



Power BI Dashboards | Beginner

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Course Outline

Overview

- What is Power BI
- Power BI Components
- Data Flow

Connecting to Data Sources

- Power BI Service Navigation
- Options to Connect to Sources
- Creating a Data Connection

Reports and Dashboards

- Dashboard Components
- Options to Share Reports and Dashboards

Creating a Report

- Power BI Desktop Navigation
- Creating a Simple Report Using Power BI Application
- Examples of Using Custom Visuals

Data Import Options

- Connecting to ODATA and Oracle Server and Extracting Data
- DirectQuery vs. Import

Data Transformation

- Data Transformation Components
- Data Modeling

Data Transformation - Advanced

- Creating your own M script for your next advanced report
- M Script Examples

Session Goal and Objectives

Course Goal: To provide an overview of Power BI functionality in conjunction with CA PPM data.

Course Objectives: You will learn how to:

- Understand How Power BI Works with CA PPM Data
- Connect to Data Sources
- Create Reports and Dashboard
- Create and Modify M Scripts

Overview

- What is Power BI
- Power BI Components
- Data Flow



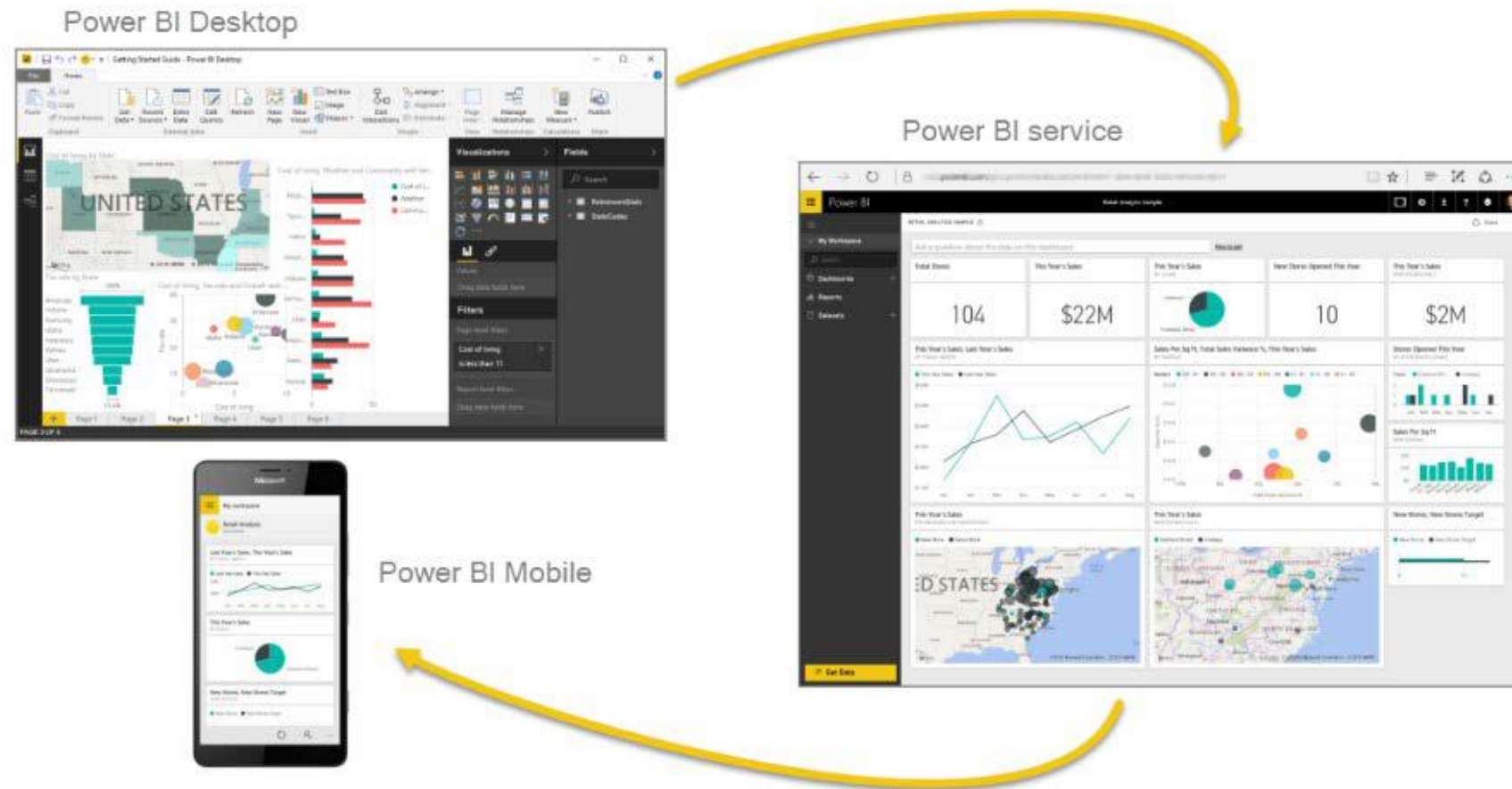
Overview

Power BI is a dashboard tool from Microsoft that lets you connect to variety of data sources and create visually stunning and interactive dashboards.



