

Purview Data Protection and Security for Power BI for GCC

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Speakers

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Protect your data in Power BI

Microsoft Purview



Information Protection

Classify and protect your data from breaches and exfiltration with sensitivity labels.

Capabilities include:

- Classify and label sensitive Power BI data
- Enforce governance policies even when Power BI content is exported to supported export formats

Microsoft Purview



Data loss prevention

Reduce the risk of sensitive business data leakage from Power BI.

Capabilities include:

- Evaluate all semantic models within the workspaces
- Detect when sensitive data is uploaded into your Premium capacities
- See customized policy tip when semantic model identified as sensitive

Microsoft Defender for Cloud Apps



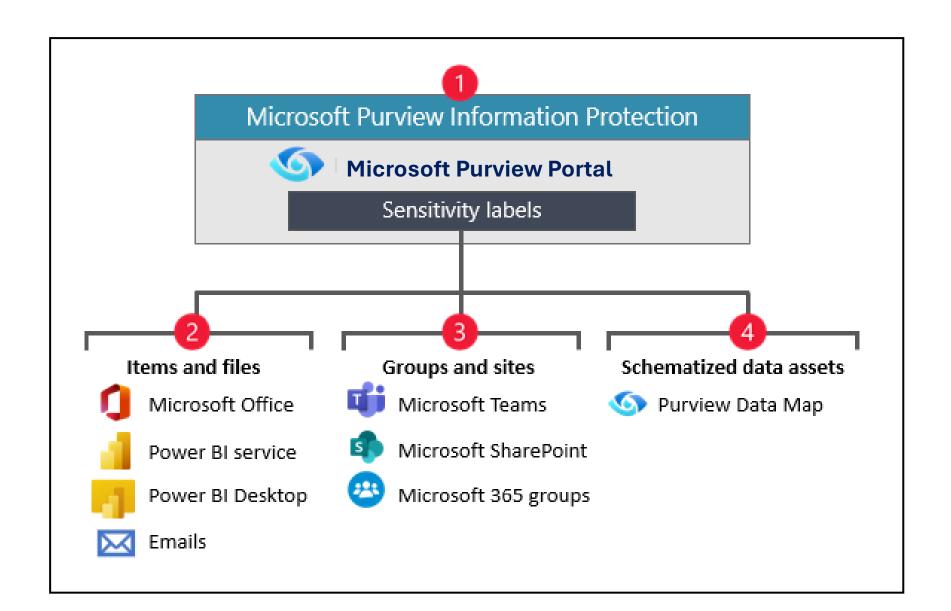
Security

Protect your Power BI reports, data, and services from unintended leaks or breaches.

Capabilities include:

- Create conditional access policies by using real-time session controls in Microsoft Entra ID
- Security admin capabilities to monitor user access and activity
- Perform real-time risk analysis

