Integrating Power Apps with Power BI

Agenda

➢ Power BI Primer

• Embedding Power BI Dashboard Tiles in PowerApps

• Extending Power BI Reports using Canvas Apps

• Surfacing Power BI Reports in a Power Apps Portal

What is Power BI?

- What is Power BI?
  - A cloud-based analytics service for licensed subscribers
  - Environment which supports and promotes self-service BI
  - Powerful builder tools for importing, modeling and visualizing data
  - Enterprise-grade platform for deploying reports and dashboards
  - On-premises server product supporting subset of cloud features
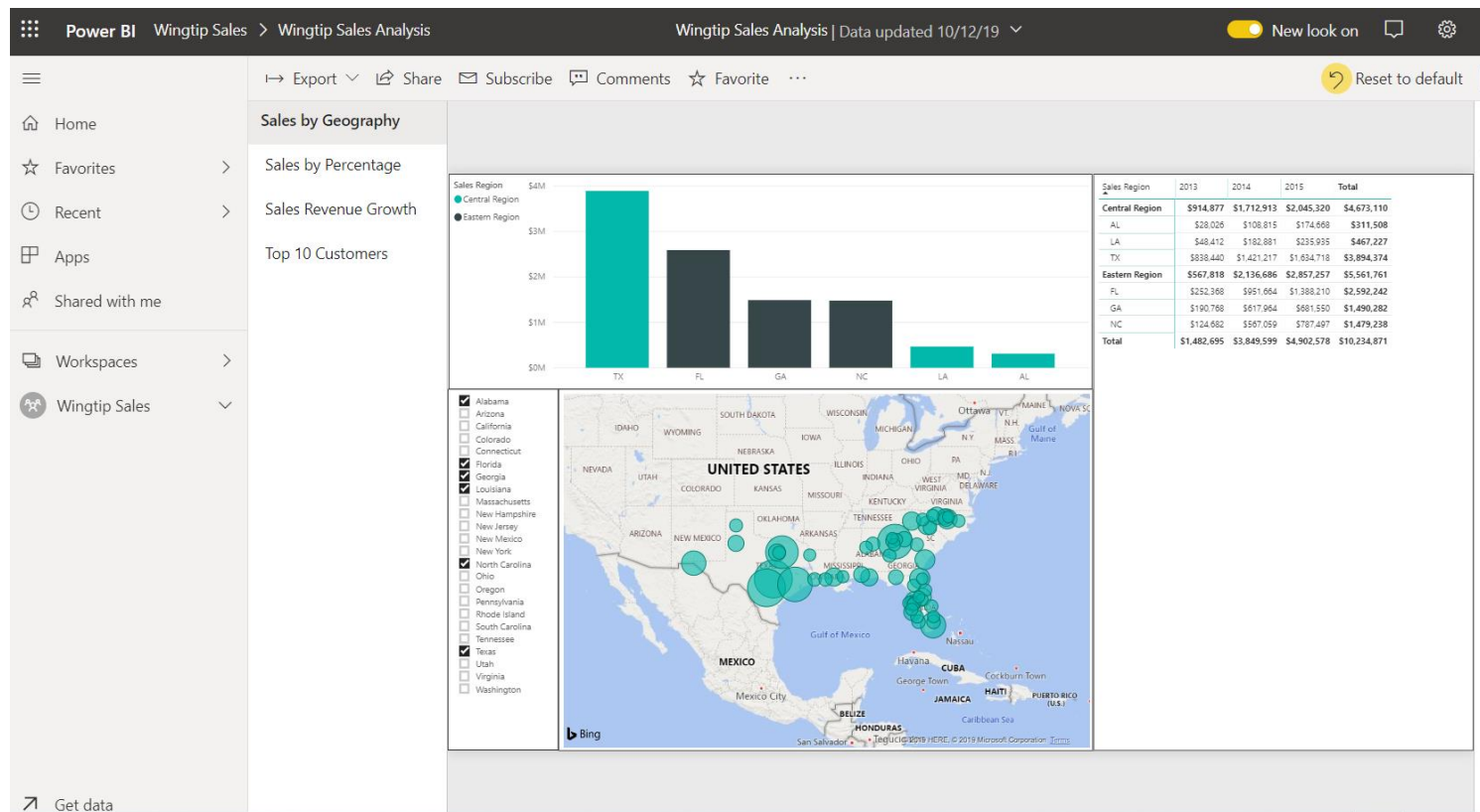
Power BI Service	Power BI Desktop	Power BI Report Server

The Power BI Service

- ## The Power BI Service
  - Provides cloud-based foundation for Power BI platform
  - Provides browser-based portal at https://app.powerbi.com

# Central Power BI Concepts

- Workspace
    - Provides user context and asset container
    - Every user has personal workspace
    - Team development requires group workspaces
- Dashboard
    - Consolidated view into reports and datasets
    - Custom solution entry point for mobile users
- Report
    - Collection of pages with tables & visualizations
    - Provides interactive control of filtering
- Dataset
   - Data model containing one or more tables
    - Can be very simple or very complex

