Microsoft

Business Analytics
with Power BI

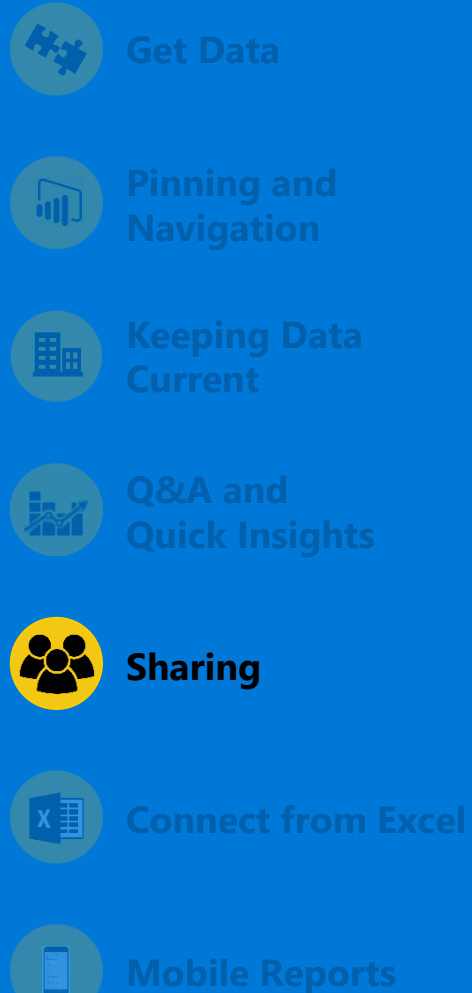Microsoft Services

Module 2: Power BI Service

Lesson 5: Sharing

Power BI Service

Get Data

Pinning and Navigation

Keeping Data Current

Q&A and Quick Insights

Sharing

Connect from Excel

Mobile Reports
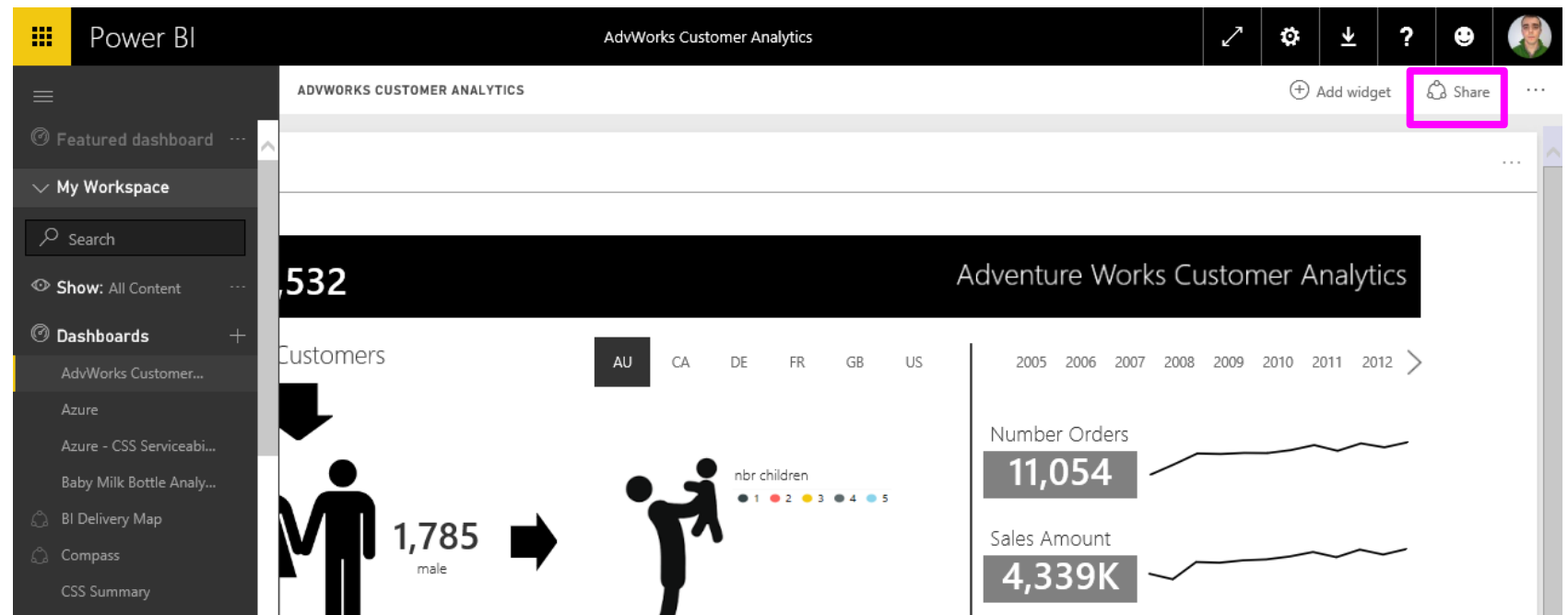
National Clouds

- Along with the commercial (global) cloud, Power BI is available in three separate National clouds:
  - US Government
  - Germany
  - China

- Offers same levels of security, privacy, compliance and transparency as the global version of Power BI, combined with a **unique model for local regulations** on service delivery, data residency, access, and control.

Note: All the commercial features are not available in all national clouds.

Sharing

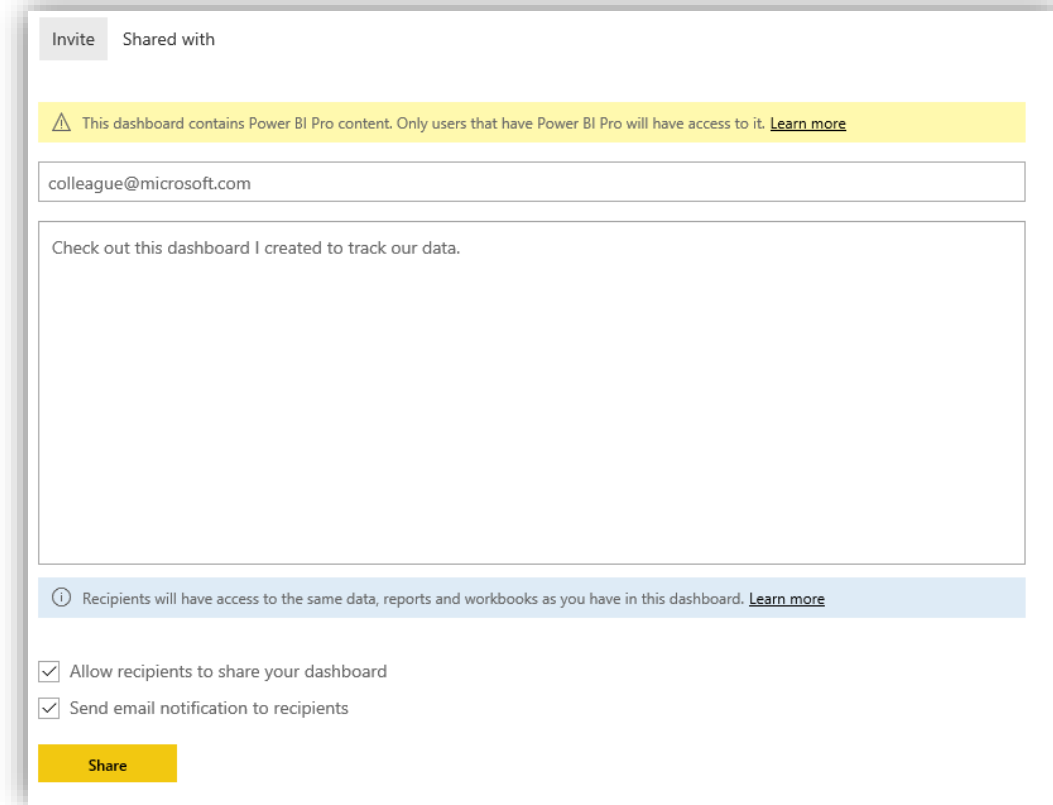## Peer-to-Peer/Peer-to-Distribution Group