Purview Information Protection for Power BI



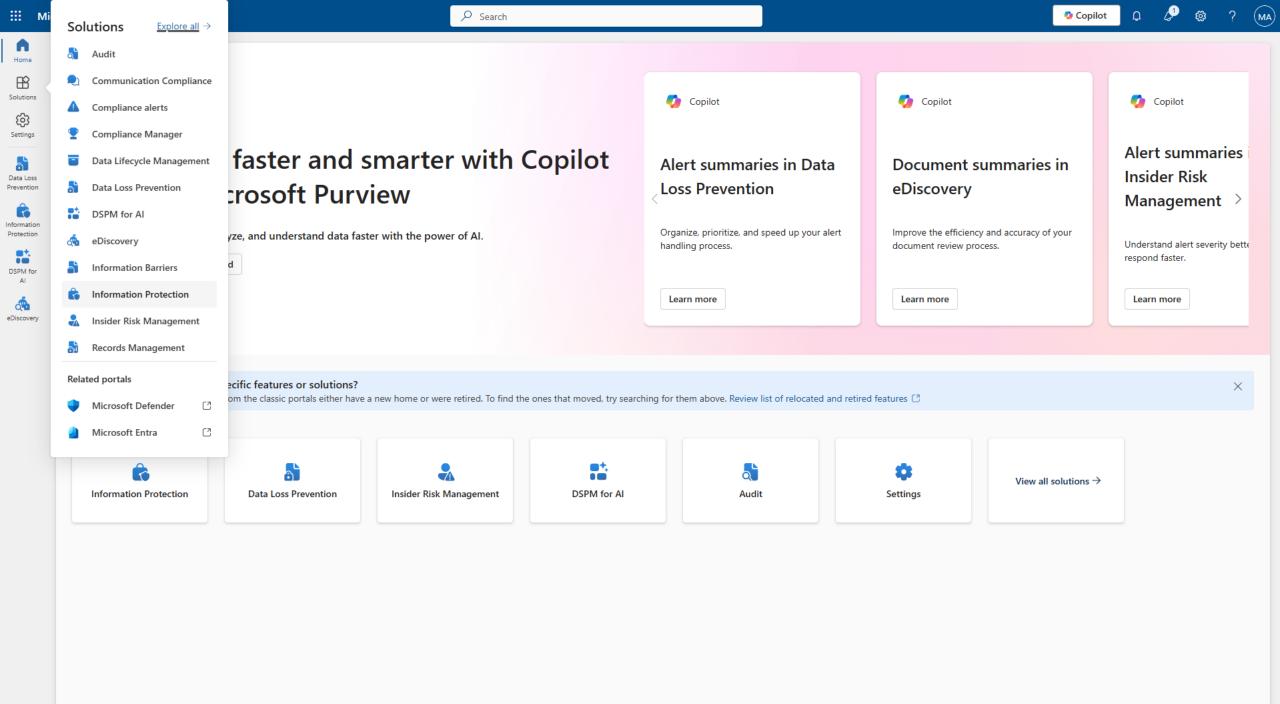
Confidential Public Confidential

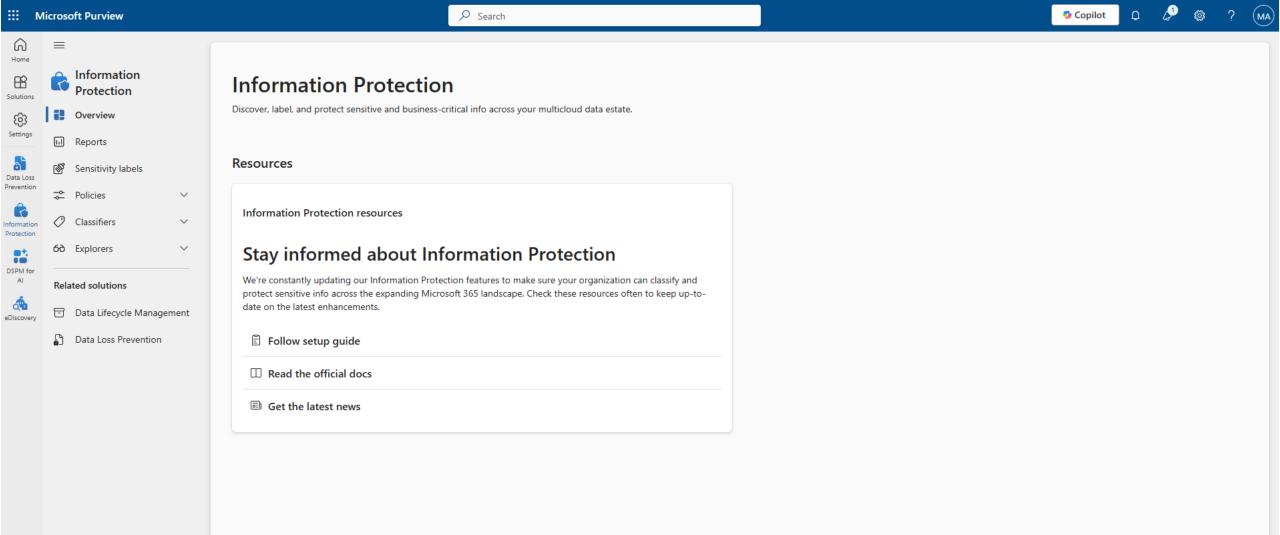
Sensitivity Labels

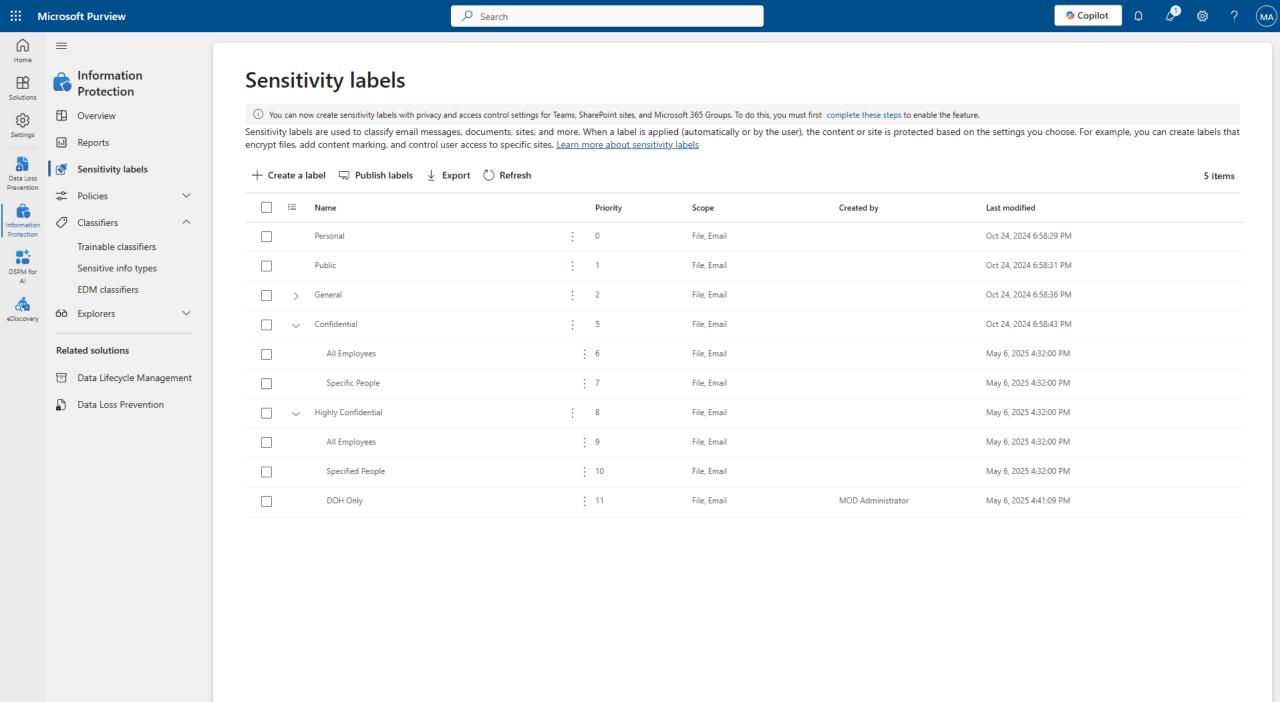
- Sensitivity labels are part of the Information protection framework
- Only one label can be assigned to each item
- Sensitivity label has the following purposes.
 - **Classification:** It provides a classification for describing the sensitivity level.
 - **User education and awareness:** It helps users understand how to appropriately work with the content.
 - Policies: It forms the basis for applying and enforcing policies and DLP.



Create Sensitivity Labels







Edit sensitivity label



Provide basic details for this label

The protection settings you choose for this label will be immediately enforced on the items or content containers to which it's applied. Labeled files will be protected wherever they go, whether they're saved in the cloud or downloaded to a computer.

Parent label

Highly Confidential

Name * i

DOH Only

Display name * i

DOH Only

Label priority (i)

11

Description for users * i

DOH Only

Description for admins (i)

Enter a description that's helpful for admins who will manage this label

Label color (i)

(3)

Edit sensitivity label



Define the scope for this label

Labels can be applied directly to items (such as files, emails, meetings), containers like SharePoint sites and Teams, Fabric and Power BI items, schematized data assets, and more. Let us know where you want this label to be used so you can configure the applicable protection settings. Learn more about label scopes

✓ Items

Be aware that restricting the scope to only files or emails might impact access control settings and where the label can be applied. <u>Learn more</u>

Files

Protect files created in Word, Excel, PowerPoint, and more.

✓ Emails

Protect messages sent from all versions of Outlook.

Meetings

Protect calendar events and meetings scheduled in Outlook and Teams.

Groups & sites

Configure privacy, access control, and other settings to protect labeled Teams, Microsoft 365 Groups, SharePoint sites, and Loop workspaces.