Reports and Pages

- Reports contain one or more pages
  - A report can be designed with a single page
  - A report can be designed with many pages
  - Tabbed navigation located at bottom of report view
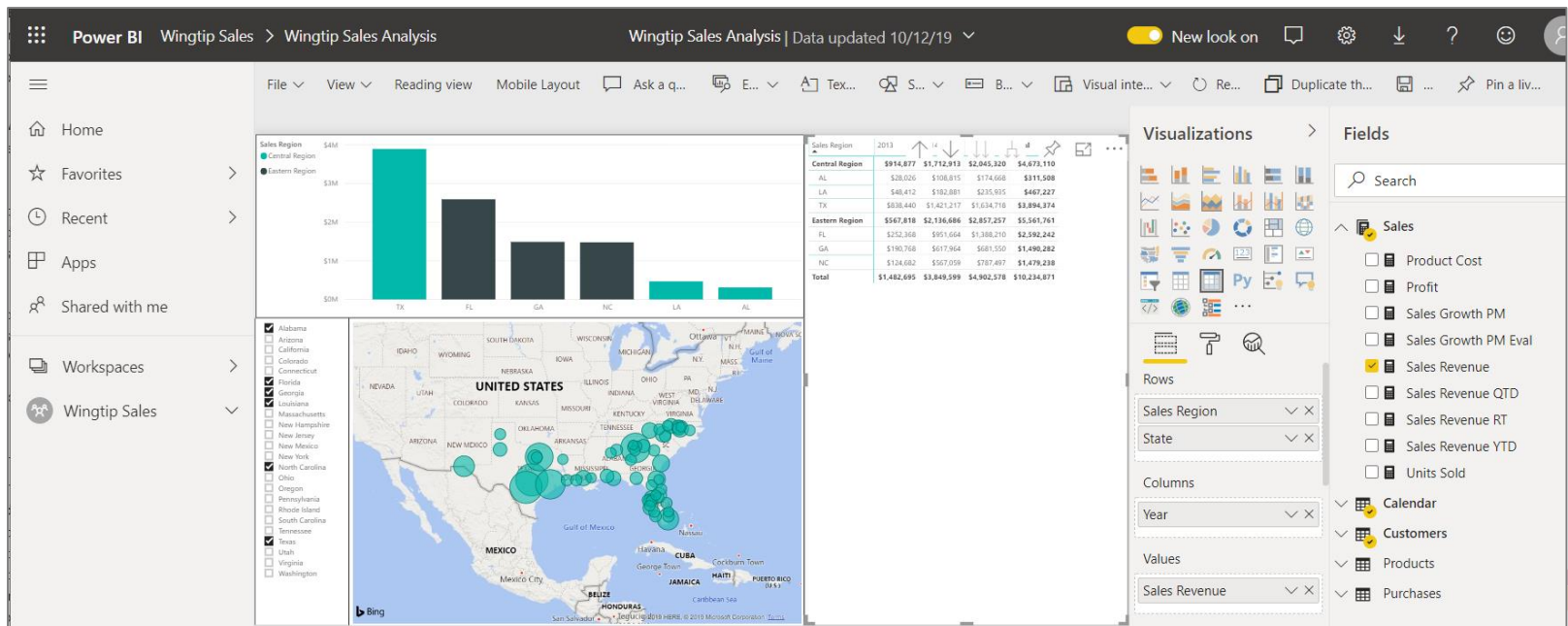 - Each report is associated with exactly one dataset
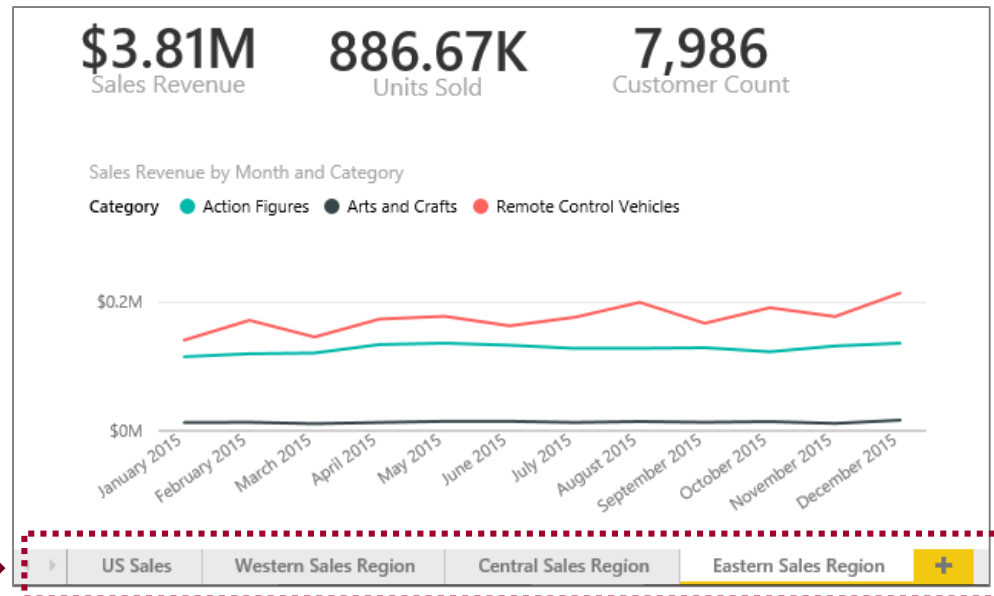
Report Authoring

- Report initially opens in reading view
 - Select Edit command to switch report to edit mode
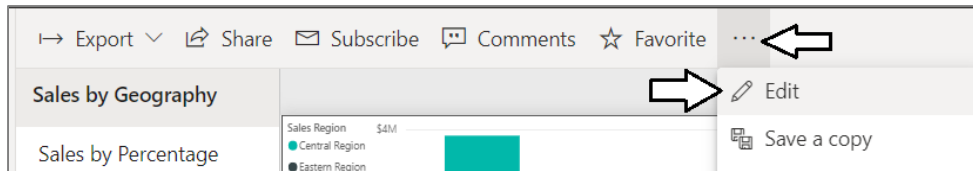
 - Report design tools appear on right side of page

Visuals (aka Visualizations)

- Reports are designed using visual (aka visualizations)
  - Each visuals is based on an underlying visualization type
  - Visualization type can be changed using **Visualizations** pane
 - Visuals configured using fields from tables in **Fields** list
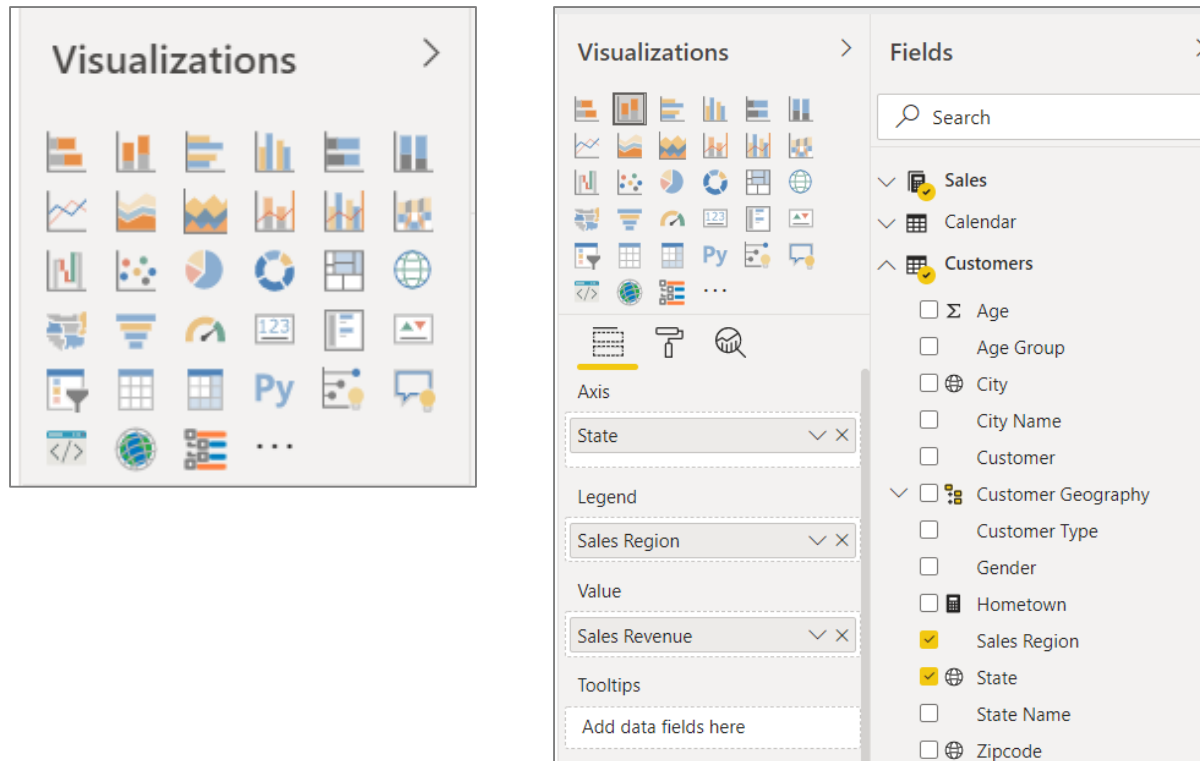
Editing Visual Properties