- It is possible to **share dashboards** and **underlying reports** with colleagues **inside and outside** of your organization
- The **share happens at the dashboard level** and each recipient gets an additional dashboard and reports in their **My Workspace**

Microsoft Confidential

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Peer-to-Peer/Peer-to-Distribution Group

- Recipient e-mail can be a **distribution group** (if using Office 365 for email)

- Can **control if recipients can re-share**

- Recipients get an **e-mail with a link** (lasts one month)

- A shared dashboard appears with the symbol

Invite | Shared with

⚠ This dashboard contains Power BI Pro content. Only users that have Power BI Pro will have access to it. Learn more

colleague@microsoft.com

Check out this dashboard I created to track our data.

ⓘ Recipients will have access to the same data, reports and workbooks as you have in this dashboard. Learn more

☑ Allow recipients to share your dashboard
☑ Send email notification to recipients

Share

Sharing

Peer-to-Peer/Peer-to-Distribution Group

- Recipients can **see the dashboard** and **interact with reports in the Reading View**

- **Changes** made by the **owner** are **available for everyone** when saved

- **No one can see the dataset**

- When re-sharing is enabled, users outside the organization can also share if their domain is registered in your tenant

- If users already have access to a dashboard, they can **access it directly via the dashboard's URL**

- **Users outside the organization** have to **bookmark the URL,** it will not appear in their My Workspace

Sharing

Peer-to-Peer/Peer-to-Distribution Group

- It is possible to see with **whom** the dashboard is **currently shared** and **revoke re-sharing** rights individually
- People outside the organization are listed as **Guest**

Sharing

Group Share

- Groups in Power BI are **Office 365 groups** and can be used in other services such as OneDrive or Exchange (have their own space and e-mail).
- AADSync can be used to **sync on-premises AD groups** with Office 365 groups
- A group has its **own workspace** with its own Datasets, Reports and Dashboards
- A user has **one My Workspace** but can have **access to several Group Workspaces**
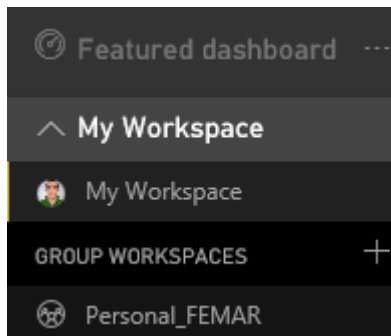
Sharing

Group Share
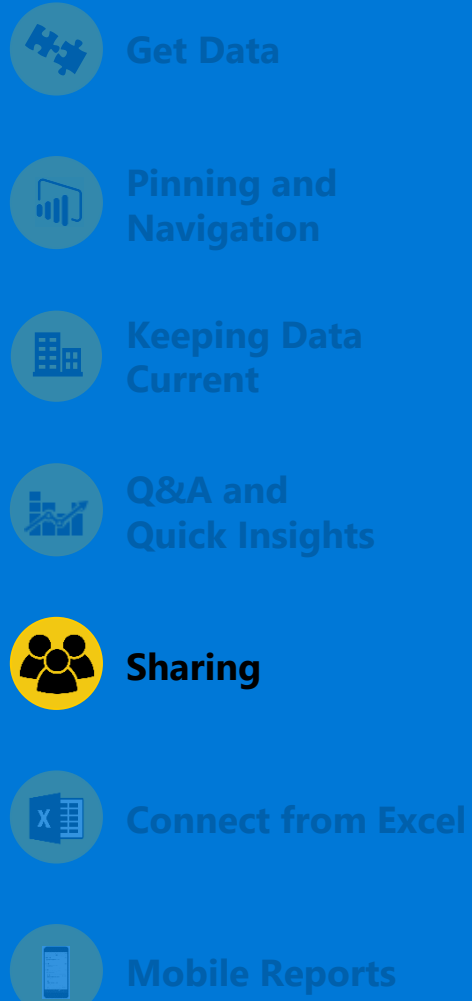
- Members of the group can either have **Can Only View** <u>or</u> **Can Edit** permissions
- **Can Only View** allows the users to see all of the **dashboards and reports** that belong to that group. Access is **read-only**
- **Can Edit** allows the users to see and edit all of the content
- A dashboard in a Group can also be **shared with another peer directly** via the peer-to-peer method
- A group workspace allows **several people to take ownership** of a certain set of content
- It also **allows the content to be organized** according to your governance rules (department, business area)

Sharing

Group Share

- Members with **Admin** privileges can manage access to the group
- **Access is set** to either View or Edit for **everyone** in the group (except Admins)
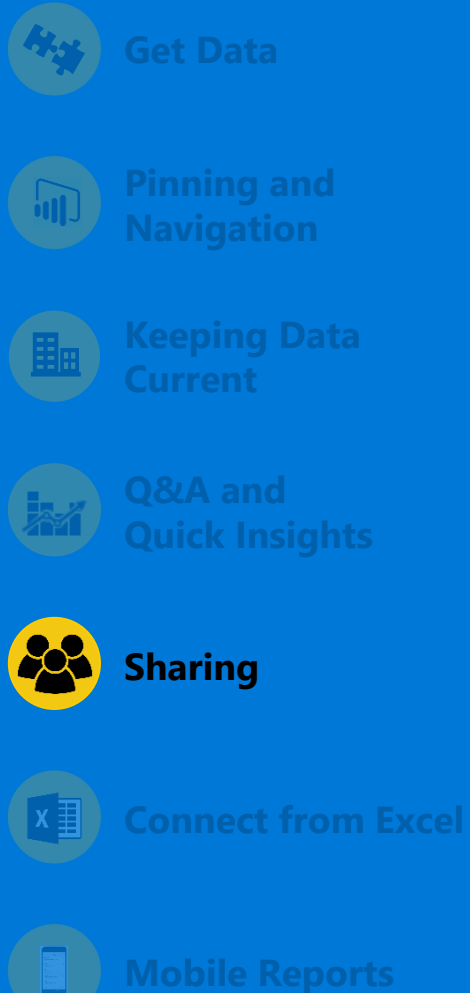
Sharing

Organizational Content Packs

- **Distribute to a large audience** a set of dashboards, reports and datasets
- Users can **subscribe** to the Pack **via the Get Data** experience
- **Access** to the content is **read-only**, but users can **customize by creating a copy** of their own