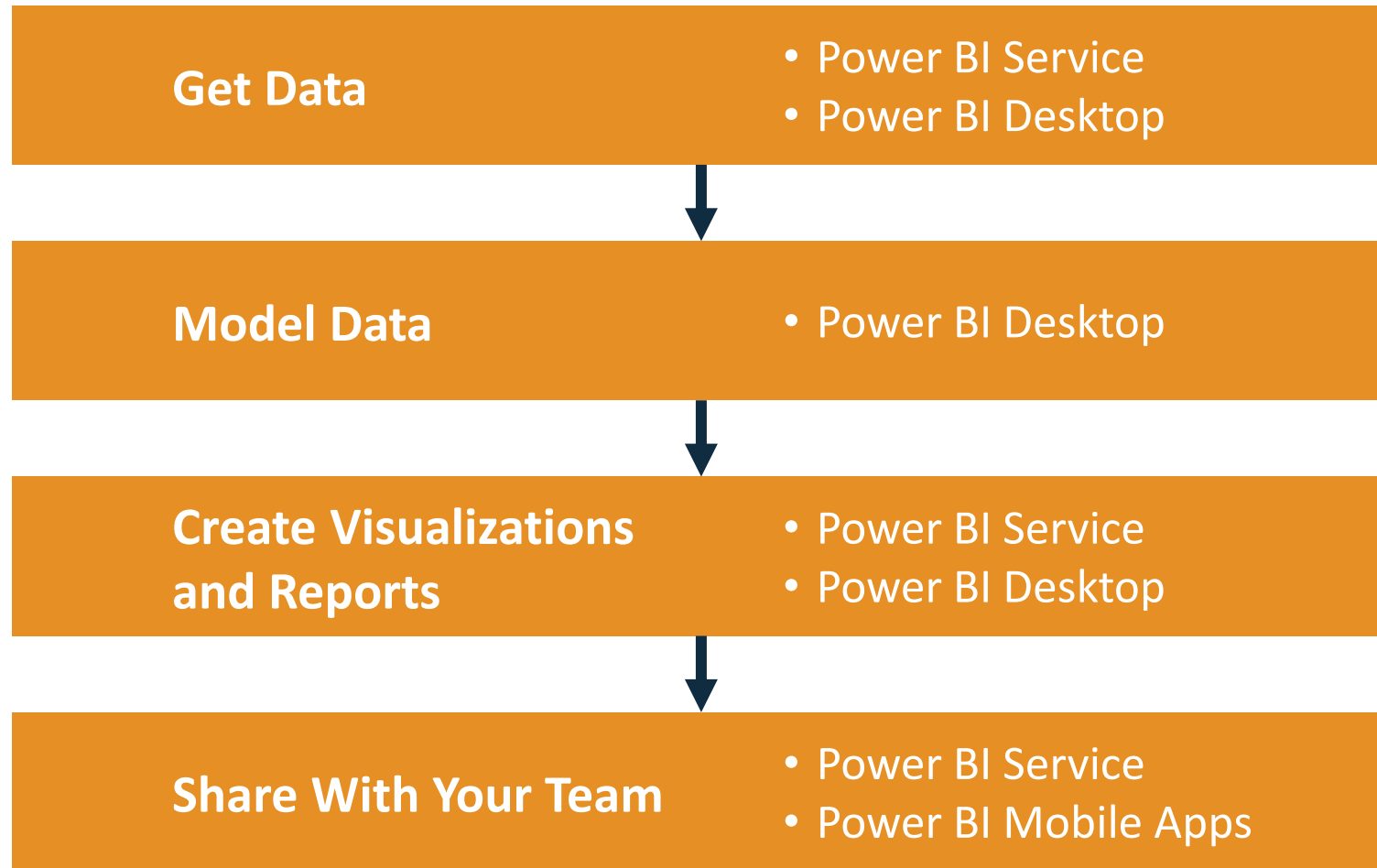
Overview

Power BI has 3 main components:



Overview

Development Approach



Connecting to Data Sources

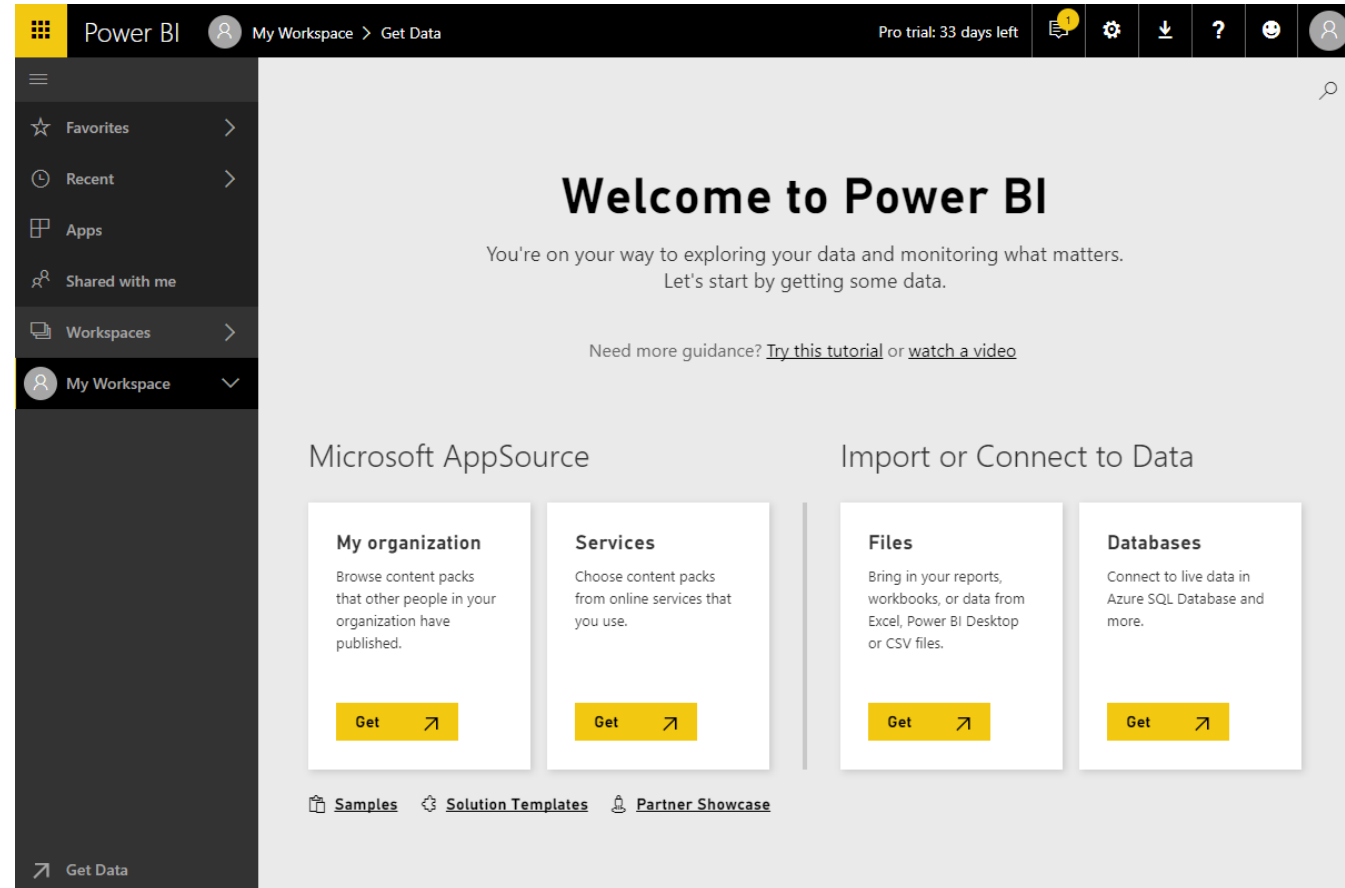
- Power BI Service Navigation
- Options to Connect to Sources
- Creating a Data Connection