- Visual properties modified using three property panes
  - Visual properties vary depending on visualization type

Fields Pane **Format Pane** **Analytics Pane**
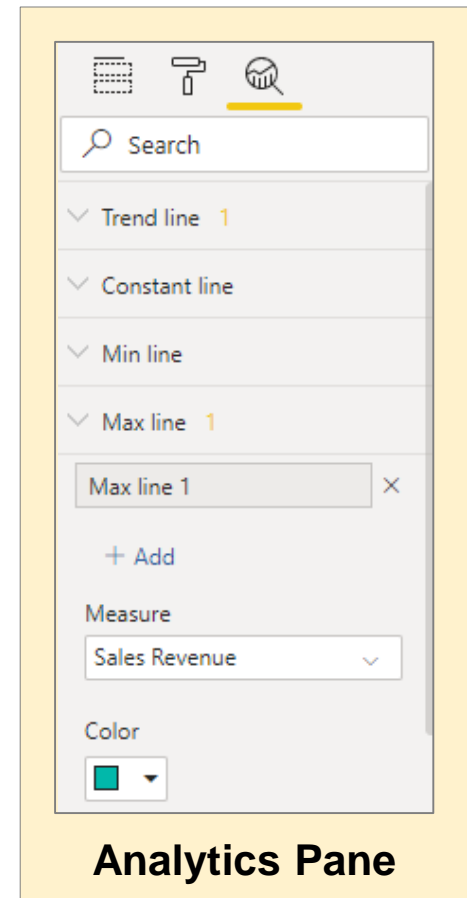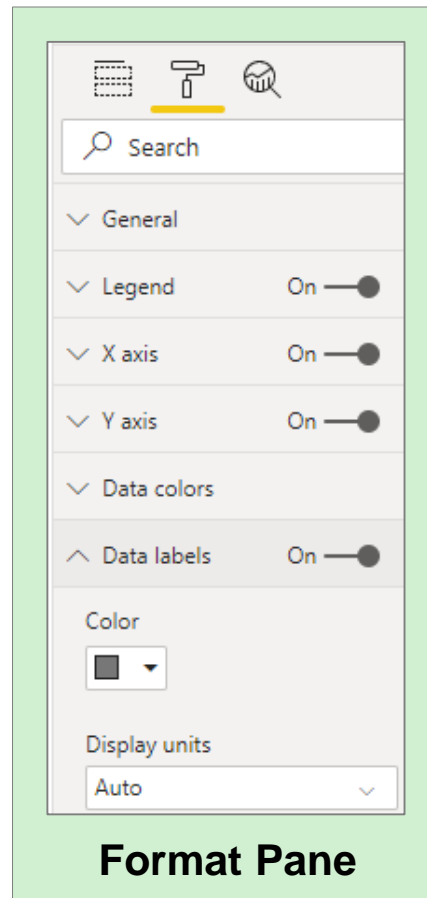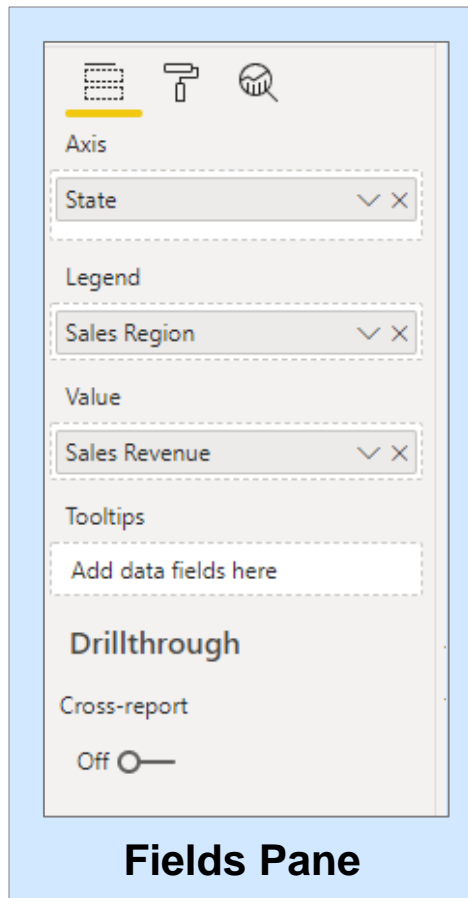
Report and Datasets