Personalize this Content Pack   ✕

Click Save to create your own personal copy of the content pack.
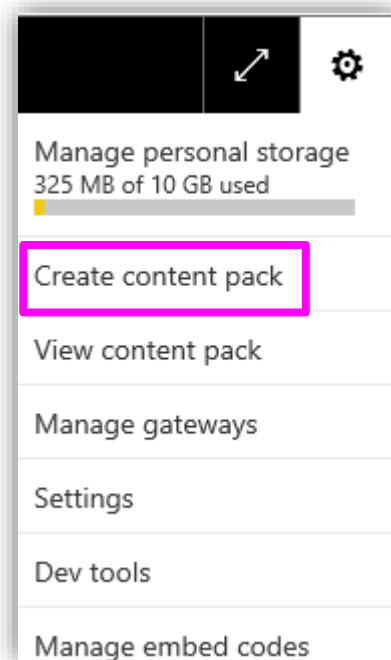
Save   Cancel
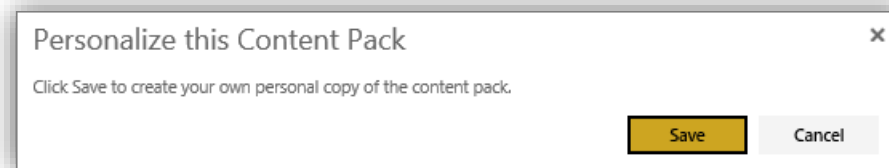
- **Schedule refresh** is set by author
- Can be used in conjunction with **Groups**
- **Can be edited** after creation

Sharing

Organizational Content Packs

Sharing

Power BI Apps

- A **collection** of dashboards, reports and datasets, contained in an **app workspace**

- Users can be set as **collaborators** or **admins** of the workspace

- You can choose to share with all the organization or with specific people or groups

Sidebar navigation:
- Get Data
- Pinning and Navigation
- Keeping Data Current
- Q&A and Quick Insights
- **Sharing**
- Connect from Excel
- Mobile Reports

Toolbar: + Create | Publish app | ...
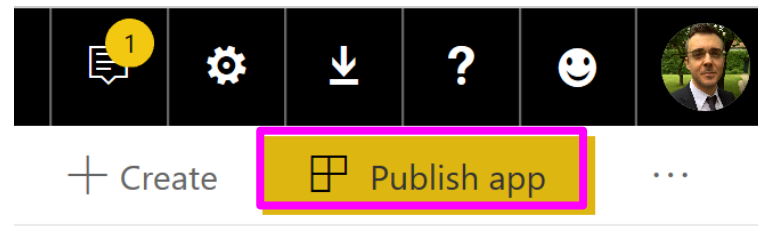
Sharing

Power BI Apps

- **Users install an app** and they will get automatic updates and the data will be refreshed according to the specification made by the publisher

- They can **install the app through a link** provided to them

- Or through **"Get Apps"**

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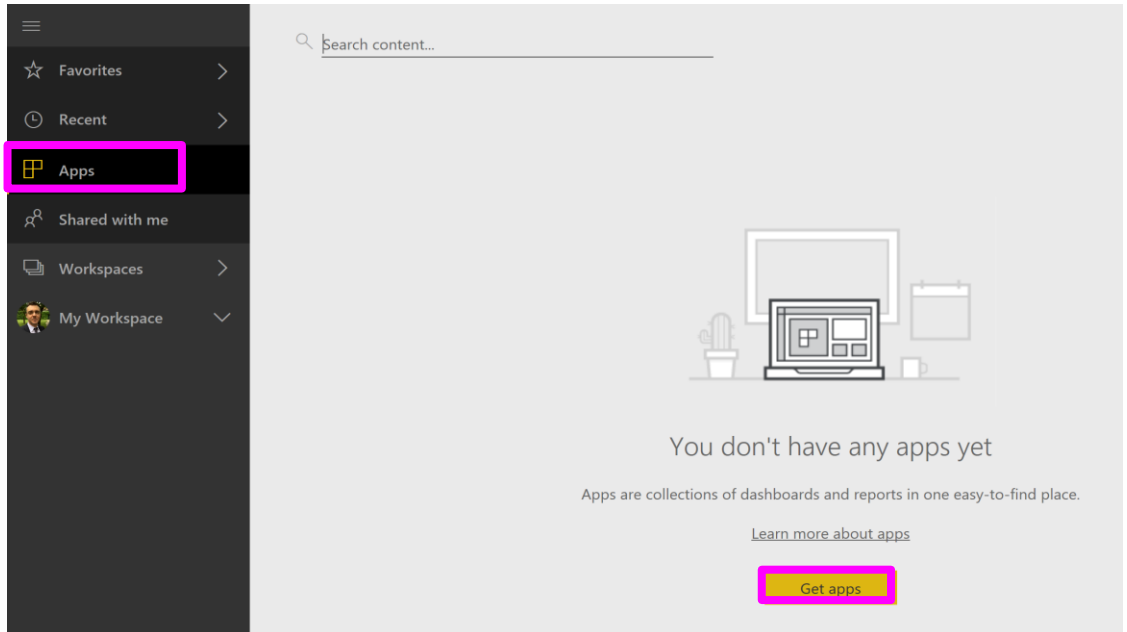
Sharing

Power BI Apps

- A searchable portal will appear to select an App
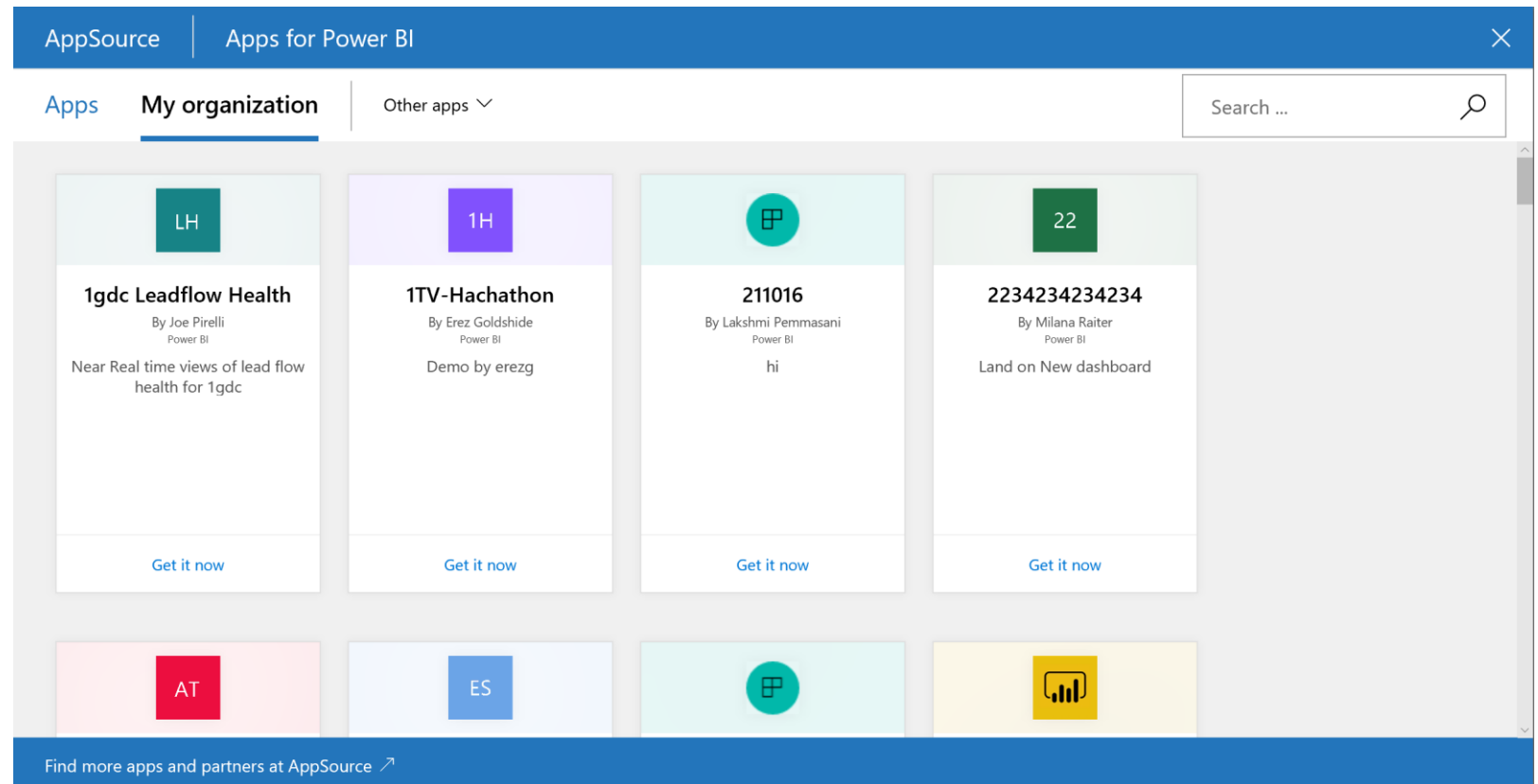
Sharing