Connecting to Data Sources



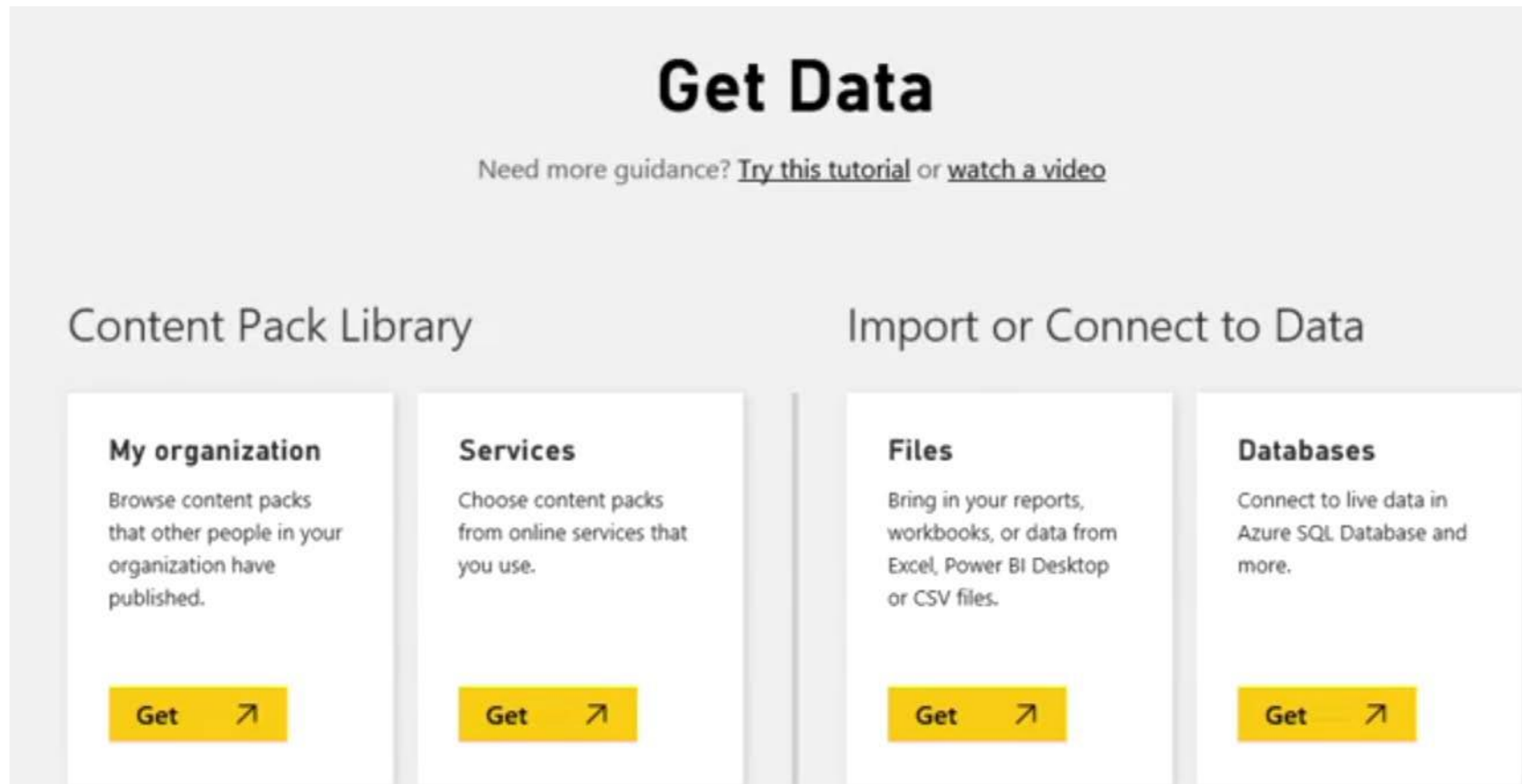
Power BI Service Navigation



Connecting to Data Sources

Options to Connect to Sources

- SaaS solutions
- Azure services
- Custom content packs
- Custom connections
- On-premise SAS data
- Excel workbooks
- CSV files
- Power BI Desktop files



Connecting to Data Sources



Creating a Data Connection

Import or Connect to Data

Files

Bring in your reports, workbooks, or data from Excel, Power BI Desktop or CSV files.

Get ↗

Databases

Connect to live data in Azure SQL Database and more.

Get ↗

Reports and Dashboards

- Dashboard Components
- Options to Share Reports and Dashboards



Reports and Dashboards

Dashboard Components

- Dashboard are high level view of some key KPI of one or more reports. Reports are pinned to a live page which then adds it to a new or existing Dashboard.
- An entire report can be published or individual visualizations from multiple reports.

Reports and Dashboards

Options to Share Reports and Dashboards

- Publish reports to the web
- Share dashboards
- Duplicate and modify shared dashboards (personal versions)
- Export to multiple formats
- Print
- QR code

Reports and Dashboards

Steps to Share

Publish to Web

- Do not use this option as it will allow access to dashboard to public

Share

- Grant/Revoke access to colleagues in the organization
- It will warn you if you have entered an email address outside the organization

Create Workspaces (Pro only)

- Public or Private groups
- Edit or View only groups

Create Apps (Pro Only)

