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BUDAPEST BI FORUM



**Multiple Audiences
for Power BI Apps**

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Multiple Audiences

How does it work and what does it take inside Power BI

Tom Martens @ Budapest BI Forum 2022

2022-11-17

Inside the box

Who I am

Why is sharing so important

Multiple audiences for Power BI Apps



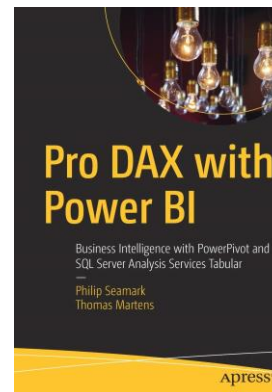
Tom Martens

Solution Architect @ Munich Re

 /tommartens68

 @tommartens68

25+ years of
experience designing
analytical solutions
using the MSFT data
platform



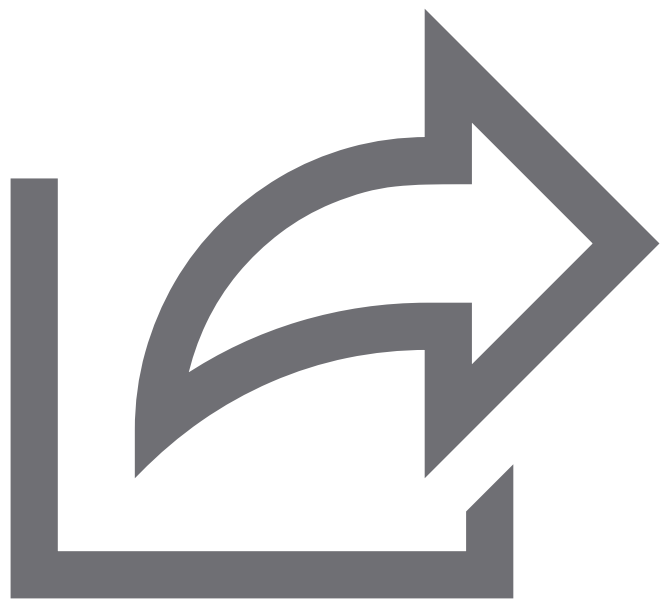


Why is
sharing so
important

Together we learn, together we grow ...

Sharing is the **joint use of a resource** or space. It is also the **process of dividing and distributing**. In its narrow sense, it refers to joint or alternating use of inherently finite goods, such as a common [pasture](#) or a shared residence. Still more loosely, "sharing" can actually mean giving something as an outright gift: for example, to "share" one's food really means to give some of it as a gift. **Sharing** is a **basic component of human interaction**, and is **responsible** for **strengthening social ties** and ensuring a person's [Tom: an organization's] well-being.

[Sharing - Wikipedia](#)