Power BI Apps

- Selective Publish for Power BI Apps
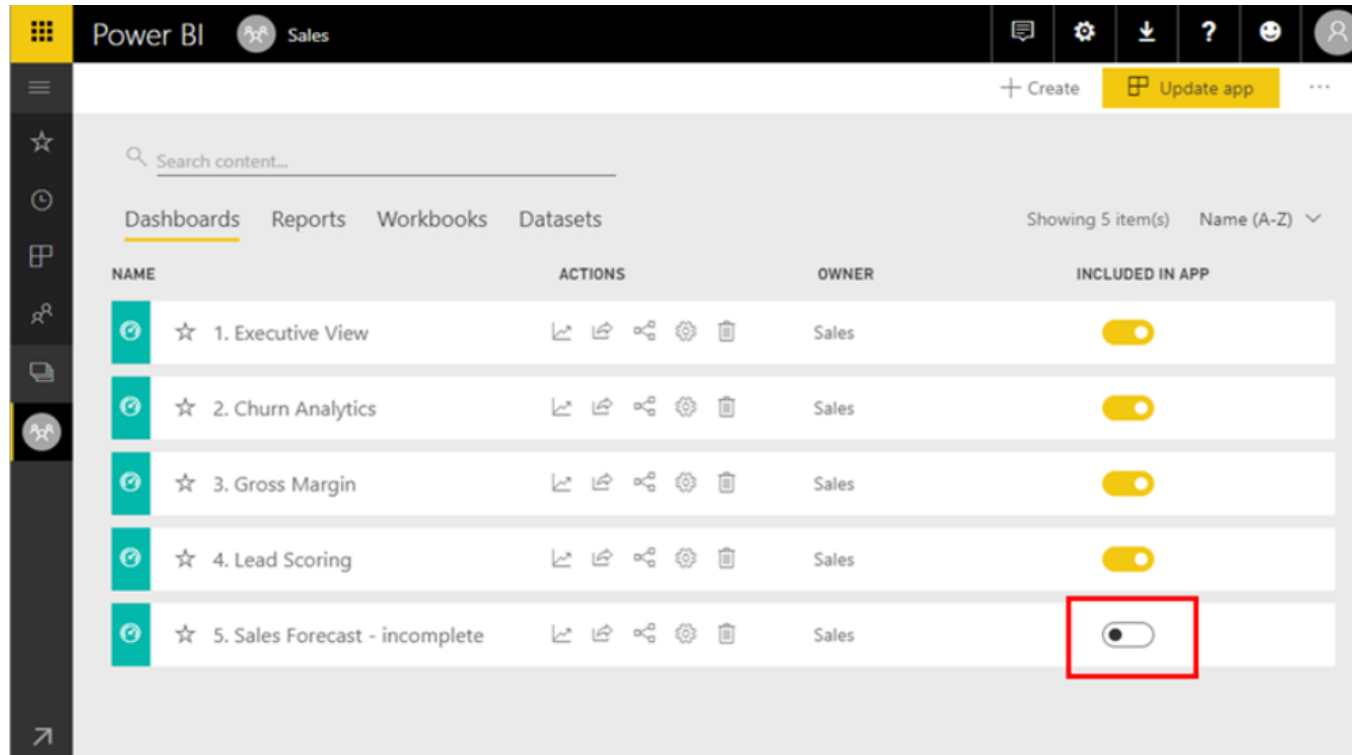
Sharing

External Guest Access

- Power BI + **Azure AD B2B** helps **seamlessly distribution** of Power BI Apps and dashboard to external users

- External users **can be licensed in three ways**
  - Premium Capacity
  - Assigned Power BI Pro license
  - Brings their own Pro license

- Mobile App **is going to be supported**
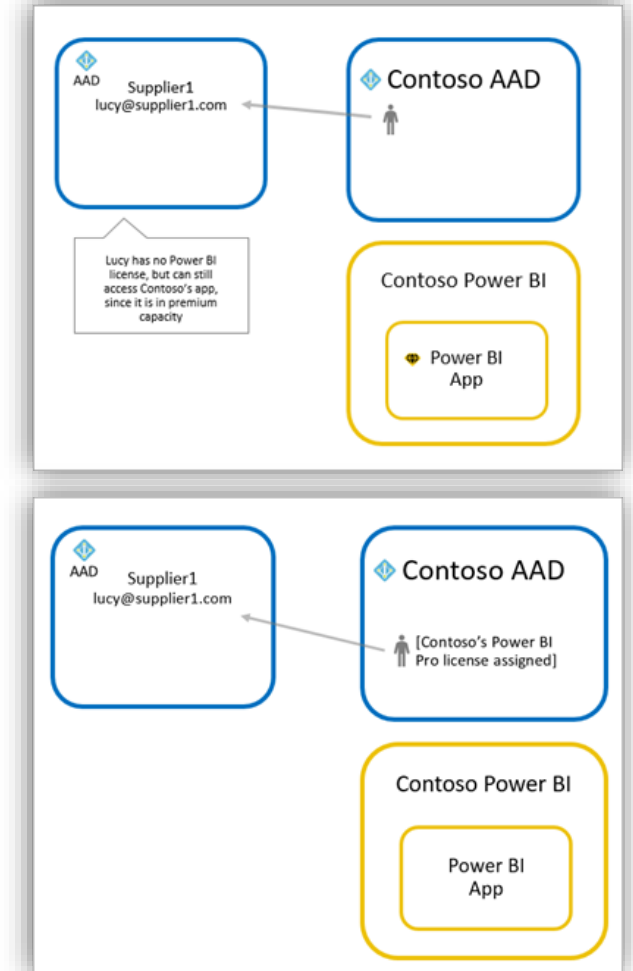
Sharing

Public Share

- **Embed interactive visualizations online** such as blog posts, websites or social media
- Visuals can be edited, updated, refreshed or un-shared after publishing
- Sharing starts on a report
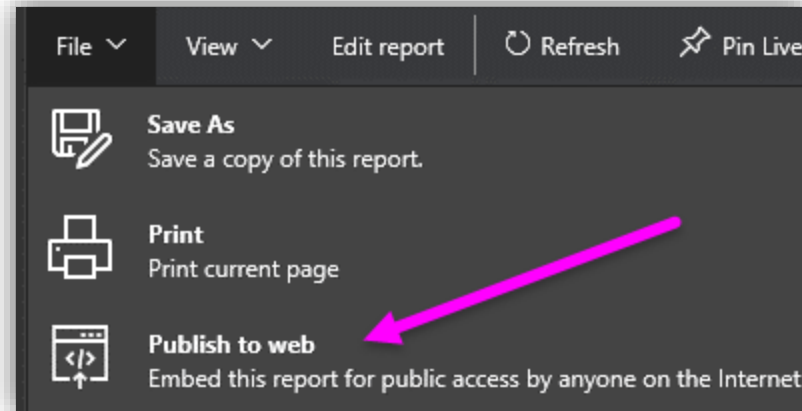
Sharing