- Each report is based on single underlying dataset
    - **Fields list** in report designer shows tables and fields
    - Fields added to a visual's data roles in **Fields pane**
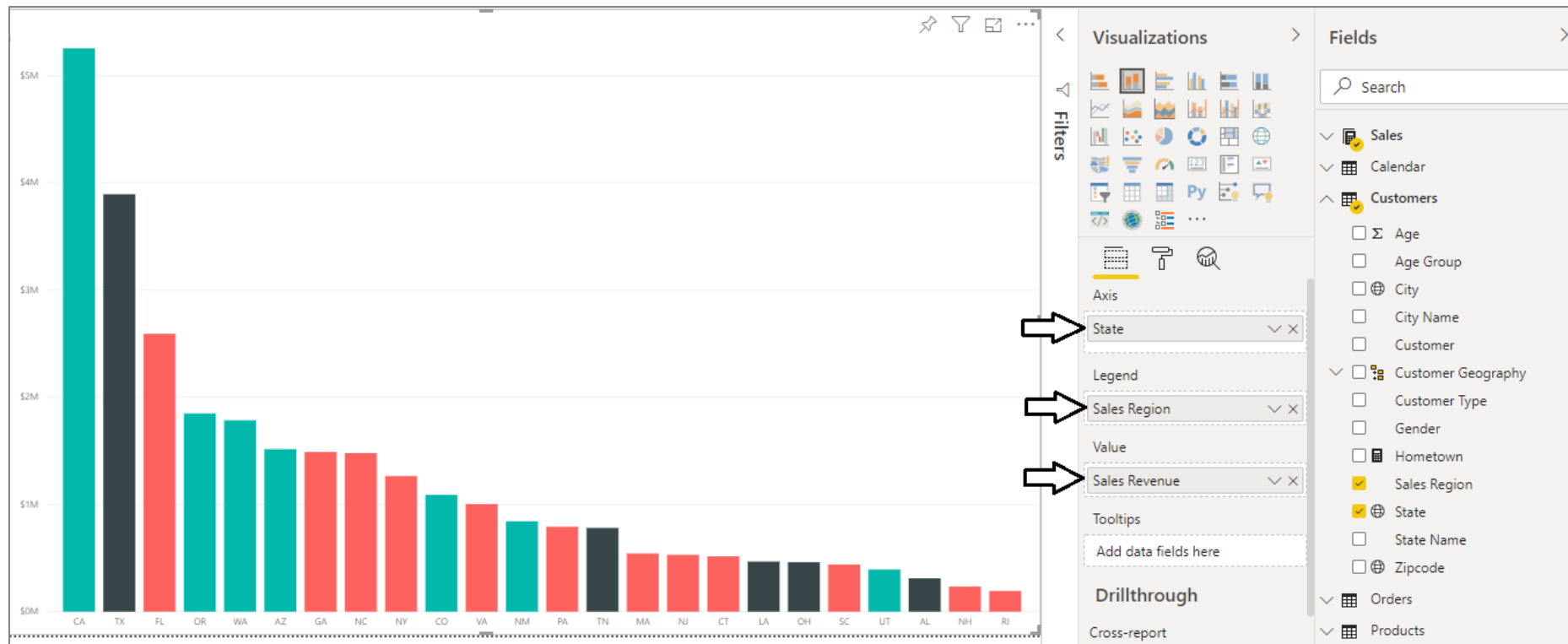
Dashboards and Tiles

- Dashboard is a collection of tiles
  - Tiles can be created by pinning visual from a report
  - Tiles can be created by pinning Q&A search result
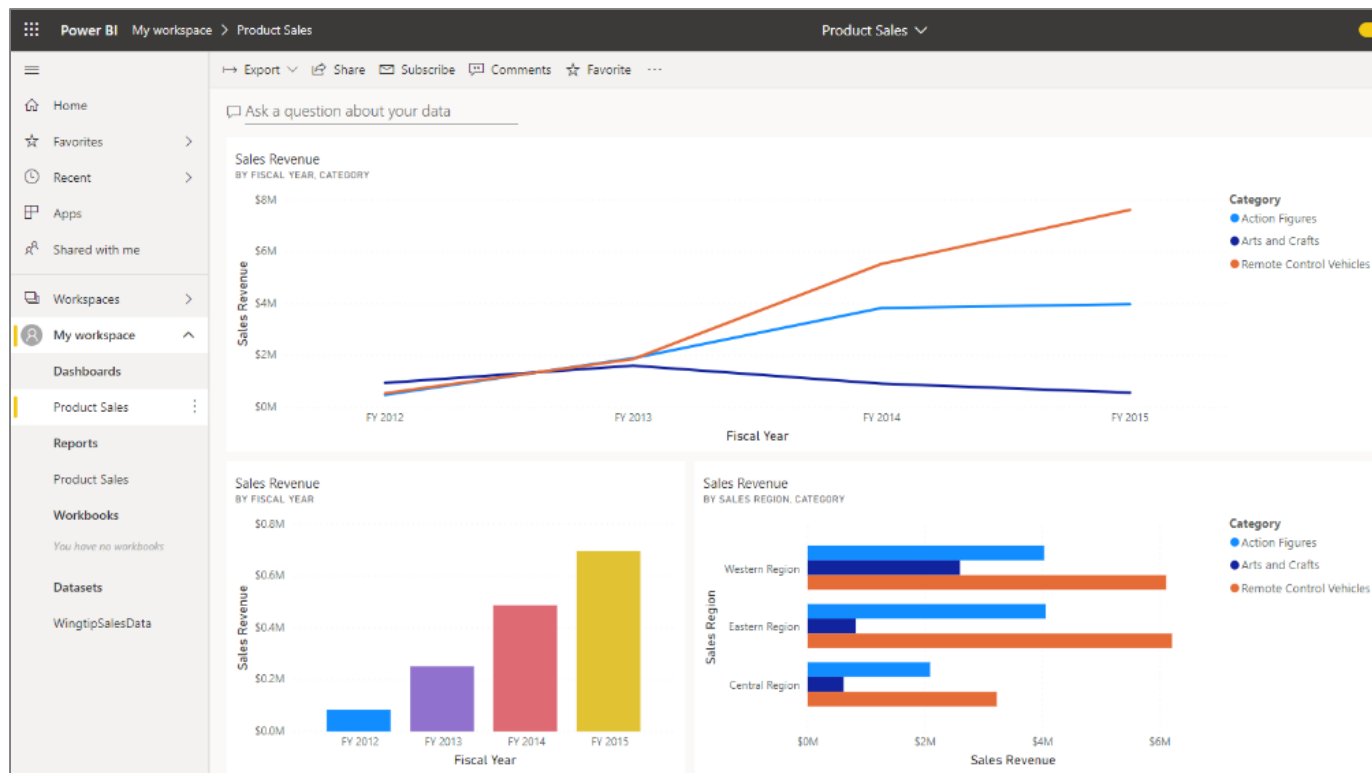
Creating Dashboards

- ## Dashboards contain tiles

  - ### Tiles created from visuals using thumbtack button
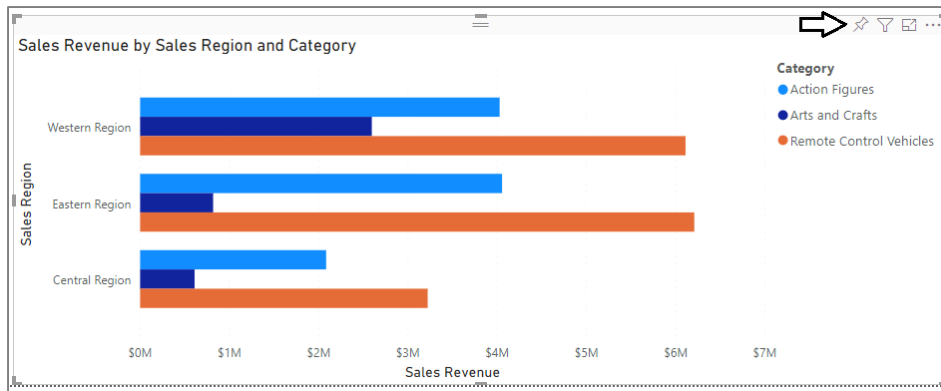
  - ### New tiles can be added to new or existing dashboard
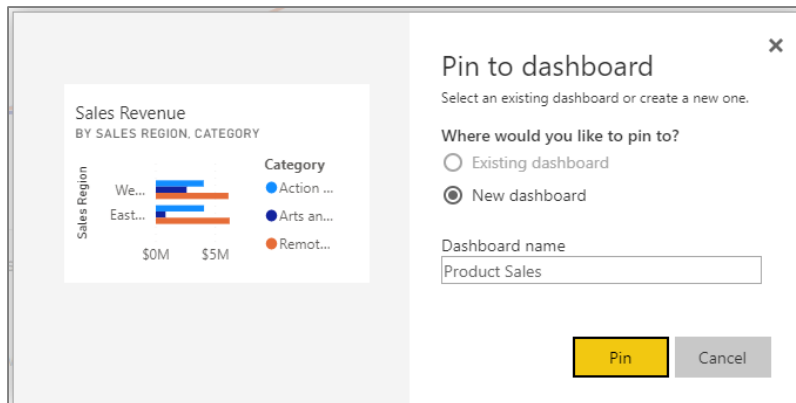
Dashboards and Reports