Microsoft Purview

 ✓ Copilot

 ✓ Copilot

 ✓ Search

 ✓ Copilot

 ✓ Copilot

Edit sensitivity label



Choose protection settings for the types of items you selected

The protection settings you configure will be enforced when the label is applied to items in Microsoft 365.

✓ Control access

Control who can access and view labeled items.

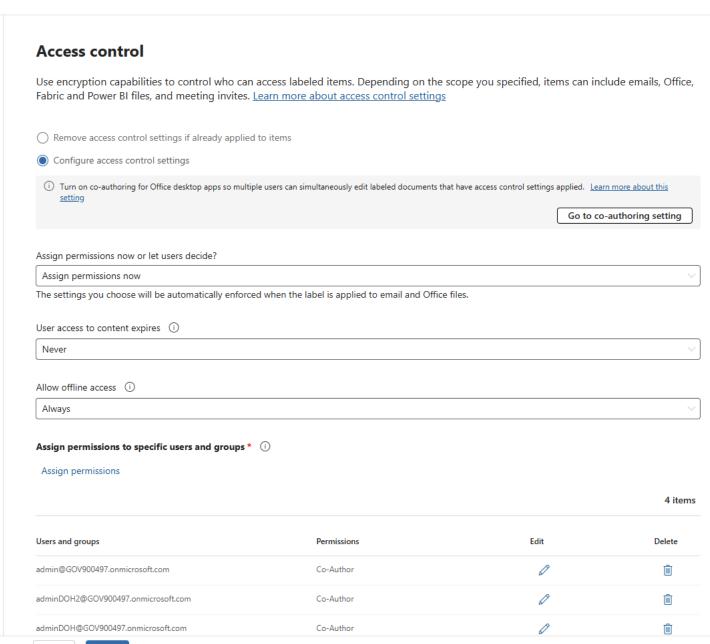
Apply content marking

Add custom headers, footers, and watermarks to labeled items.

O Search **Microsoft Purview**

Edit sensitivity label





Microsoft Purview

∠ Search











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Edit sensitivity label



Content marking

Add custom headers, footers, and watermarks to content that has this label applied. Learn more about content marking

(i) All content marking will be applied to documents but only the header and footer will be applied to email messages. If you chose to configure meeting settings for this label, the header and footer will also be applied to meeting invites.

Content marking



Add a watermark

Customize text

Highly Confidential - DOH Only

✓ Add a header

Customize text

Highly Confidential - DOH Only

Add a footer

Customize text

Microsoft Purview

O Search











Edit sensitivity label



Auto-labeling for files and emails

When users edit Office files or compose, reply to, or forward emails from Outlook that contain content matching the conditions you choose here, we'll automatically apply this label or recommend that they apply it themselves. Learn more about auto-labeling for Microsoft Purview

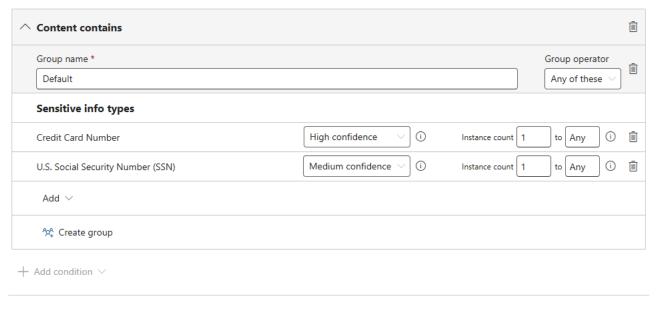
① To automatically apply this label to files that are already saved (in SharePoint and OneDrive) or emails that are already processed by Exchange, you must create an auto-labeling policy. Learn more about auto-labeling policies

Auto-labeling for files and emails



is Since encryption is turned on, a large amount of content might be automatically encrypted when this label is applied. Turning on encryption impacts Office files (Word, PowerPoint, Excel) and PDF files that have this label applied. Because the files will be encrypted for security reasons, performance will be slow when the files are opened or saved, and some SharePoint and OneDrive features will be limited or unavailable. Learn more