Public Share

- A link and html code will be generated

Sharing

Get Data

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Connect from Excel

Mobile Reports
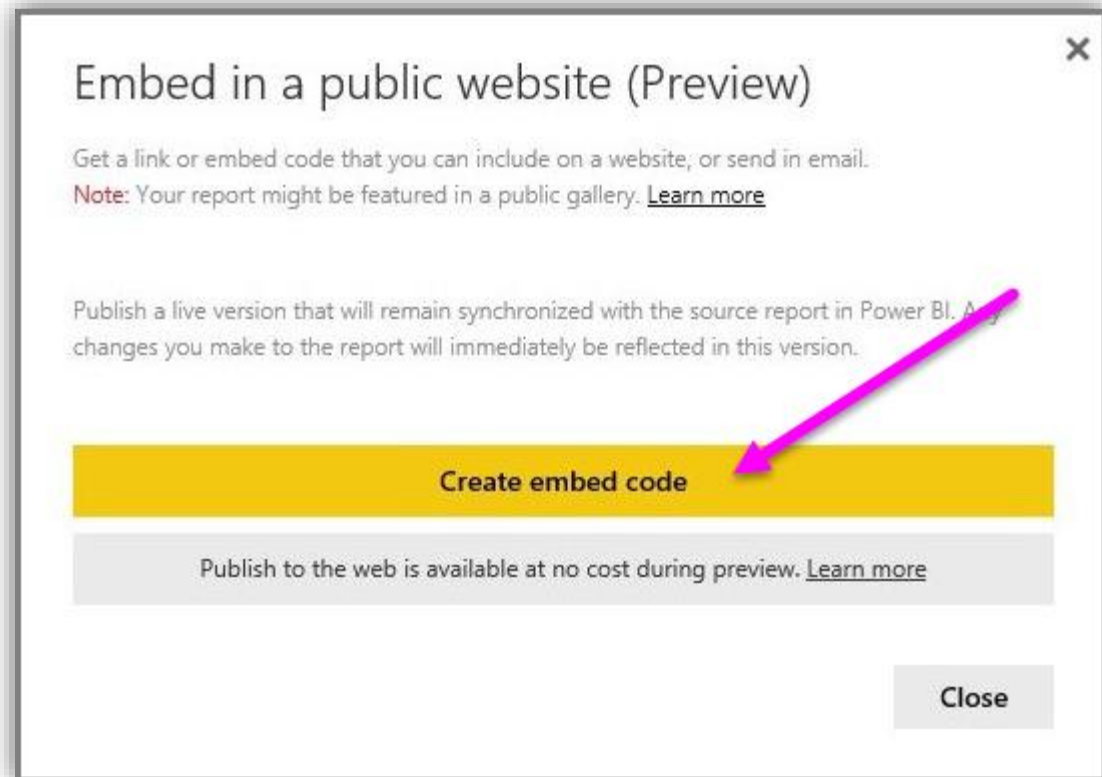
Public Share

- Be aware that data will be **available to everyone and in sync (1h lag)**

Embed in a public website (Preview)

You are about to create an embed code for this report. Anyone on the Internet will be able to access the report and the data it contains. It may be featured in a public gallery.

Please work with your legal or human resources department to ensure the data you are sharing is OK to embed in a public website and share with anyone on the Internet.

Publish   Close

Sharing

Public Share

- A report can only have one embedded code
- Custom visuals are supported

Get Data

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Mobile Reports

Success!

Link you can send in email

https://pbipmdevcst4.analysis.windows-int.net/view?r=eyJrljoiZjl2NzRhO

Html you can paste into your blog or website

<iframe width="800" height="600" src="https://pbipmdevcst4.analysis.w

Size   800 x 600 px

Close
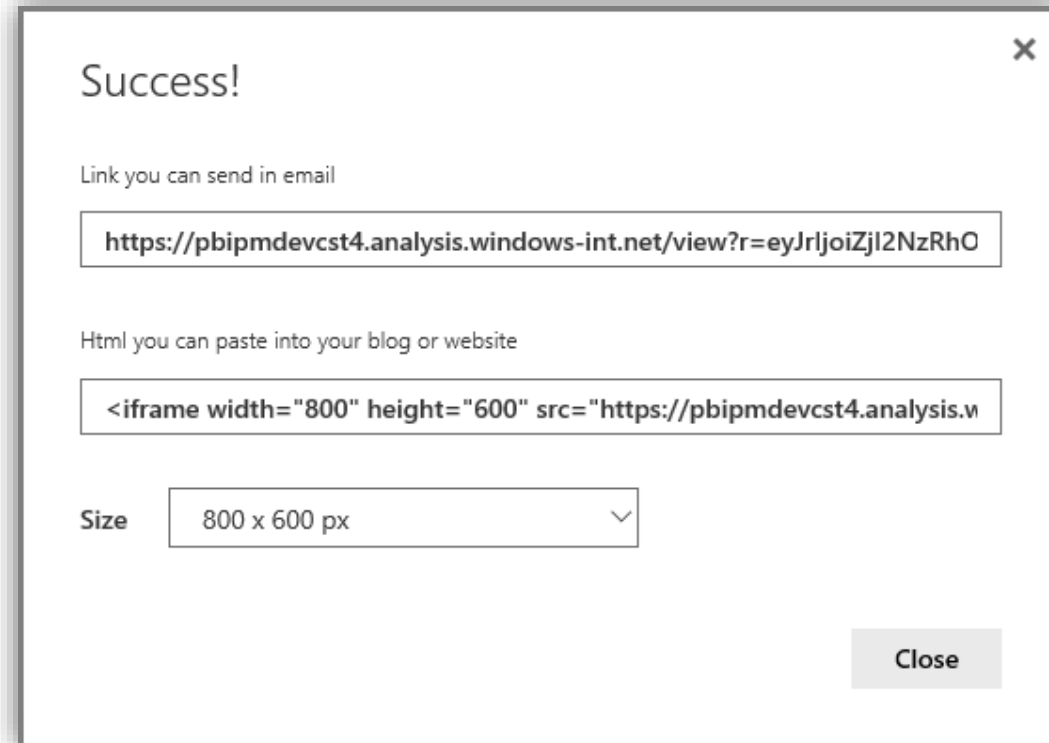
Sharing

Public Share

- Setting the **view mode** on the report, controls look and feel on iframe

Dynamic
Optimal dimensions for window size
— content will scale to fit iframe dimensions. No scrolling
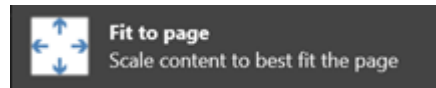
Fit to page
Scale content to best fit the page
— A border will surround content. Useful for maintaining aspect ratio
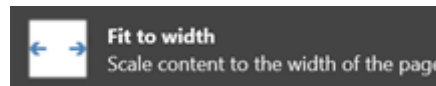
Fit to width
Scale content to the width of the page
— Consume all horizontal space
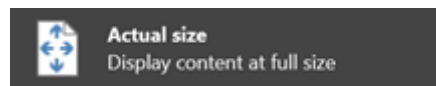
Actual size
Display content at full size
— Preserve size set on report page. Might generate scrolling