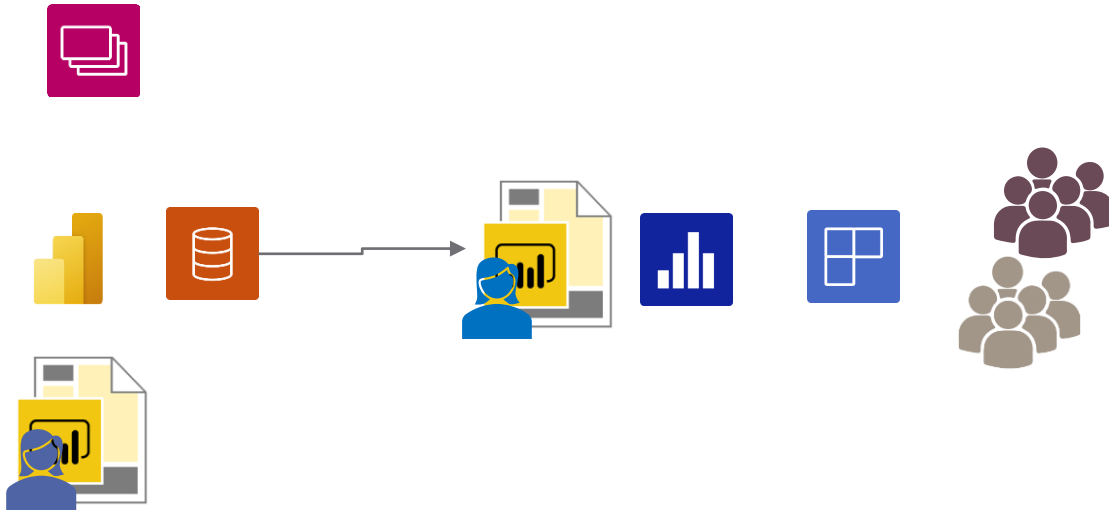
Start
sharing

Day 1 - life is easy

One workspace to bind them all

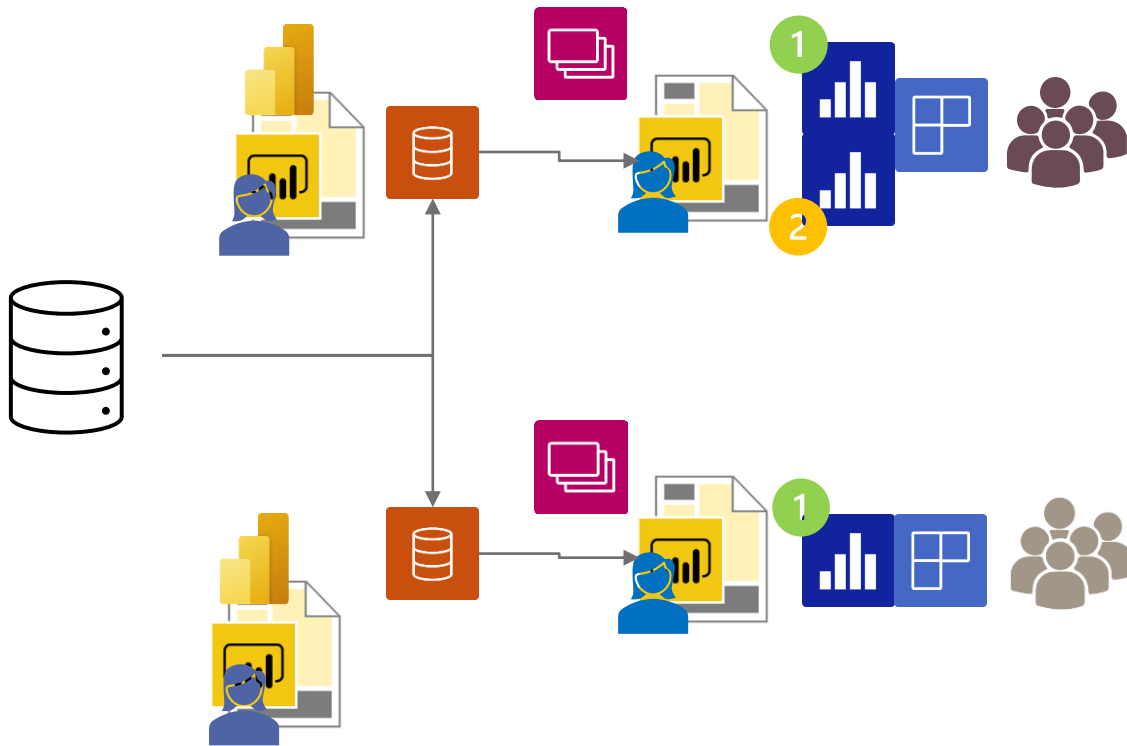
A single workspace hosts multiple datasets, reports, dashboards.

Life is good!



Day 13 - when the trouble starts

Multiple workspaces to serve different reporting needs



The same dataset!

But different content (reports/dashboards) has to be created to meet the needs of different audiences (user groups)!

Data will be duplicated; reports will be duplicated!

The development will become complicated by magnitude ☹

Day 57 – we learned thin reports

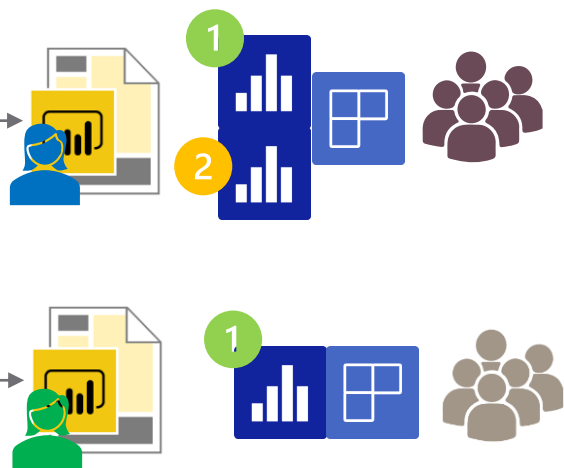
Try to use shared datasets, this will not just avoid data duplication but it will also save resources by reducing the amount of data refreshes.

