How are access rights maintained for Power Reporting?

A. Each Financial Institution will be provisioned with two workspaces initially, one for development of reports and dashboards that are not visible to viewers, and one where completed reports are shared with Viewers. All access is maintained at the workspace and is tied to the institution's instance of Microsoft Azure Active Directory.

Q. Why is the Invitation email not sending to an invited user?

A. If you added a user, but they are reporting that they did not receive the Invitation email, they should first check their Junk and Spam folders. If the Invitation email did not send, recheck the email address on the Edit Existing Tenant User page matches the Active Directory record.

Reports and Dashboards

Q. Can deposit and loan data be combined into the same report or dashboard?

A. Deposit and loan information can be combined if the deposit and loan data are in separate visuals.

Q. Can you deliver standard reports or dashboards to clients?

A. Power Reporting does not allow reports or dashboards to be associated with different datasets than what they were originally created with. This limits us from providing preconfigured reports and dashboards.

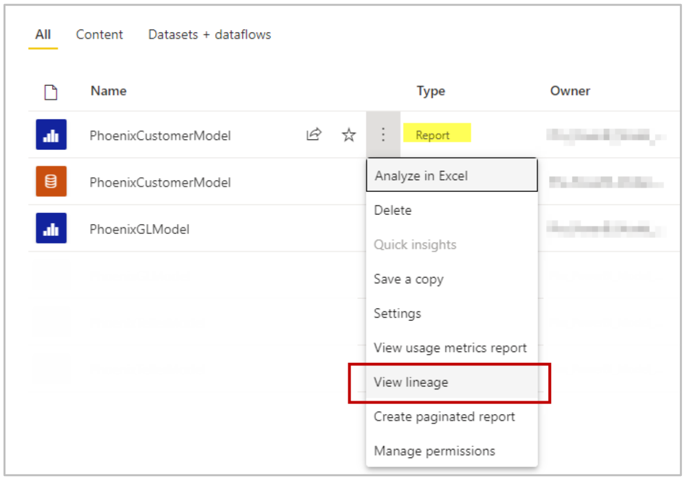
We are publishing step-by-step instructions on how to configure useful reports and dashboards including information on visuals, fields, and filters.

Q. Can traditional multi-page (or paginated) reports be created?

A. Report Model will still be the solution for paginated reports. In the future, we plan to migrate to Power BI for these reports, but no date has been determined. Power BI Report Builder can be used to produce traditional multi-page reports, but only by directly accessing the database tables.

Q. Can reports or dashboards be migrated from one dataset to another dataset?

A. Power Reporting does not allow reports or dashboards to be associated to a new dataset once the report is created. This includes not allowing reports to be moved between Production and Month-End workspaces. From the Workspace home page, click the More options icon next to a report and select View Lineage to check which dataset the report is pulling information from.



Q. Can reports written in Report Model with Report Builder be migrated to Power Reporting?

A. No, reports will need to be recreated in Power Reporting.

Q. Why are there two workspaces and what is the difference?

A. One workspace is intended for report development (XXX) and not accessible to users who can only view reports. The second workspace is intended for production reports that FI users can access.

Integration

Q. Can data from other datasets (other databases, files, or data from other products) be combined with core data?

A. Additional datasets cannot be combined with the Power Reporting datasets to create a combined report. Microsoft Power BI does allow Excel data to be imported to create a separate report that's not connected to core datasets.

Dashboards can be used to bring together multiple reports and visualizations, regardless of the dataset that each report was created from.

Q. Can reports be scheduled to run and produced in text or PDF and archived to Fusion ECM.

A. Microsoft Power BI Pro and Power BI Desktop create reports that are interactive and therefore are not suited to archiving. All users subscribed to a report will receive a link to the interactive report.

Technical

Q. What field data is available in Power Reporting?

A. Go to the *Power Reporting Model Dictionary* for a complete list of available fields.

Q. Will running Power BI against production affect performance?

A. The core is deployed in Microsoft Azure with three production SQL Servers that provide high availability and disaster recovery.

One SQL server is always active and receiving all traffic, including branch, digital, and EFT data. The second and third SQL servers are being updated near real-time for high availability. Power Reporting points to the third diastral recovery SQL server to ensure there is no impact to production performance.