- Entire Organization
- Specific Individual or Groups

Creating a Report

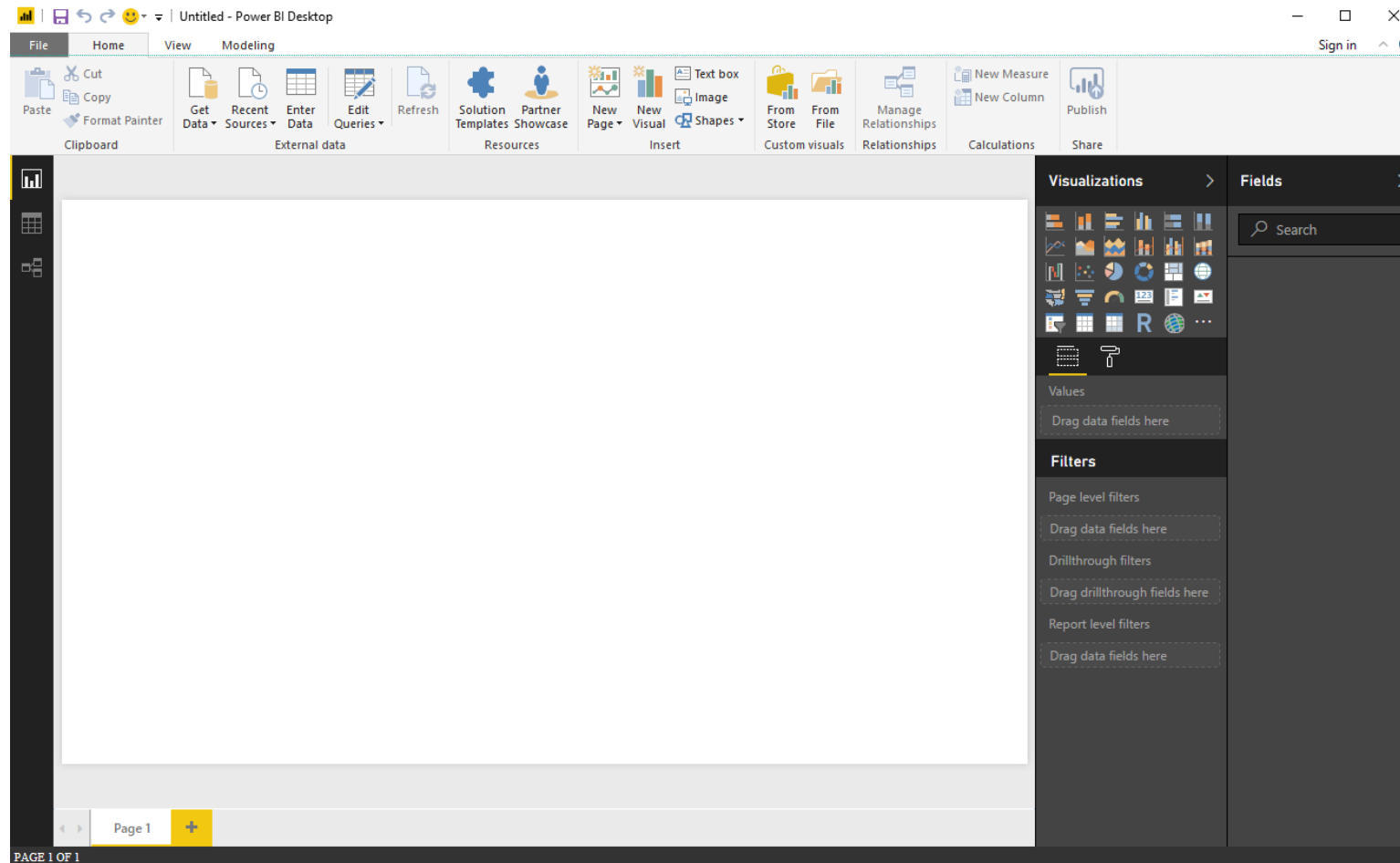
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Creating a Report