Data workspace



Create a data workspace and consider a workspace being an Analysis Services Tabular instance!

Content workspace(s)



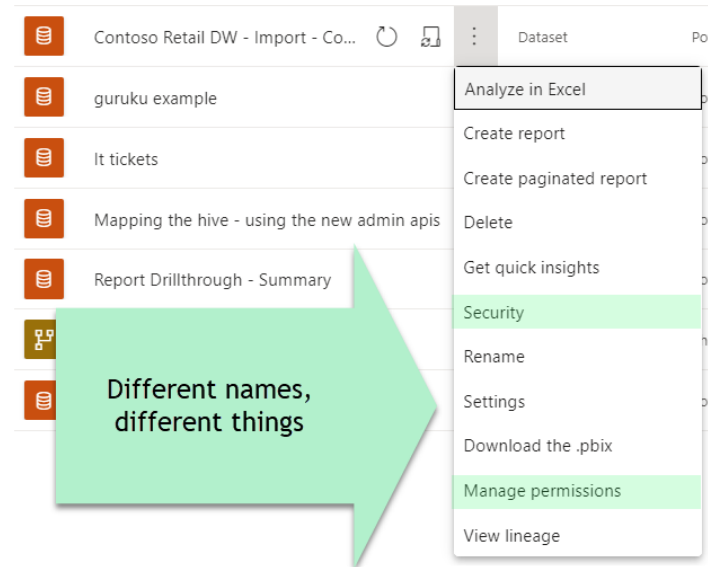
Create 1 to n content workspaces

- This allows to address different audiences consuming the same data but are not using the same content!
- Content creators have at least the **contributor** role assigned in the content workspace
- Content creators are connecting to the Power BI dataset
- Content creators are **not** members of the data workspace
- Content creators need Build Permission on the dataset
- **Row Level Security will be honored if data and content workspaces are separated**

The data workspace



Create a data workspace and consider a workspace being an Analysis Services Tabular instance!

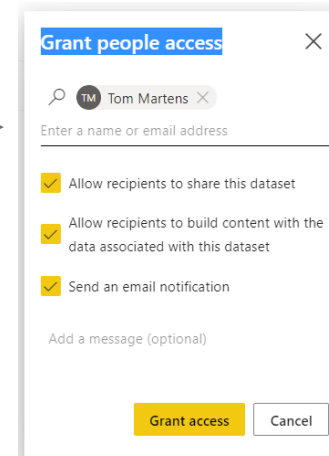


Contoso Retail DW - Import - Co... Dataset
guruku example
It tickets
Mapping the hive - using the new admin apis
Report Drillthrough - Summary
Different names, different things
Security
Rename
Settings
Download the .pbix
Manage permissions
View lineage

Row-Level Security

RLS has moved to Power BI Desktop

Any previously defined RLS security is no longer working. You will need to re-create RLS in Power BI Desktop. In the Power BI Service, you can add members to roles you create. [Learn more](#)



Grant people access X

TM Tom Martens X

Enter a name or email address

- Allow recipients to share this dataset
- Allow recipients to build content with the data associated with this dataset
- Send an email notification

Add a message (optional)

Grant access Cancel

And now,
what?

Use the new feature

Multiple Audiences

Spreading your content to
different audiences is easy.