Sharing

QR Code

- Access data by simply **scanning a bar code** on your device

Sharing

Sidebar navigation

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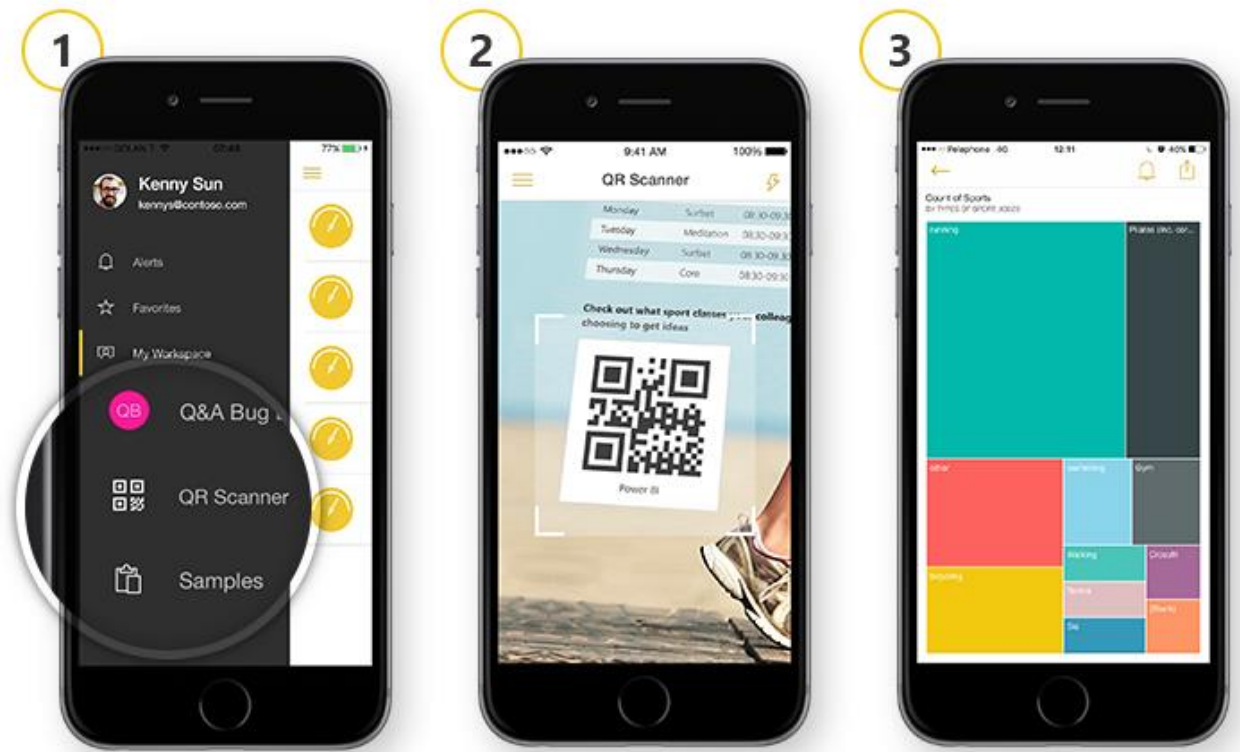
QR Code

- **Permissions are followed**. The access is made in the context of the mobile app
- Access through **Focus Mode on a tile or** to a **report**

Focus mode

Number of Bottles vs Milk and Waste
PER DAY

- Ingerido ●Waste ●Contagem de Index

Microsoft Confidential

Sharing

QR Code

- Print, e-mail, include the QR code in a presentation (.jpg)
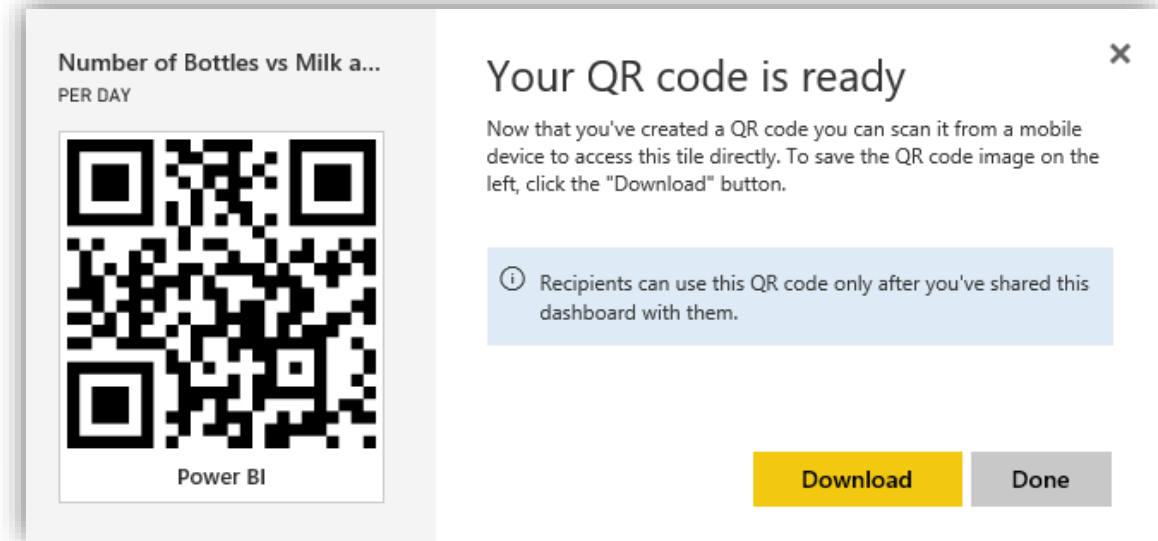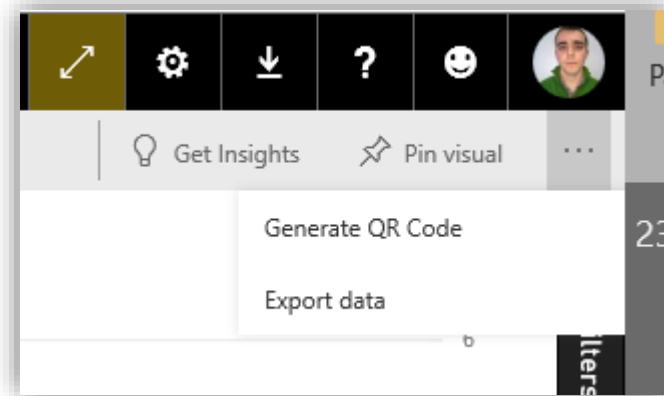
- Use augmented reality and overlay data over the world

Sharing

Integrate with Sharepoint Online

- A **web part** exists to allow easy integration of a Power BI **report** into a Sharepoint Online page.

- Users must have **access to both** the Sharepoint page and the Power BI report.