Power BI Desktop Navigation

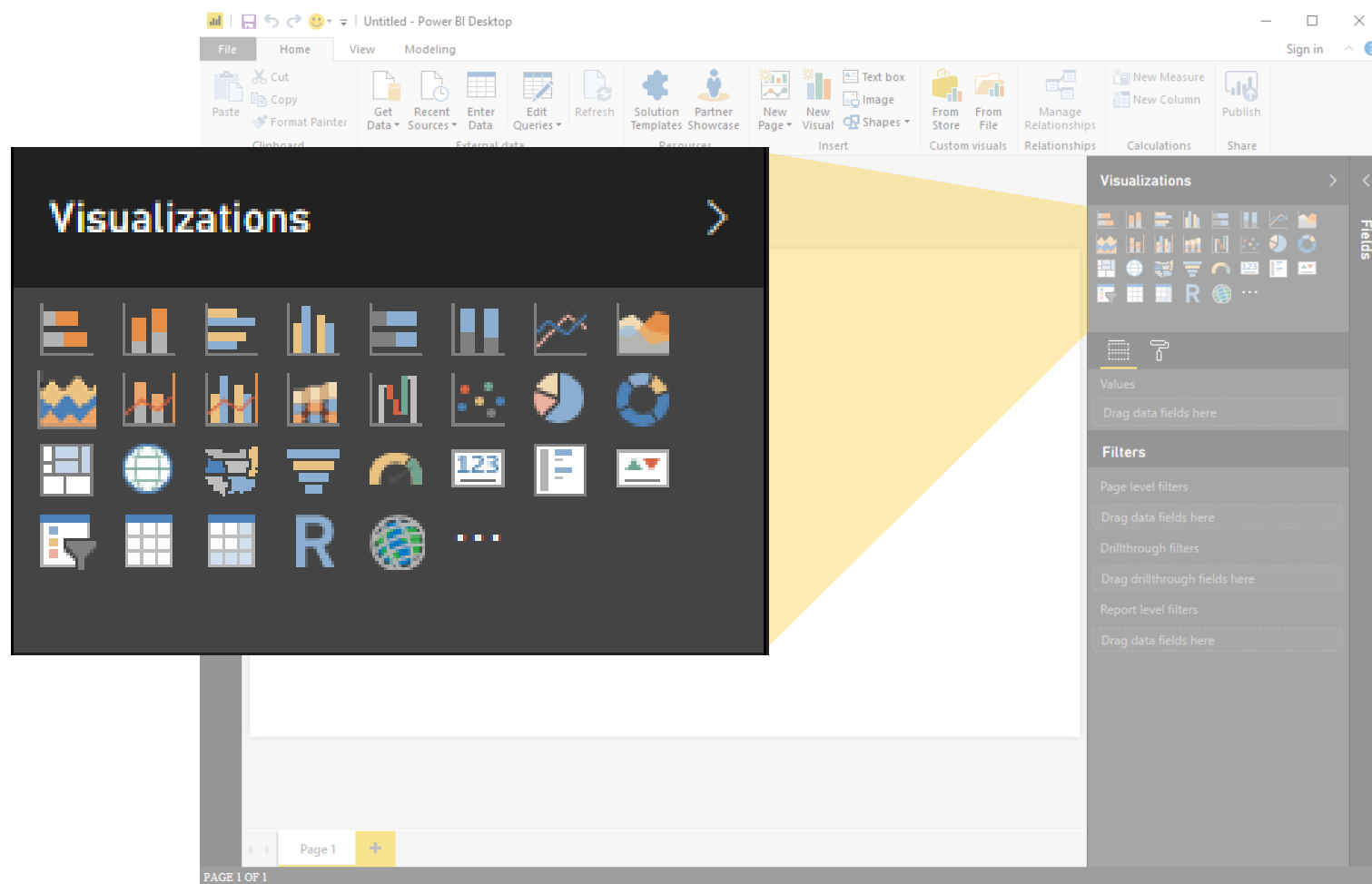


Reports and Dashboards

Dashboard Components

Chart Visualizations

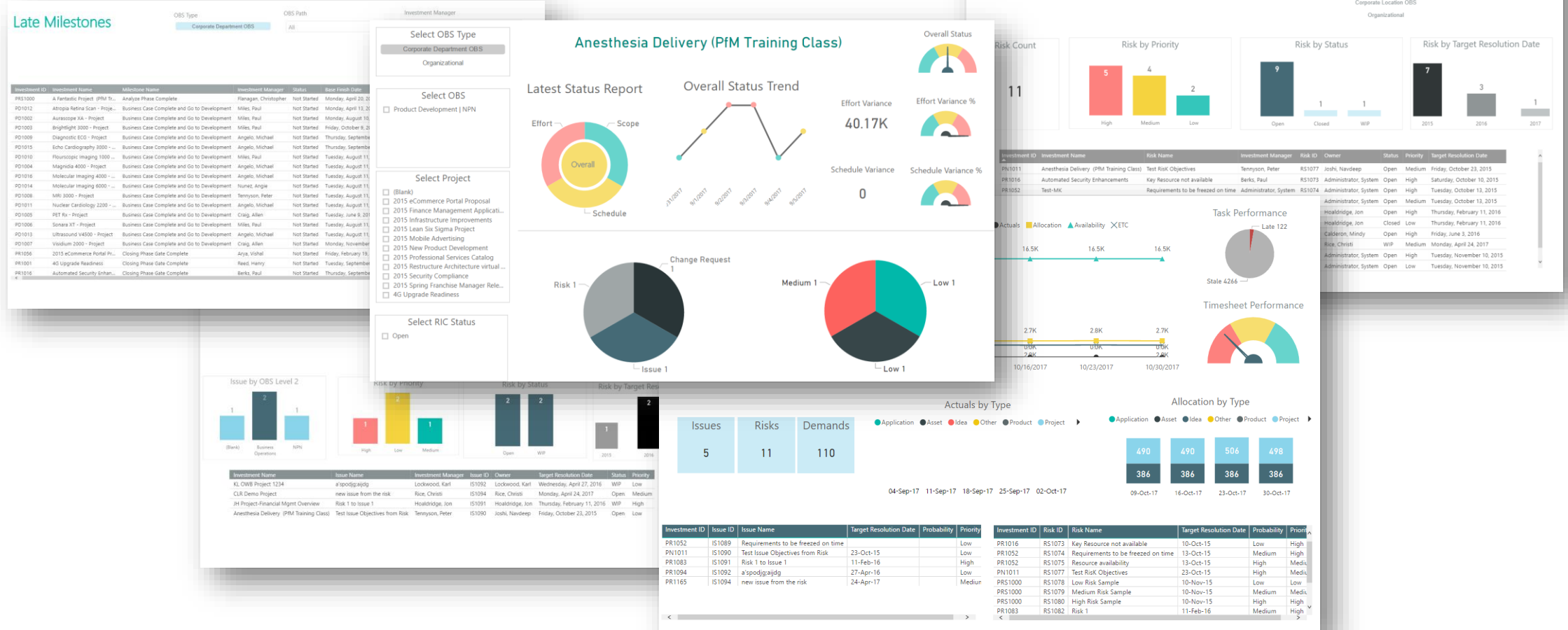
- Bar chart
- Column chart
- Line chart
- Are chart
- Pie chart
- Combo chart
- Bubble chart
- Scatter chart
- Donut chart
- Gauge chart
- Funnel chart
- Waterfall chart



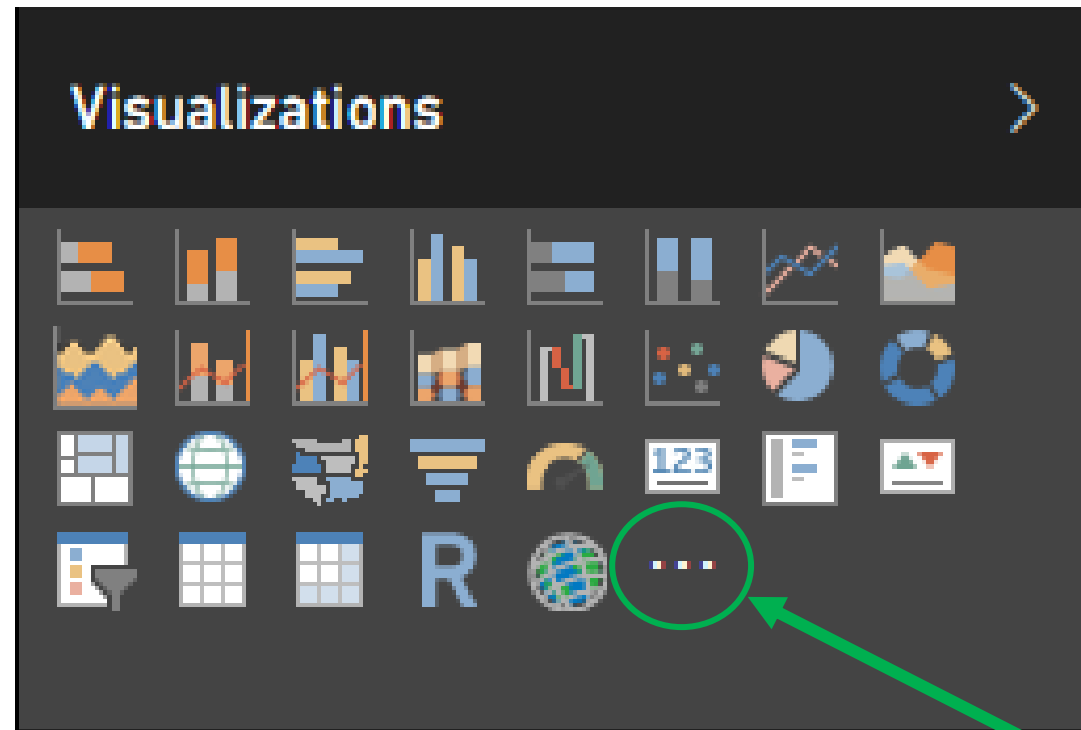
Creating a Report



Creating a report



Examples of Custom Visuals



Data Import Options

- DirectQuery vs. Import
- Connecting to ODATA and Oracle Server and Extracting Data

Data Import Options



Connecting to ODATA and Oracle Server and Extracting Data

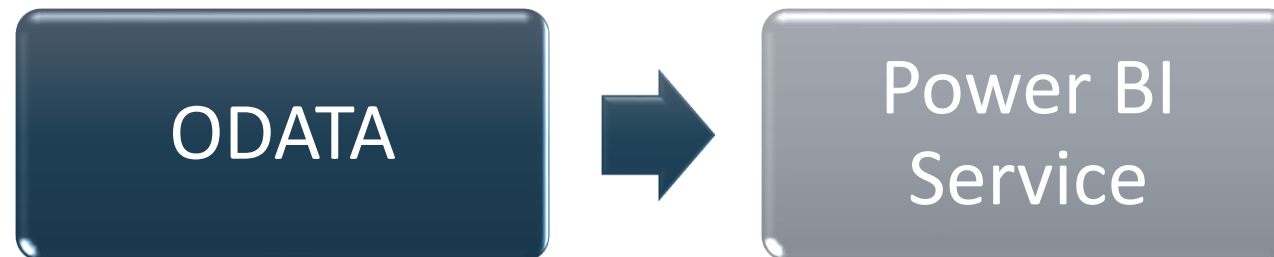


OData Feed



Oracle database

Data Refresh – On Premise vs On Demand CA PPM



Data Import Options



DirectQuery vs. Import [Oracle]