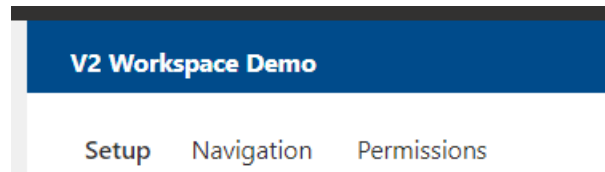
Multiple Audiences for Power BI Apps

- The official announcement: [Announcing Public Preview of Multiple Audiences for Power BI Apps | Microsoft Power BI Blog | Microsoft Power BI](#)

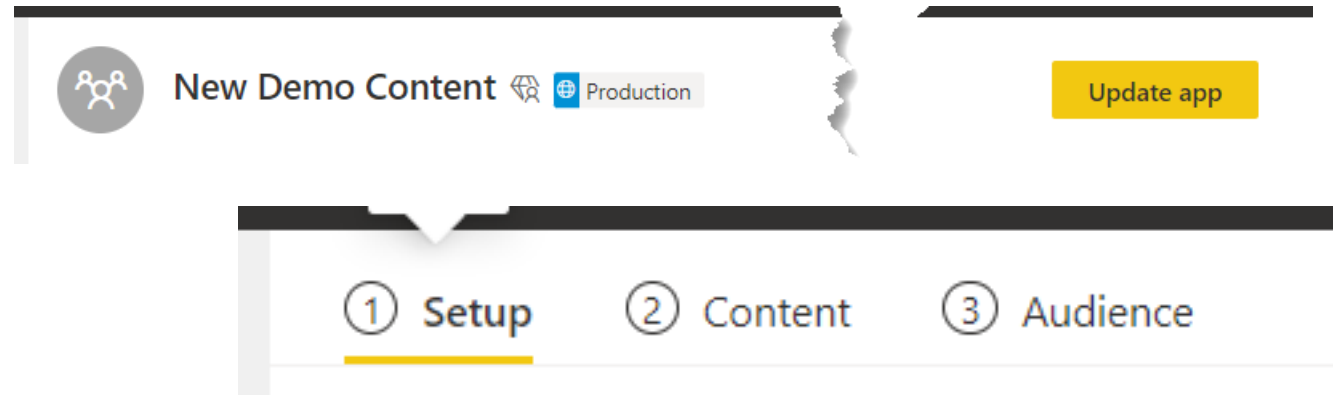
With multiple audiences for an App, now Power BI App author can create **multiple audience groups within** the **same App** and assign different permissions to each group.

Multiple Audiences for Power BI Apps

Old



New



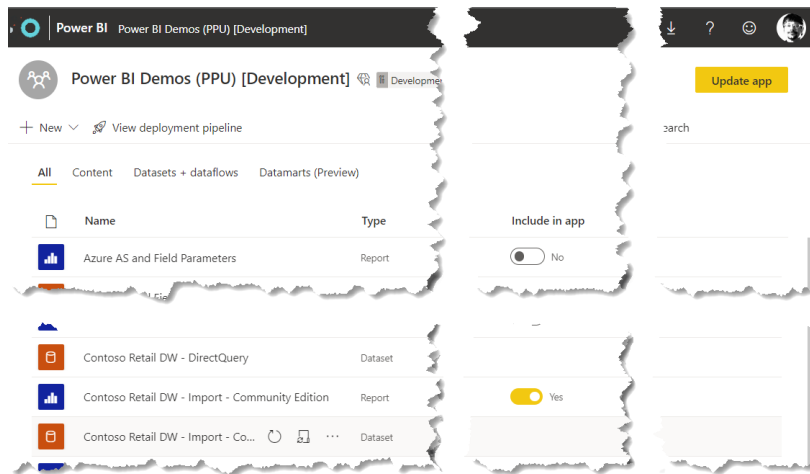
Existing (old) apps **will not be affected** by the new feature.

If you want to use the "Multiple audience" experience, you can upgrade your existing app, you just need to add new audiences.