- Dashboards link users to reports
  - Dashboard tiles designed to provide high-level view
  - Clicking tiles drills down into report to see more detail
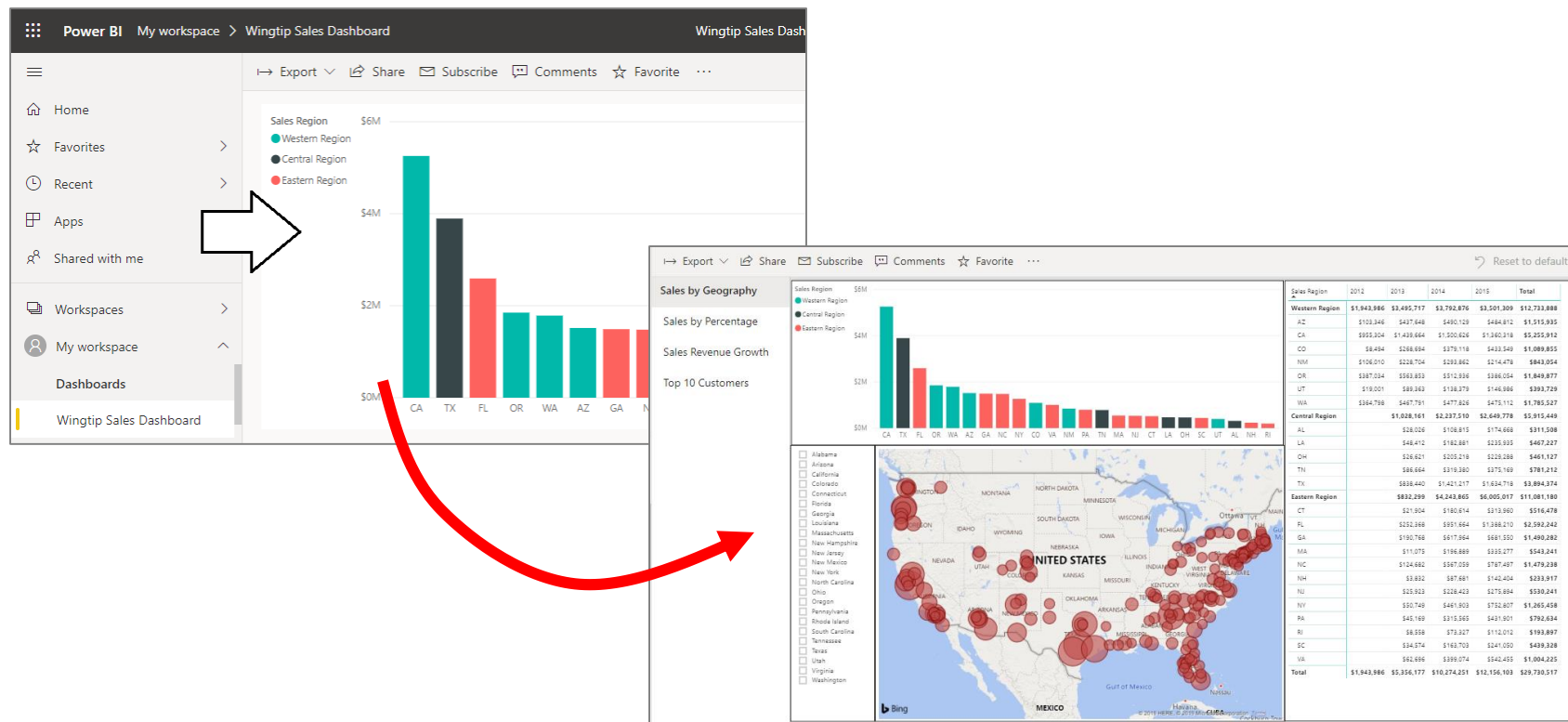
DEMO

Creating Reports and Dashboards using the Power BI Service

Installing Power BI Desktop

- Power BI Desktop quick & easy to install over the Internet
  - Select Power BI Desktop option from Power BI Download menu
  - Power BI Desktop downloads & installs in less than a minute
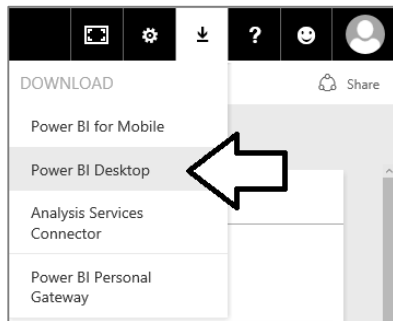
Working with Power BI Desktop