Data Connectivity mode ⓘ

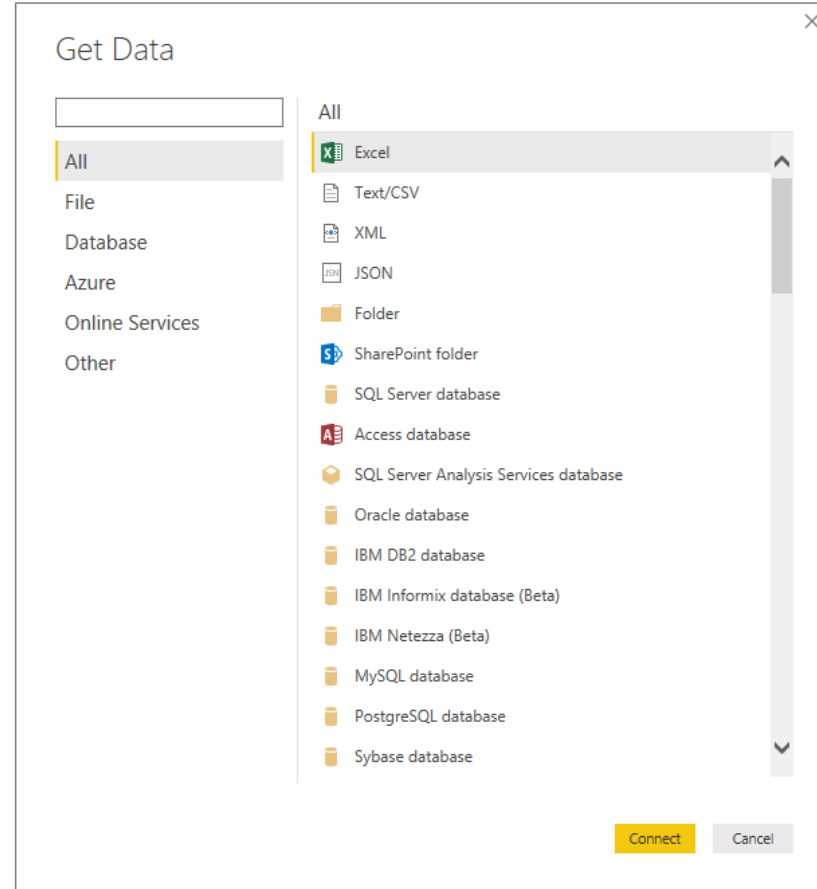
☒ Import

☐ DirectQuery

Data Import Options



Connecting to a Source



Data Transformation

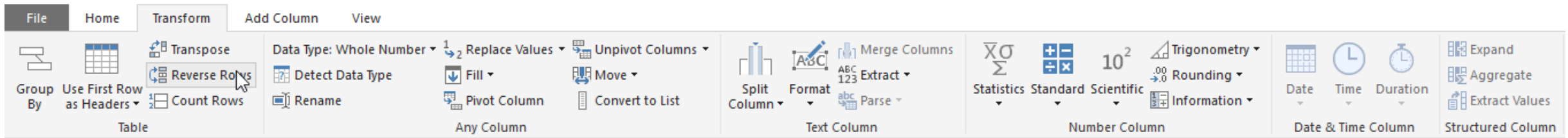
- Data Transformation Components
- Data Modeling



Data Transformation

Data Transformation Components

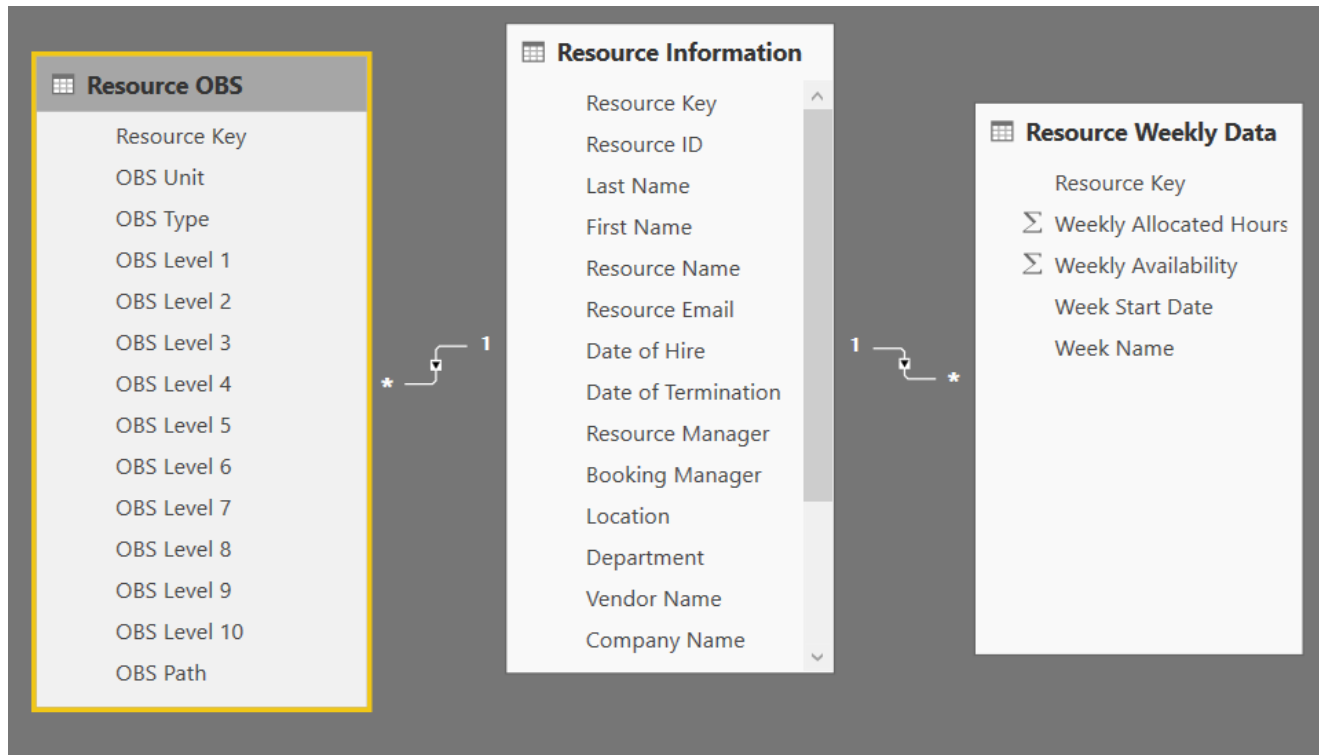
- Use first row as header
- Split the field or concatenate fields
- Replace values null with blanks
- Group data
- Pivot/unpivot columns
- Aggregate functions
- Format columns