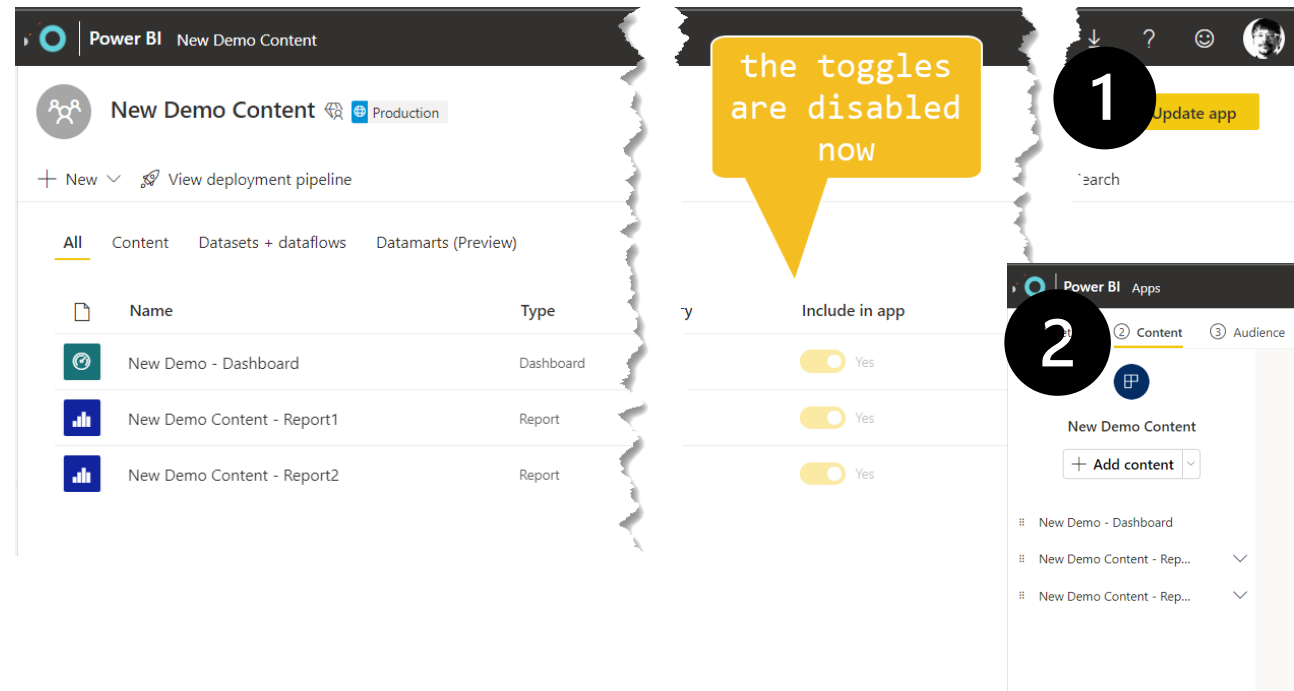
Multiple Audiences for Power BI Apps

Where is the content

Old

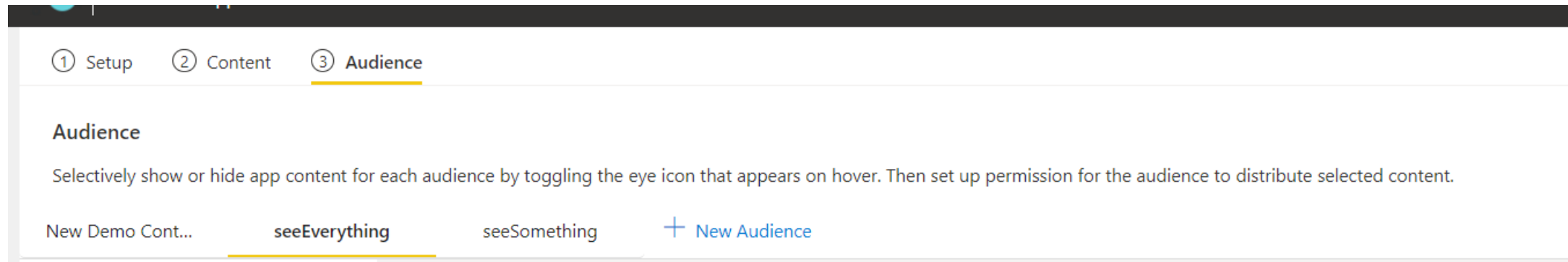


New



New content will be disabled by default

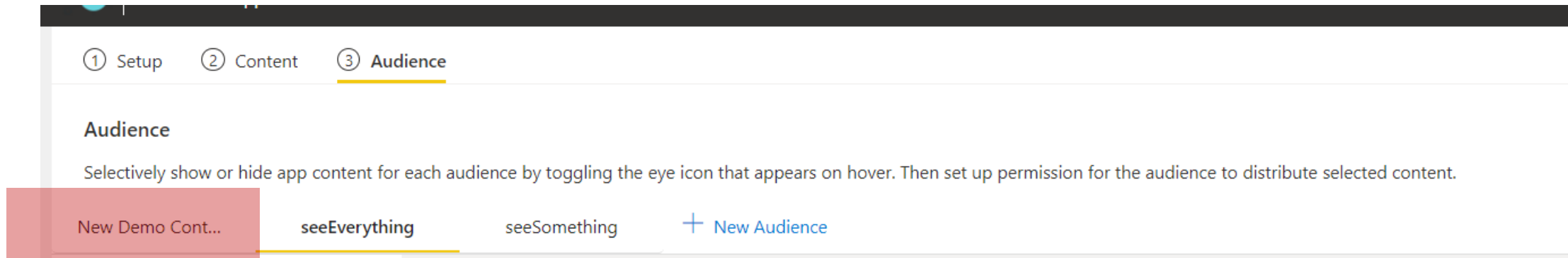
Multiple Audiences for Power BI Apps



At the current moment **10** audiences can be configured. The number of audiences might increase if this feature is entering GA.

We have discussed this number with some teams internally already, but none is going to exceed this number in the next 1-2 years. But we all know that things will happen 😊

Multiple Audiences for Power BI Apps



The top left audience is the “default” audience, existing members and groups will be automatically assigned to this audience. This audience is named like the App after migration or on initial creation.

Multiple Audiences for Power BI Apps

Step 1 Configure the Audience

The screenshot displays the Power BI App configuration interface, specifically the 'Audience' step. The interface is divided into several sections:

- Navigation:** At the top, there are three steps: 'Setup', 'Content', and 'Audience' (which is highlighted with a yellow underline).
- Audience Section:** Below the navigation, the title 'Audience' is followed by a descriptive text: 'Selectively show or hide app content for each audience by toggling the eye icon that appears on hover. Then set up permission for the audience to distribute selected content.'
- Audience List:** A horizontal list of audience names is shown: 'New Demo Cont...', 'seeEverything' (highlighted in green), 'seeSomething', and '+ New Audience'.