- **Single sign-on** experience between the two platforms

Sidebar navigation

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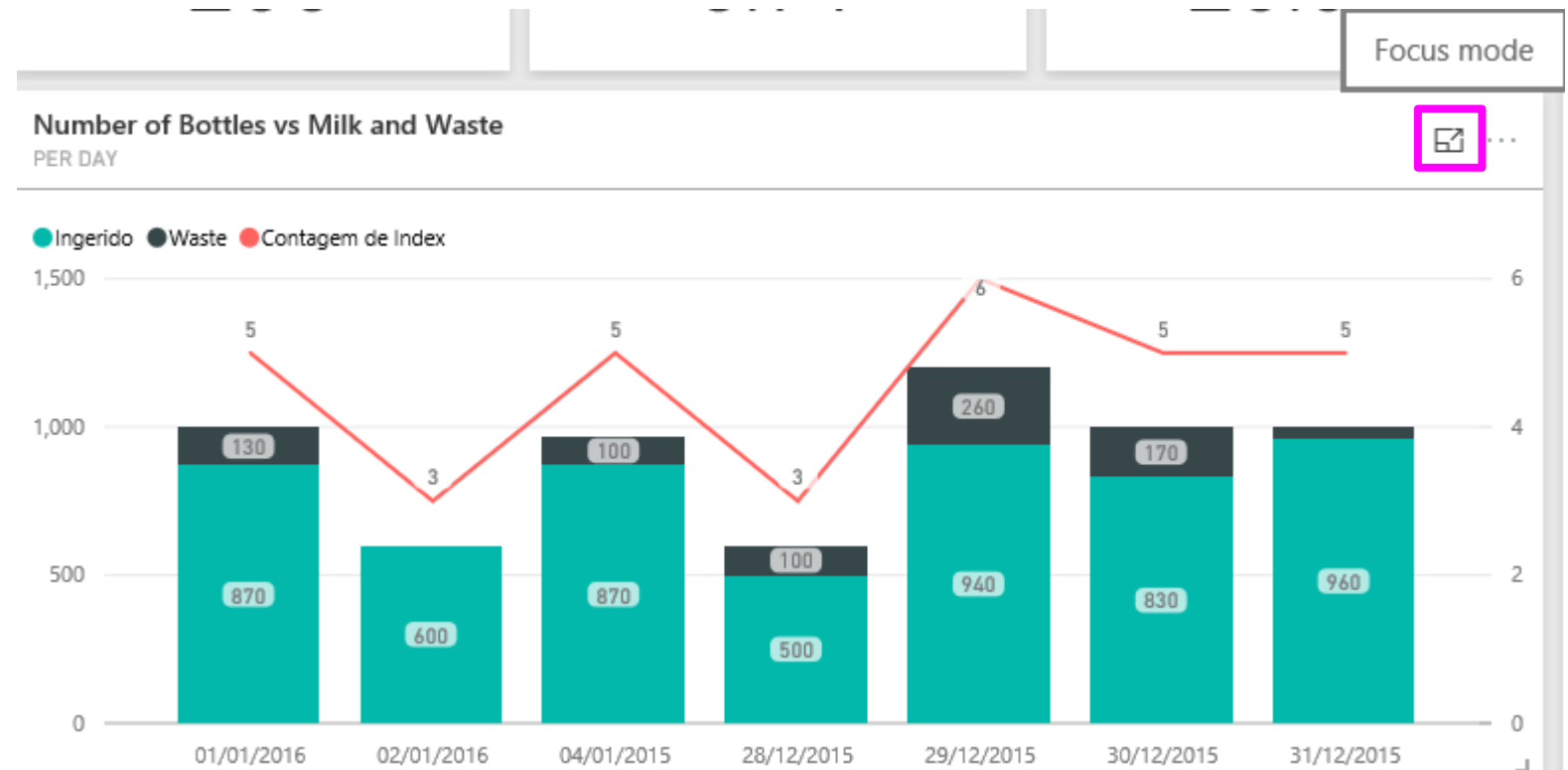- Connect from Excel
- Mobile Reports
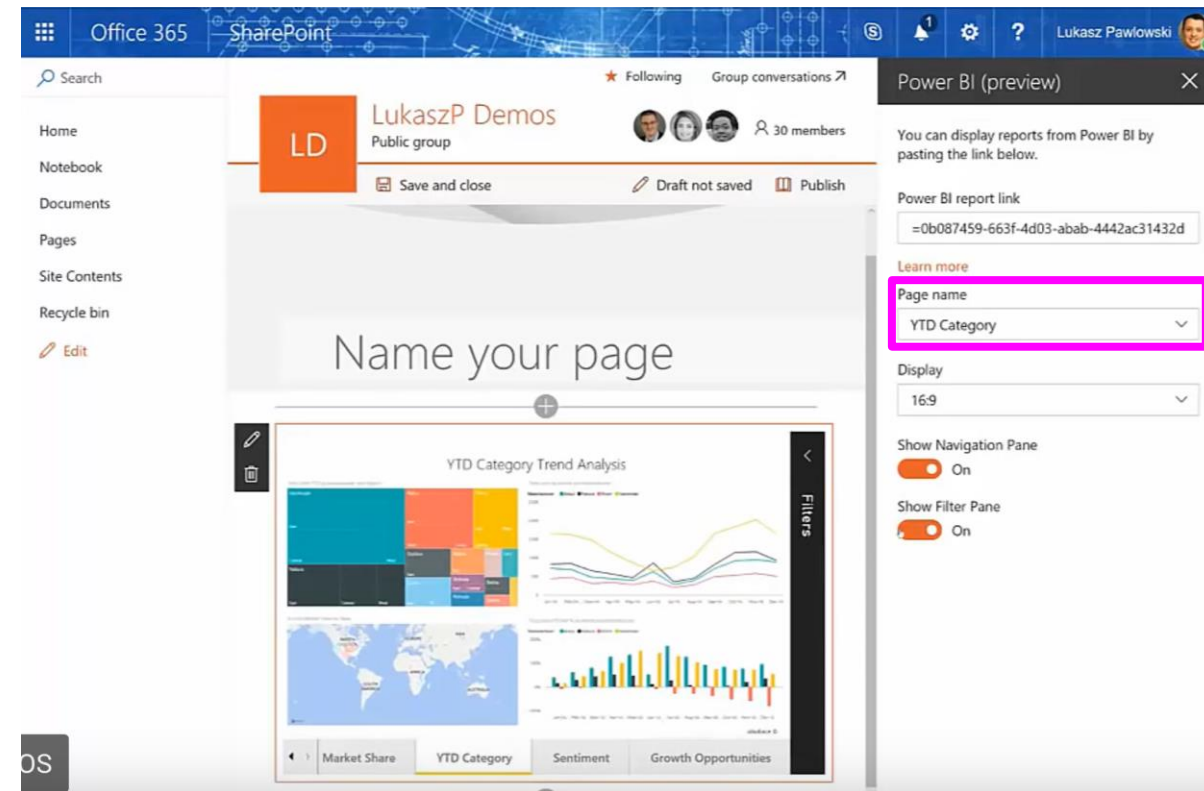
Sharing

Data Security

- When datasets operate in **Imported mode** all of the data is available for the users that have access to reports, by default

- When datasets operate in **DirectQuery (Live) mode** data will be filtered based on data source credentials

- When in **DirectQuery (Live) mode and using SSAS**, data can be filtered based on user (dynamic) and row-level-security (and even cell-level security) can be used

- Connections to on-prem **SSAS do not require AD synchronization**, but UPN mapping must be in-place (either through AD or through Power BI)

- To protect imported datasets, it is possible to create **roles** and **row-level-security** rules to restrict data access

Sharing

Data Security - Row-Level-Security

- **Roles and rules** defined (using Power BI Desktop) in the data model **restrict the data** that users can see at the **row level for each dataset**

- **Manage security** on the data model from Power BI Service.
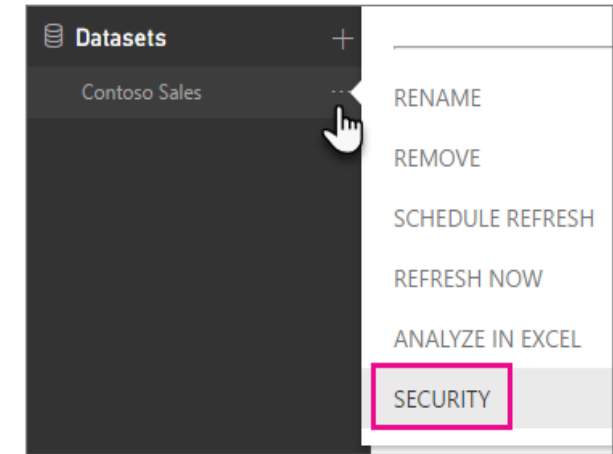
Add Member
(user has to be within organization)