- Power BI Desktop is a Windows application
  - Work is saved and published in terms of PBIX projects
  - You can work on multiple projects at once
  - Each project runs in its own Power BI Desktop instance
  - Power BI Desktop can freeze up or act buggy
  - Quit & restart Power BI Desktop if it acts strangely
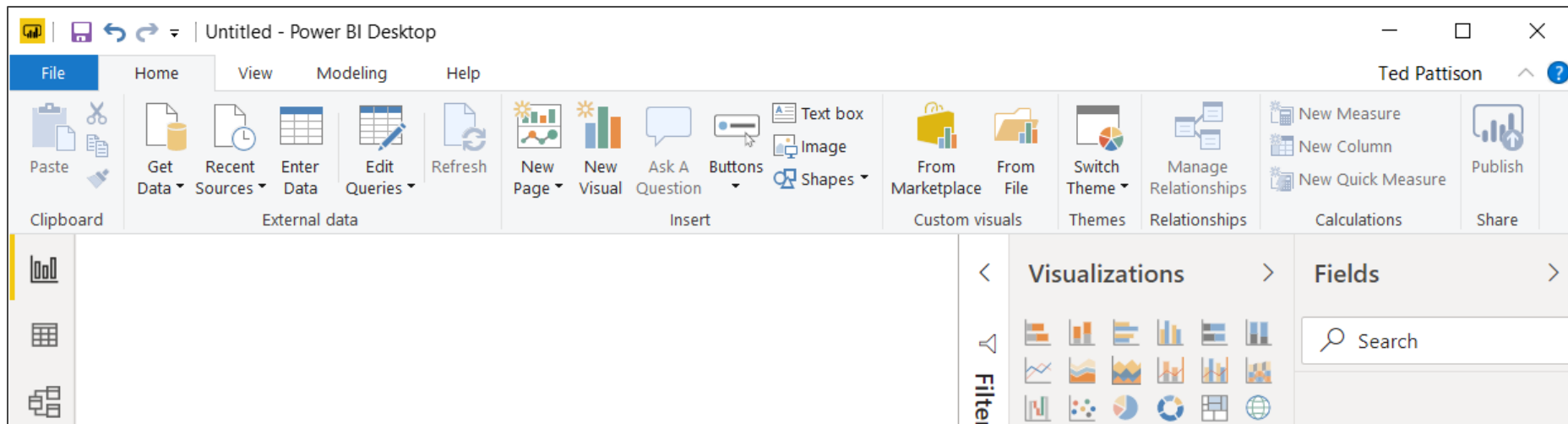
Getting Around in Power BI Desktop

- What do you need to learn to use Power BI Desktop?
  - Query features for importing data
  - Designing data model & writing DAX expressions
  - Designing reports with Power BI Desktop report designer

- Navigating between view modes

Report View

Data View

Model View

To access query features
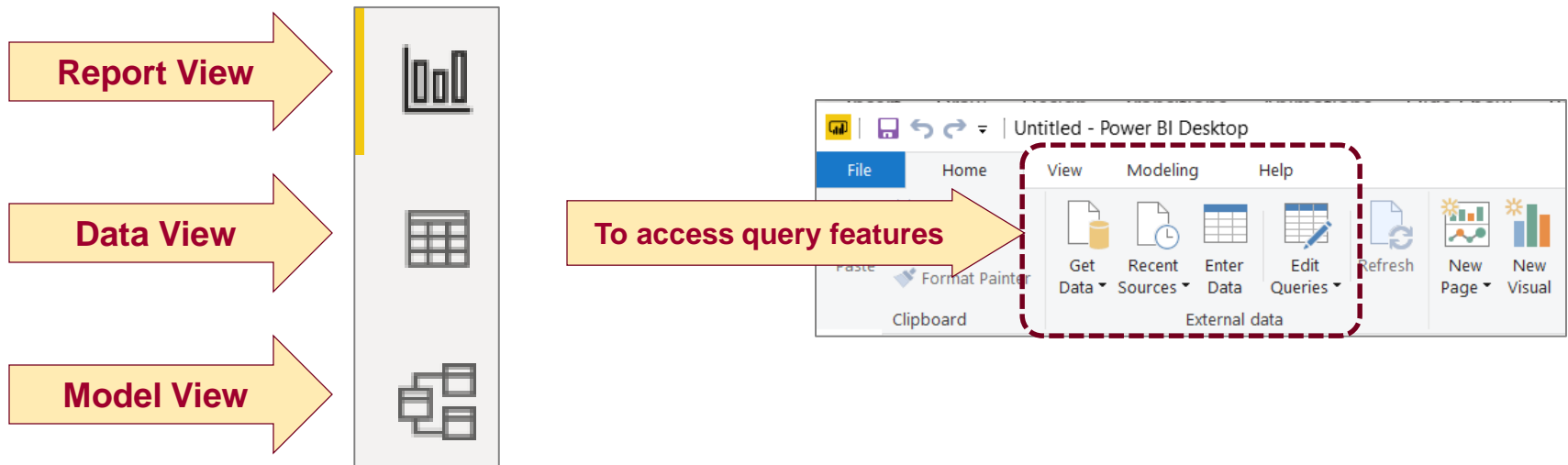
Projects and PBIX Files

- ## Power BI Desktop projects saved using PBIX files
  - PBIX file contains data source definitions
  - PBIX file contains query definitions
  - PBIX file contains data imported from queries
  - PBIX file contains exactly one data model definition
  - PBIX file contains exactly one report
  - PBIX file never contains data source credentials

Wingtip Sales
Analysis.pbix

	Projects			
File	Home	Share	View	

← → ∨ ↑ | > This PC > Local Disk (C:) > Student > Projects | ∨ ↻

Name	Date modified	Type	Size
Wingtip Sales Analysis.pbix	8/27/2016 9:53 AM	Microsoft Power BI Desktop Document	12,103 KB
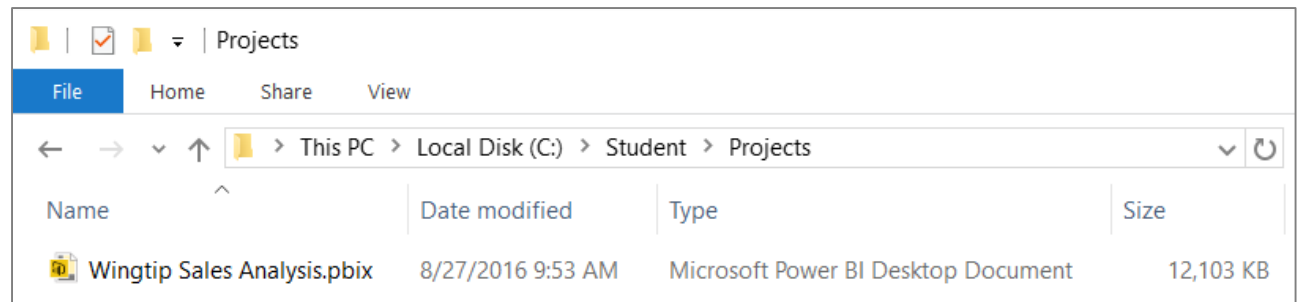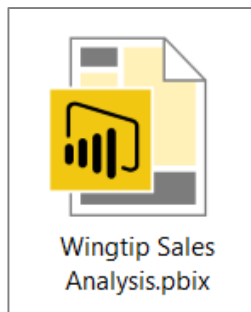
Publishing a Power BI Desktop Project