- Content Preview:** Below the audience list, there are two preview cards for the 'New Demo Content (DEV)' app. The first card is titled 'SalesQuantity BY CONTINENTNAME' and the second is 'SalesQuantity, Average of CalendarMonth BY CALENDARMONTHLABEL'. Both cards show a placeholder bar chart.
- Manage Audience Access Panel:** On the right side, a panel titled 'Manage Audience Access' is open. It shows the selected audience 'seeEverything' and the 'Grant access to' options: 'Entire organization' (unselected) and 'Specific users or groups' (selected). Below this, there is a text input field 'Enter a name or email address'. Under the 'Advanced' section, a list of users is shown, with 'aad-pbi-newdemo-aud_seeEverything' selected and highlighted in green.
- Buttons:** At the bottom right of the panel, there are two buttons: 'Update app' (yellow) and 'Cancel' (grey).

Multiple Audiences for Power BI Apps

What is this Azure thingy

Home > [redacted] | Groups > Groups | All groups >

New Group ...

Got feedback?

Group type * ⓘ

Security

Security

Microsoft 365

Group description ⓘ

Enter a description for the group

Azure AD roles can be assigned to the group ⓘ

Yes

No

Membership type * ⓘ

Assigned

Owners

No owners selected

Members

No members selected

Step 1
Configure the
Audience

Microsoft Azure Search resources, services, and docs (G+)

Home > [redacted] | Groups > Groups | All groups >

aad-pbi-newdemo-aud_seeSomething Group

Overview
Diagnose and solve problems

Manage
Properties
Members
Owners
Roles and administrators
Administrative units

Delete Got feedback?