Remove member
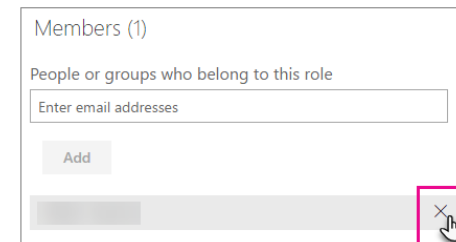
Validate role
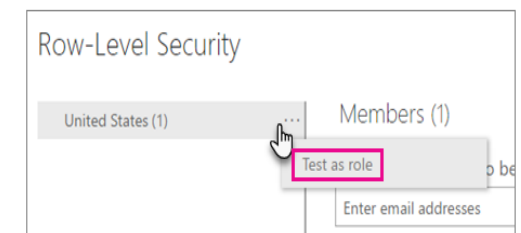
Note - *Permissions are cumulative across roles and can contradict!*

Sharing

Data Security - ExpressRoute

- **Azure service** that lets you create **private connections** between Azure datacenters and your on-premises infrastructure
- **Bypass the internet** to better secure your sensitive data and connections
- Helps to ensure **predictable network performance** and **availability**

Get Data

Pinning and Navigation

Keeping Data Current

Q&A and Quick Insights
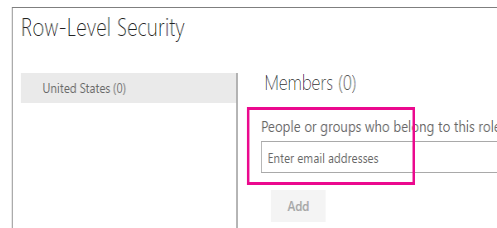
Sharing

Connect from Excel

Mobile Reports

Microsoft Azure

Internet

OR

Microsoft Azure

Internet

ISP / Colocation

Microsoft Confidential

Sharing

Data Security - Gateways

- They use an **encrypted channel for communications** and **passwords** for data sources are only **encrypted asymmetrically in the service**

- Only **outbound ports** are required and are **well identified** (actual IPs can be white listed for increased security)

- With Gateways and Live Connections, your **data can stay on-prem – only query responses are transferred**

- **Enterprise Gateway** can be used in conjunction **with ExpressRoute**

Sharing

Get Data

Pinning and Navigation

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Mobile Reports

Data Security - Gateways

- With Dec 2017 Update:

- **High Availability Support: A** way to group multiple gateway instances together thus eliminating the single point of failure and overall providing a more robust and scalable infrastructure for the on-premises data gateway.

- **"Additional Logging" includes the Mashup engine traces:** The Additional Logging settings in the Diagnostics tab of the gateway will now allow the Mashup engine traces to be included in the logs. This could help with investigating and troubleshooting connectivity issues.

Sharing

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Sharing

Download Power BI Desktop files (Preview)

- You can recover a file from the service if you lose the original from your local computer, download someone else's report if you are part of a group, and get the latest version of the report if you made changes in the web.
- Only files uploaded after November 2016 will be available for download.

| File ⌄ | View ⌄ | Edit report | 🖥 Explore ⌄ | ↻ Refresh | 📌 |

Save as
Save a copy of this report

Print
Print current page

Publish to web
Embed this report for public access by anyone on the Internet

Export to PowerPoint (Preview)
Export this report as a PowerPoint presentation

Download report
Download a .pbix copy

Sidebar navigation
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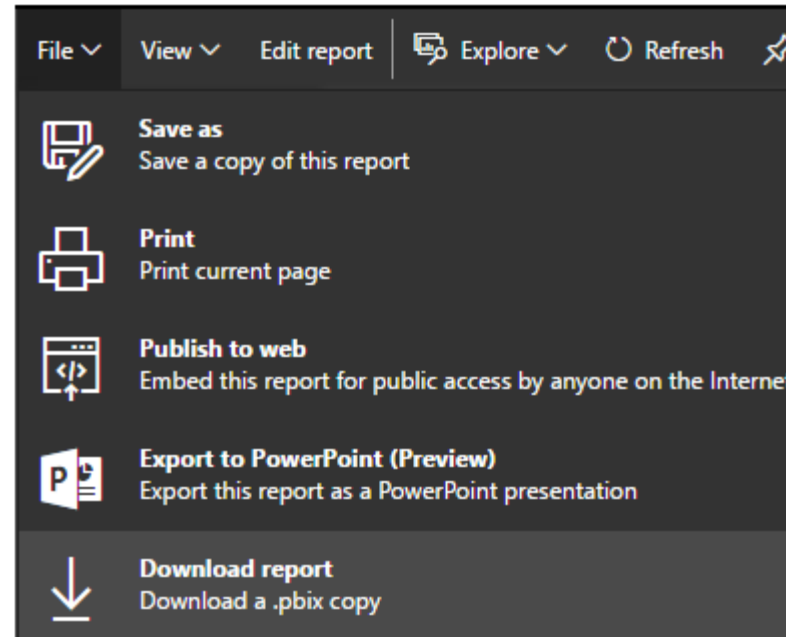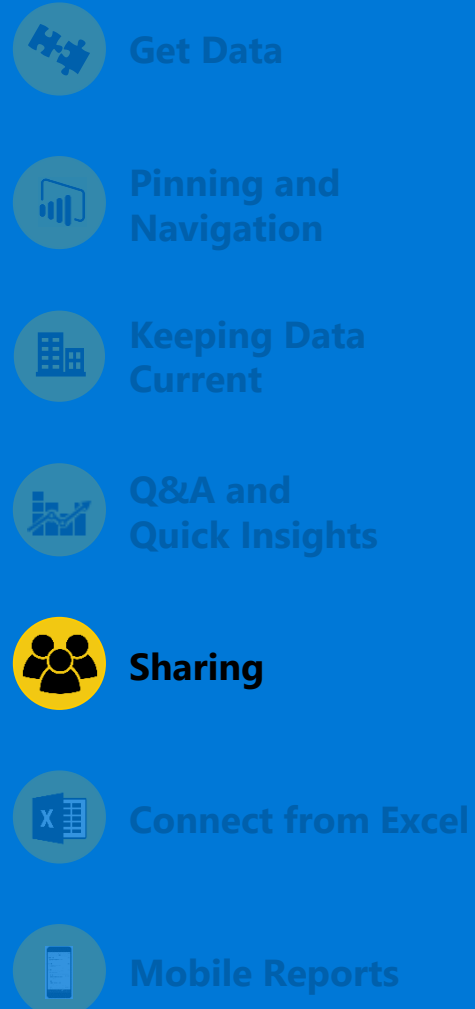- **Sharing**
- Connect from Excel
- Mobile Reports

Sharing

E-mail subscriptions (Preview)

- With Power BI **e-mail subscriptions**, you can quickly subscribe to emails of the **report pages** or **dashboard** that matter most.
- Once subscribed, Power BI will regularly **send screenshots** of that content directly to your inbox whenever the **data changes**.

Navigation sidebar

- Get Data
- Pinning and Navigation
- Keeping Data Current
- Q&A and Quick Insights
- Sharing
- Connect from Excel
- Mobile Reports