- Power BI Desktop provides **Publish** command
  - Used to publish project to Power BI service
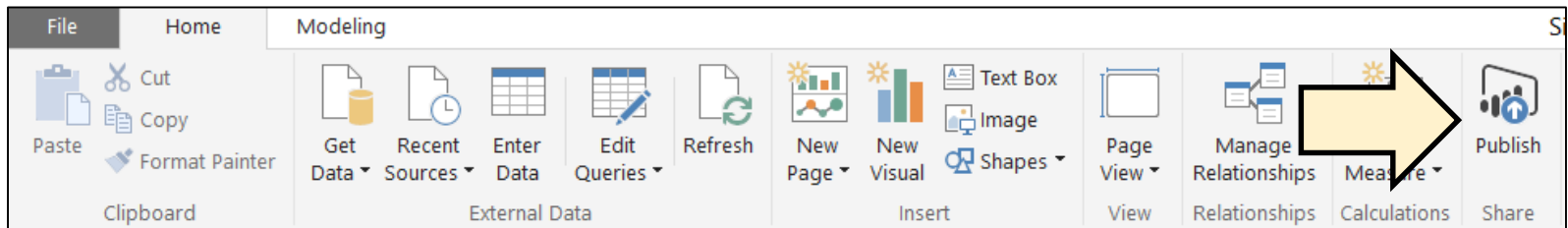
  - Requires logging into your Office 365 account
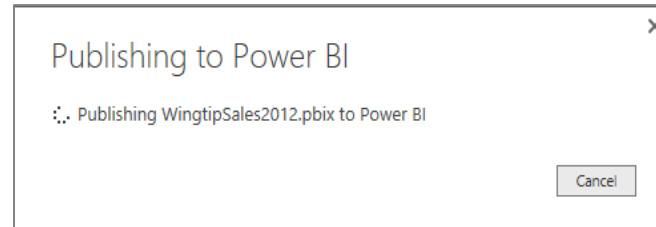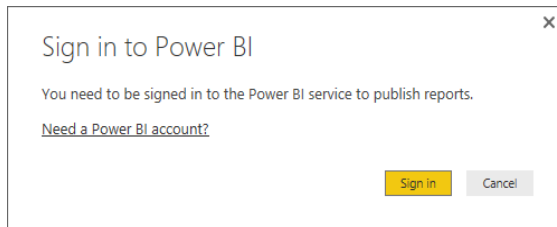
  - Published articles added to target workspace

DEMO

Getting Up and Running with Power BI Desktop

Agenda

✓ Power BI Primer

➤ Embedding Power BI Dashboard Tiles in PowerApps

• Extending Power BI Reports using Canvas Apps

• Surfacing Power BI Reports in a Power Apps Portal

Start by Creating Dashboard Tiles
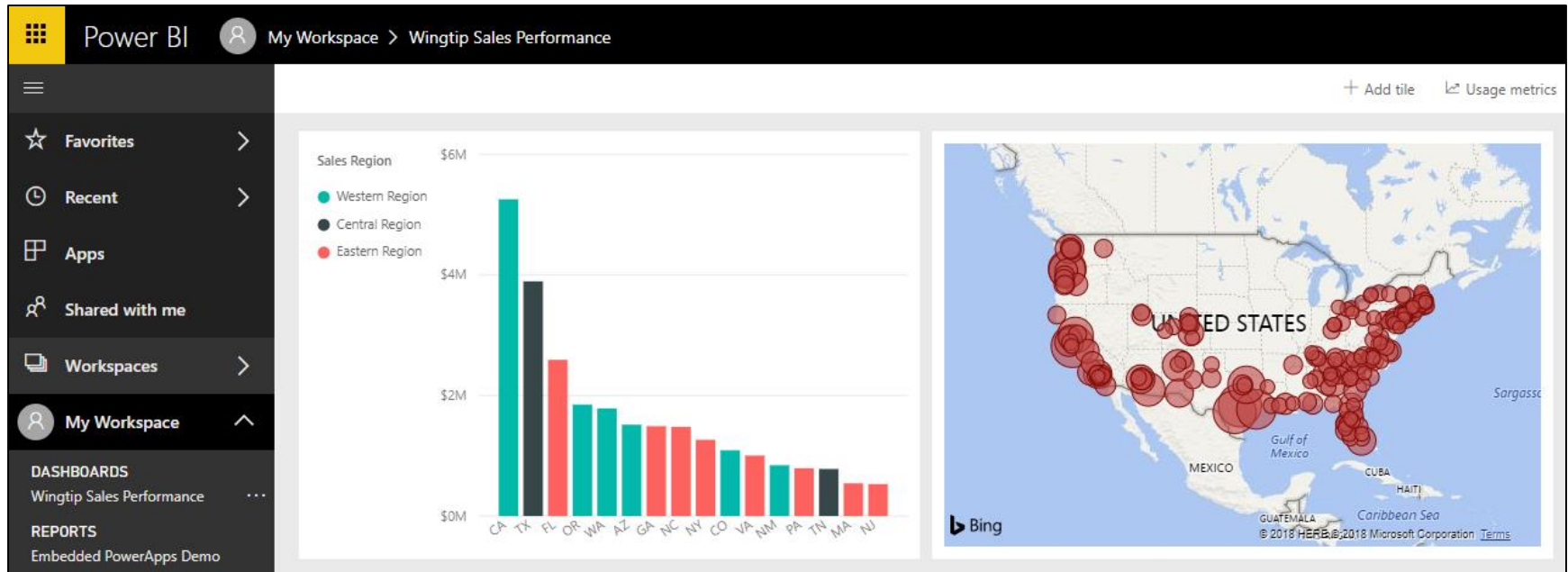
The Power BI Tile Control in PowerApps
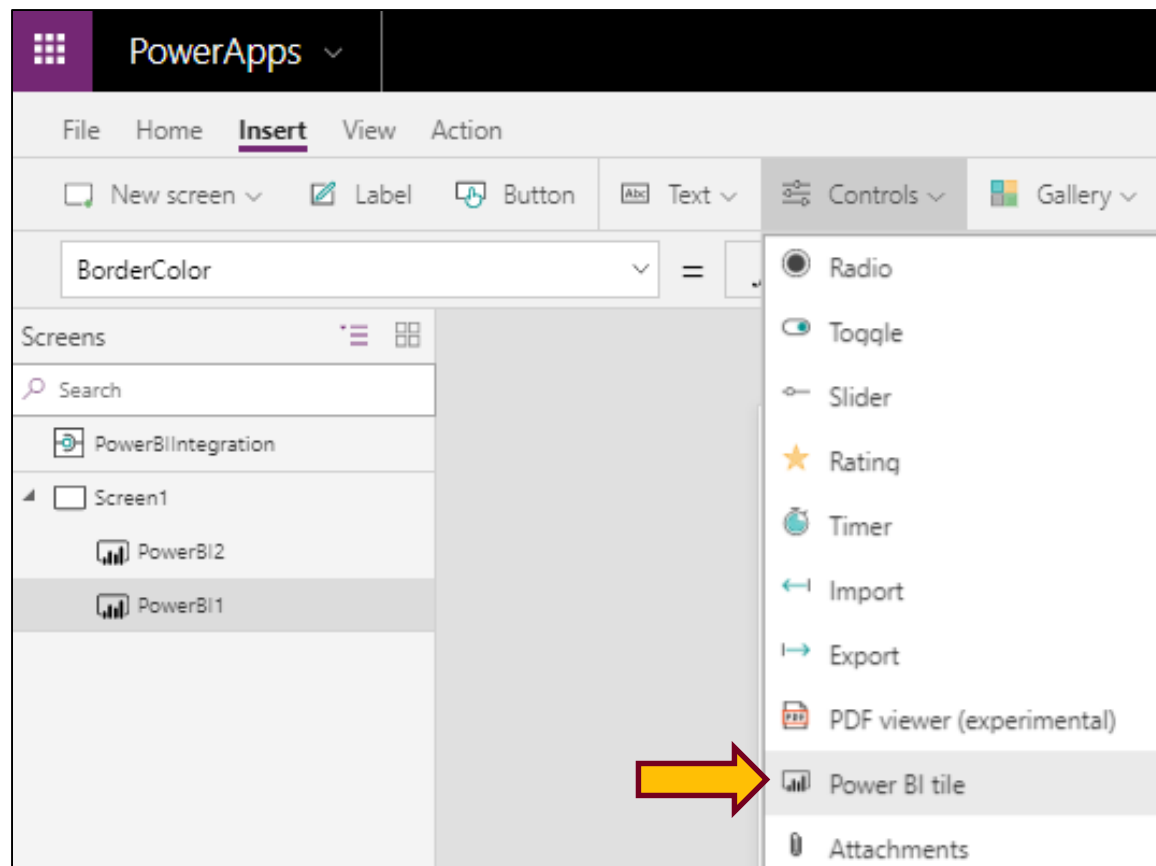
Embedding Power BI Dashboard Tiles