AA **aad-pbi-newdemo-aud_seeSomething**
controls the member who are just a part of the content inside the app New Demo

Membership type Assigned

Source Cloud

Type Security

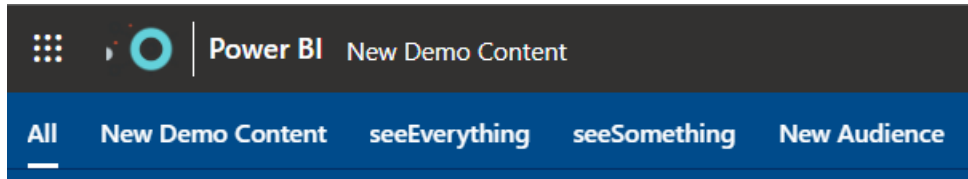
Multiple Audiences for Power BI Apps

Step 2
Hide/Unhide the reports

The screenshot displays the Power BI App configuration interface, specifically the 'Audience' step. The top navigation bar shows 'Power BI Apps' and a progress indicator with three steps: '1 Setup', '2 Content', and '3 Audience'. The 'Audience' section includes a description: 'Selectively show or hide app content for each audience by toggling the eye icon that appears on hover. Then set up permission for the audience to distribute selected content.' Below this, there are tabs for 'New Demo Cont...', 'seeEverything', 'seeSomething', and '+ New Audience'. The 'seeEverything' tab is active. The main content area shows two report thumbnails: 'SalesQuantity BY CONTINENTNAME' and 'SalesQuantity, Average of CalendarMonth BY CALENDARMONTHLABEL'. A green arrow points to the eye icon on the first report thumbnail, with a tooltip that says 'Show the navigation pane'. On the right side, a 'Manage Audience Access' panel is open, showing the current audience 'seeEverything' and options to 'Grant access to' either 'Entire organization' or 'Specific users or groups'. Under 'Specific users or groups', there is a search box and a list of users, including 'Workspace users' and 'aad-pbi-newdemo-aud_seeEverything'. At the bottom right, there are 'Update app' and 'Cancel' buttons.

Multiple Audiences for Power BI Apps

Step 2
Hide/Unhide the
reports

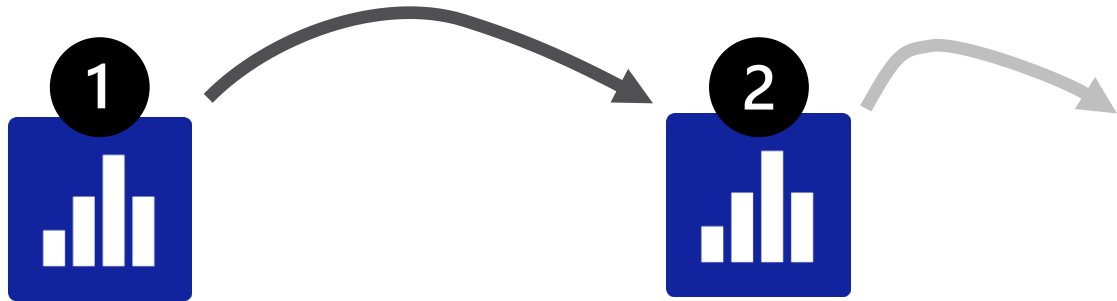
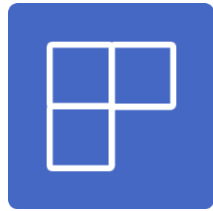


Consider the audience(s) as some kind of hierarchy that lets your users navigate through all the content.

If a user is part of multiple audiences.

Multiple Audiences for Power BI Apps

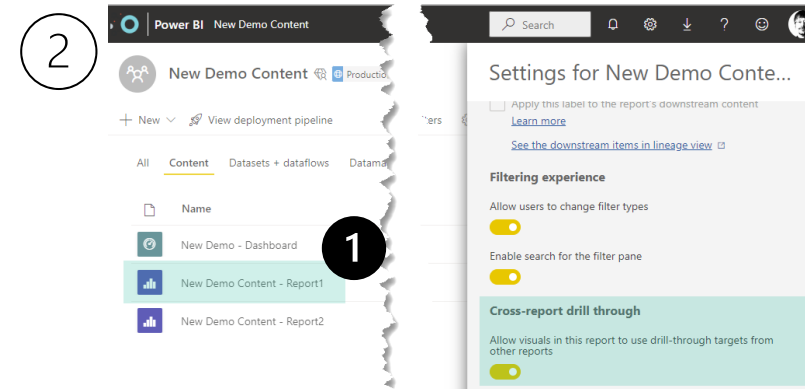
Cross-report navigation What's that



Navigate between reports inside the same workspace using the Cross-report drill through feature