Data Transformation

Data Modeling

- Import multiple tab from Excel or Create multiple queries
- Join the tables



Data Transformation - Advanced

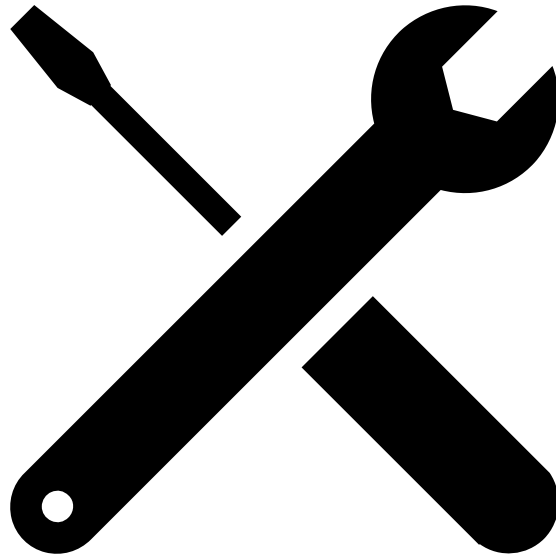
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Data Transformation - Advanced



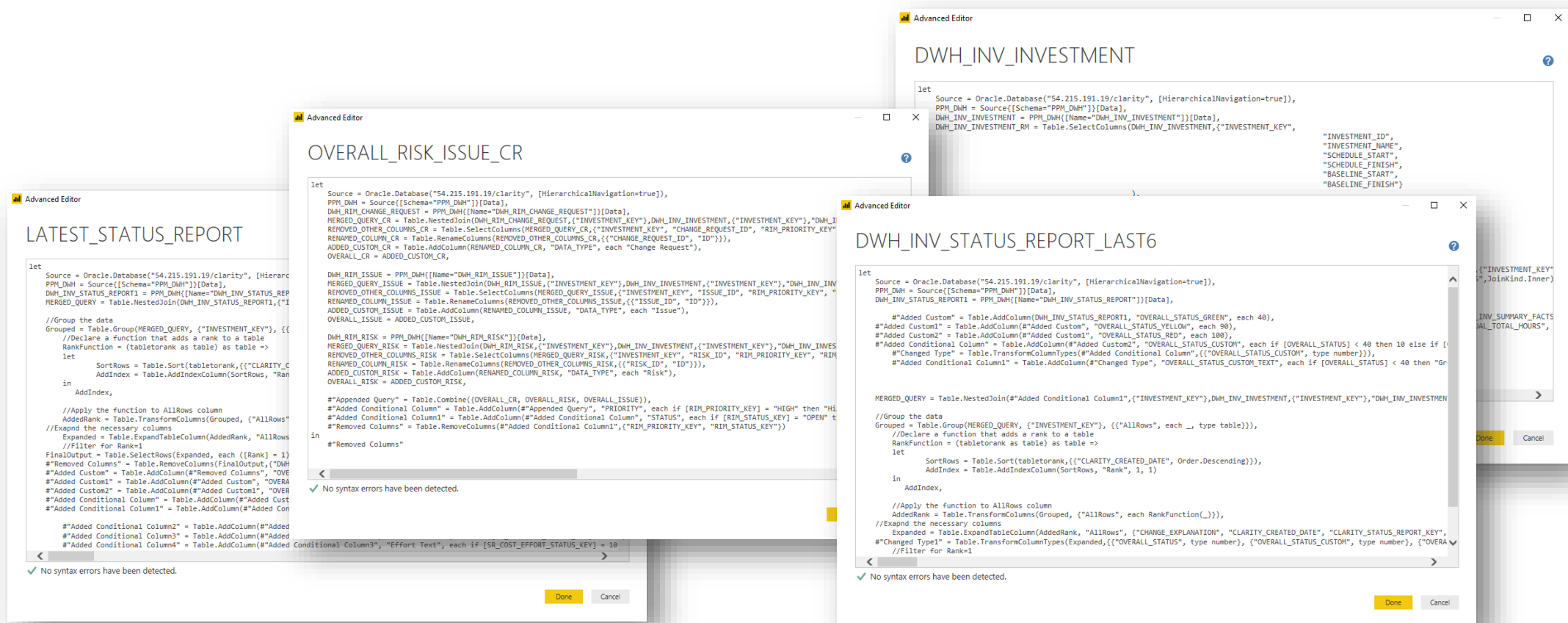
Creating your own M script for your next advanced report



Data Transformation - Advanced



M Script Examples



Create a Dashboard by connecting to Odata Feed

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Here are the steps to create a dashboard:

- Open your Power BI Desktop instance
- Select OData feed option under GetData
- Enter the Odata URL provided by your admin and click on OK.
- Enter the username & password and click on Connect to authenticate.
- Odata Table Navigator opens up. Select the tables required for your dashboard and click on Load