Agenda

- ✓ Power BI Primer
- ✓ Embedding Power BI Dashboard Tiles in PowerApps
- ➢ Extending Power BI Reports using Canvas Apps
- • Surfacing Power BI Reports in a Power Apps Portal

The Power Apps Visual
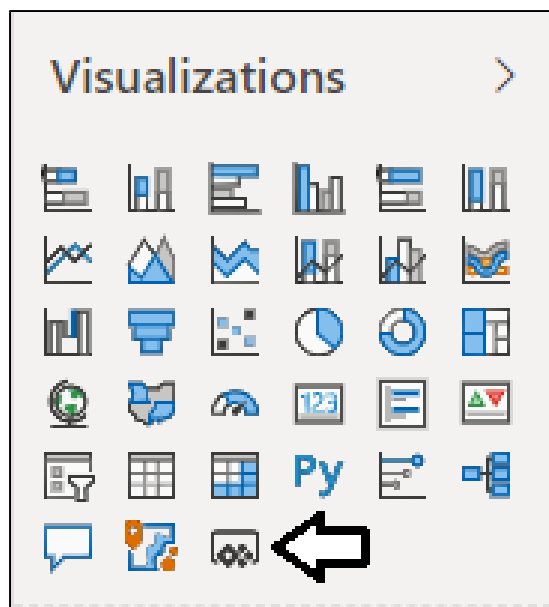
Configuring PowerApps Data Settings

Designing the App in PowerApps Studio

Using the App in Power BI Reports

Agenda

- ✓ Power BI Primer
- ✓ Embedding Power BI Dashboard Tiles in PowerApps
- ✓ Extending Power BI Reports using Canvas Apps
- ➢ Surfacing Power BI Reports in a Power Apps Portal

Configuring Portals for Power BI Integration

- Power BI Visualization must be enabled
  - This is done in portal admin center

Summary
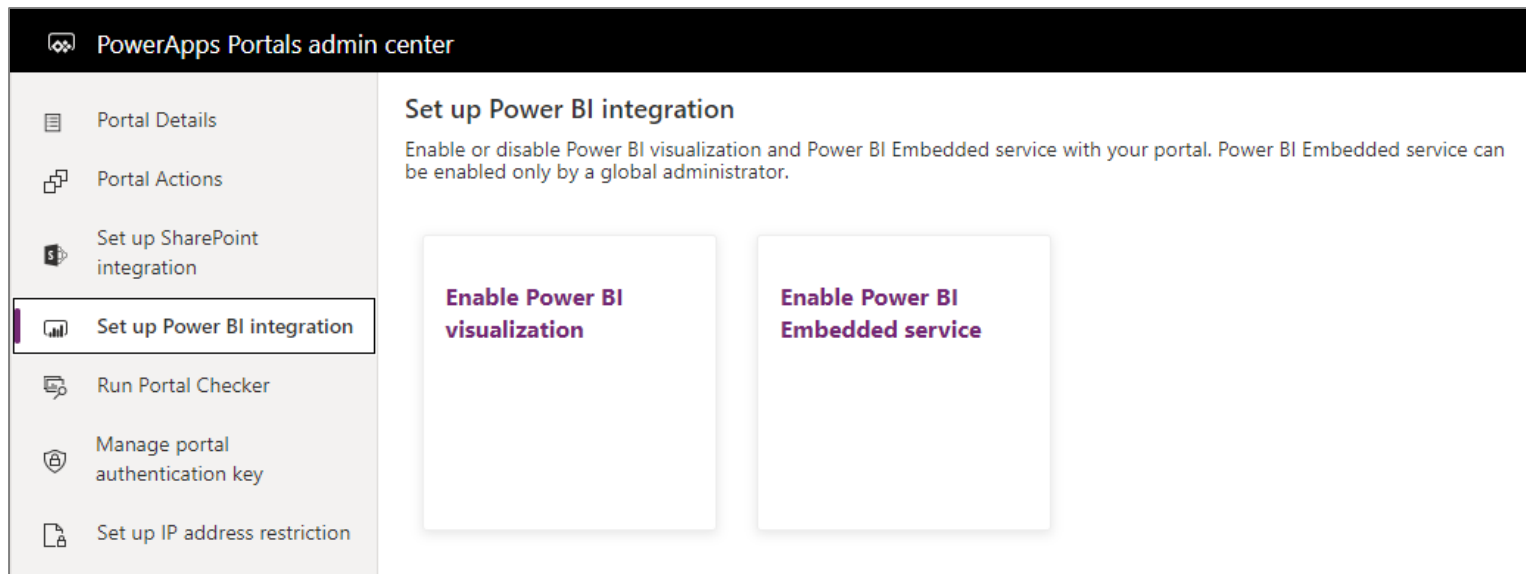
- ✓ Power BI Primer
- ✓ Embedding Power BI Dashboard Tiles in PowerApps
- ✓ Extending Power BI Reports using Canvas Apps
- ✓ Surfacing Power BI Reports in a Power Apps Portal