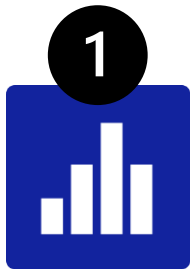
Enable Cross-report navigation on the **target** report



Enable Cross-report navigation on the **source** report

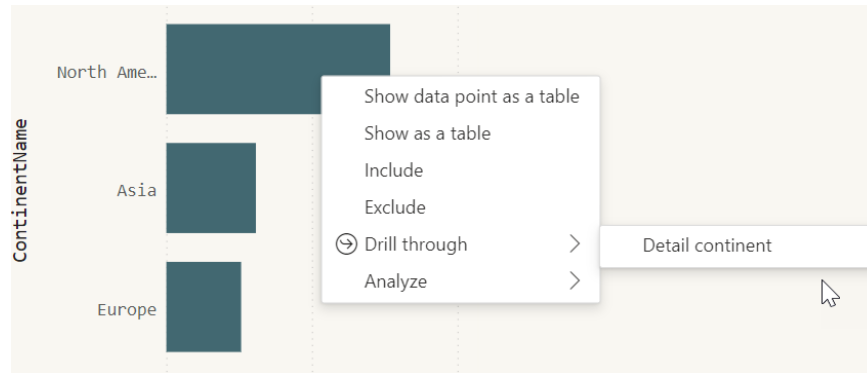
Multiple Audiences for Power BI Apps

Cross-report navigation W/o access to Report2



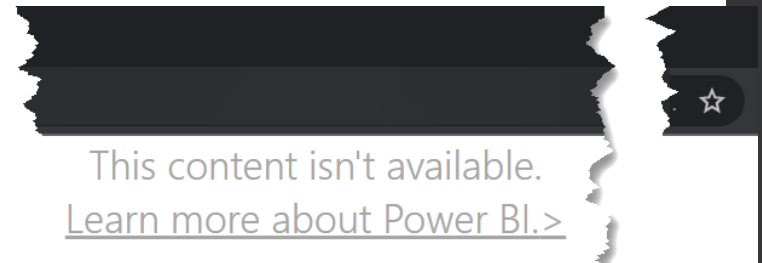
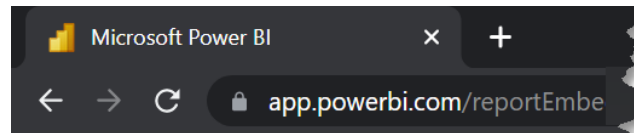
It works as expected 😊

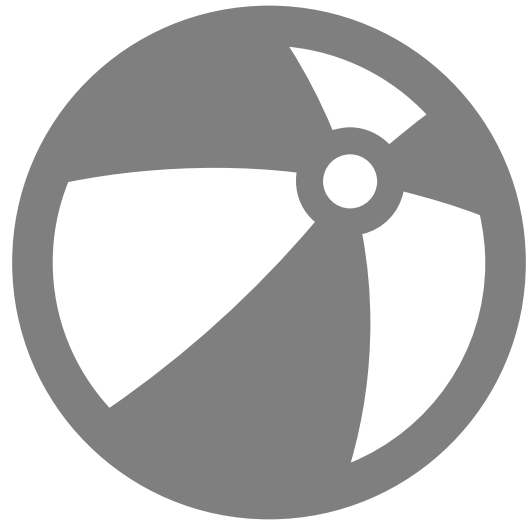
① Cross-report drill through is not available navigation on the **target** report



②

② Deep link





Demo



Wait a
second

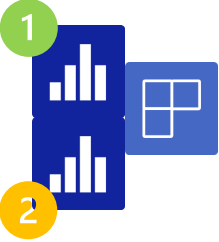
Now - life will get easy again

Data workspace



Create a data workspace and consider a workspace being an Analysis Services Tabular instance!

Content workspace(just one is needed)



We are able to use a single workspace, a single app!

No more data duplication needed!

No more content duplication!

Yay!

Multiple Audiences for Power BI Apps

Things to keep in mind!

- Multiple Audiences does not replace Row Level Security
- The configuration has to be done in one go, it's not possible to save a certain state without applying this to the current App

If there are many reports/dashboards and many audiences this can become challenging ;-)

Thank you