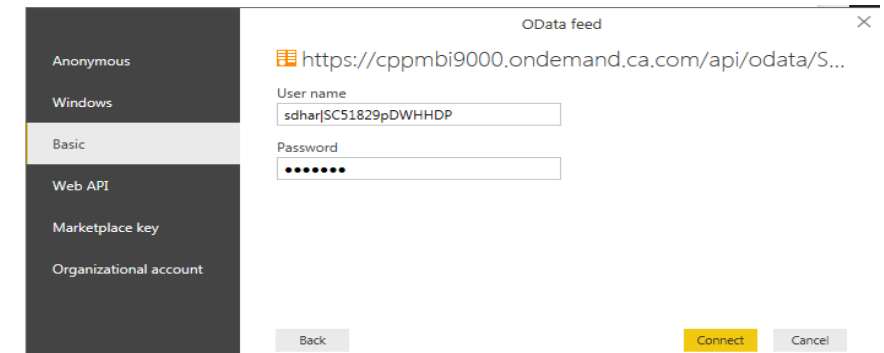
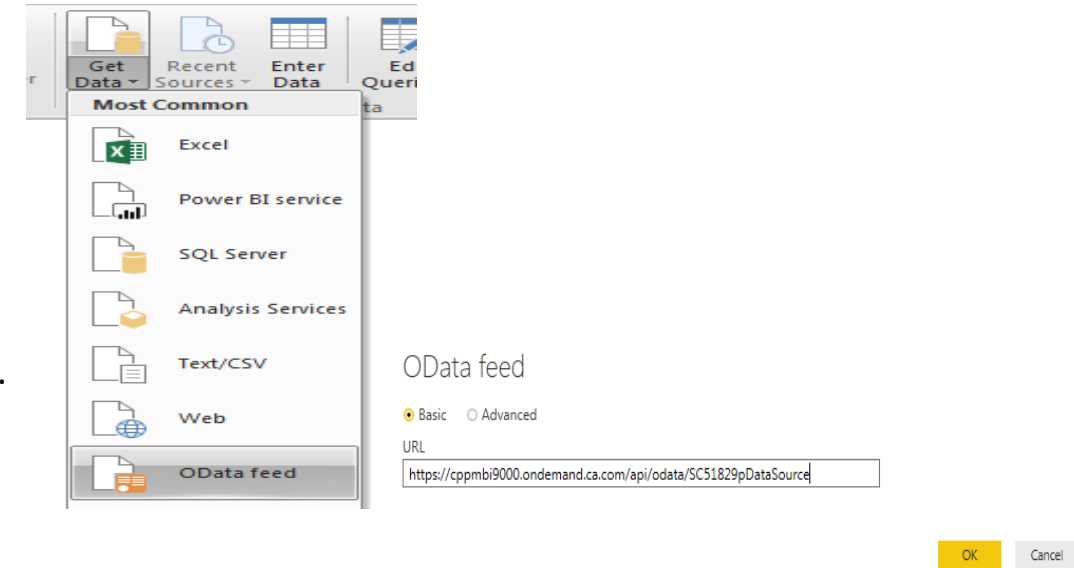
Navigator

DWH_INV_INVESTMENT
Preview downloaded on Wednesday

INVESTMENT_KEY	CLARITY_INVESTMENT_KEY	INVESTMENT_ID	INVESTMENT_NAME
5006027	5006027	IDA00275	Annual Benefit Changes I
5006029	5006029	IDA00277	Annual PPO Network Cha
5006030	5006030	IDA00279	Medicare Advantage Plar
5006032	5006032	IDA00307	New HRA vendor

The data in the preview has been truncated due to size limits.

- Selected Tables gets loaded and power BI canvas opens up.

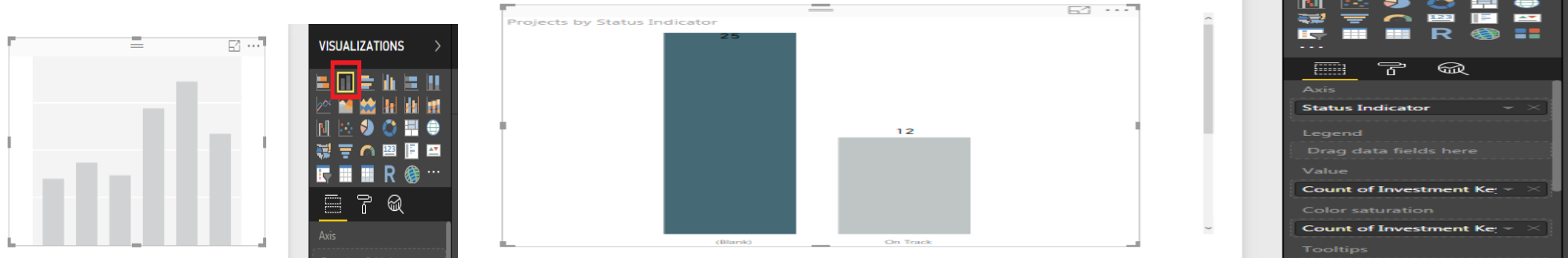


Create a Dashboard by connecting to Odata Feed

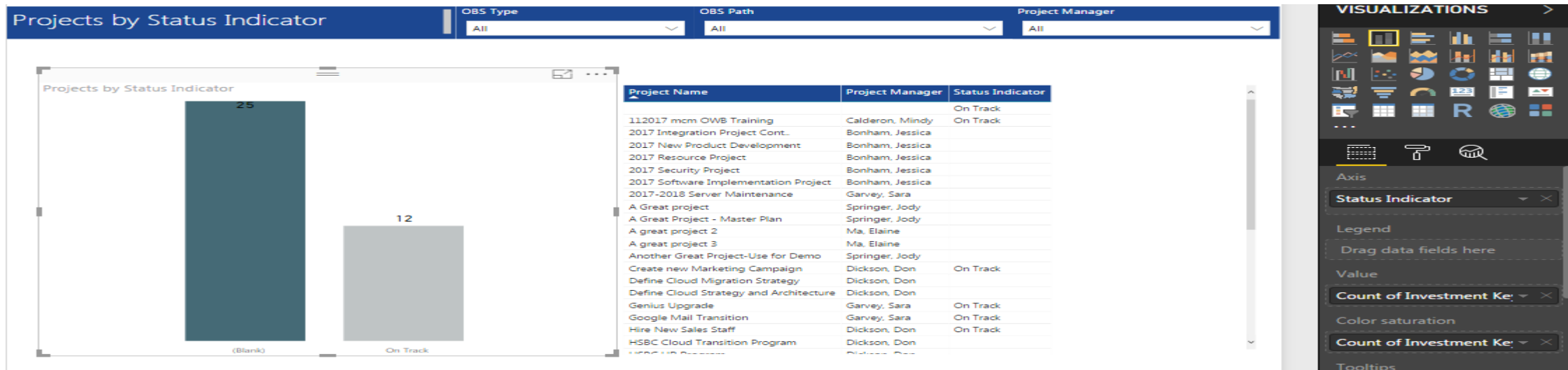
33



- Select the required visualization and drag the fields from the tables on to the settings to generate a meaningful visualization.



- You can group related visualizations under a single dashboard. Save the dashboard after completion.



Questions?



Let Rego be your guide.

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Instructions for PMI credits

- Access your account at pmi.org
- Click on **Certifications**
- Click on **Maintain My Certification**
- Click on **Visit CCR's** button under the **Report PDU's**
- Click on **Report PDU's**
- Click on **Course or Training**
- Class Name = **regoUniversity**
- Course Number = **Session Number**
- Date Started = **Today's Date**
- Date Completed = **Today's Date**
- Hours Completed = **1 PDU per hour of class time**
- Training classes = **Technical**
- Click on **I agree** and **Submit**



Let us know how we can improve!
Don't forget to fill out the class survey.



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