Detect content that matches these conditions



The state of the s

Back

Automatically apply the label

When content matches these conditions

O Search **Microsoft Purview**





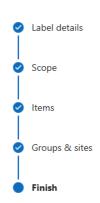








Edit sensitivity label



Review your settings and finish

Name

DOH Only

Display name

DOH Only

<u>Edit</u>

Description for users

DOH Only

<u>Edit</u>

Scope

File, Email

<u>Edit</u>

Access control

Access control

<u>Edit</u>

Content marking

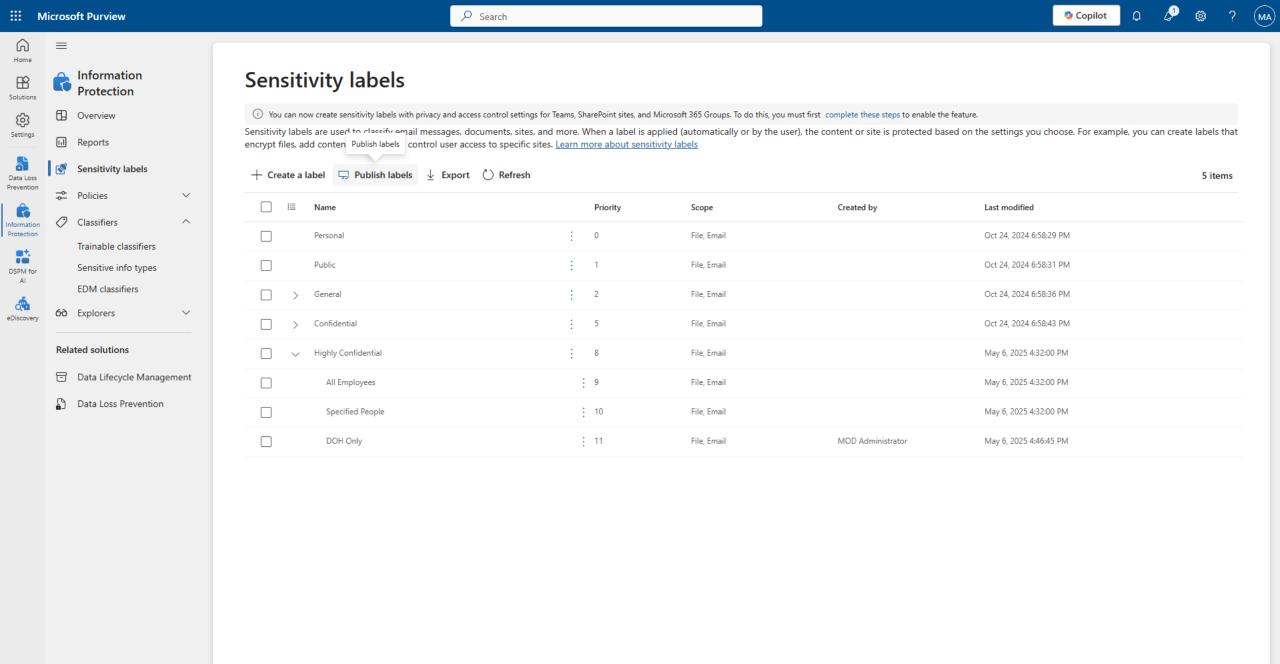
Watermark: Highly Confidential - DOH Only Header: Highly Confidential - DOH Only

<u>Edit</u>

Auto-labeling for files and emails

Automatic

<u>Edit</u>



Microsoft Purview

 ✓ Copilot

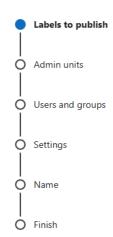
 ✓ Copilot

 ✓ Search

 ✓ Copilot

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Edit policy



Choose sensitivity labels to publish

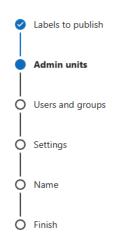
When published, the labels you choose here will be available in specified users' Office apps (Word, Excel, PowerPoint, and Outlook), SharePoint and Teams sites, and Microsoft 365 Groups.

Sensitivity labels to publish

Highly Confidential Highly Confidential/DOH Only

Edit

Edit policy



Assign admin units

Choose the admin units you'd like to assign this policy to. Admin units are created in Microsoft Entra ID and restrict the policy to a specific set of users or groups. Your selections will affect the location options available to you in the next step.

If you want to assign this policy to all users and groups, select 'Next' and proceed. Learn more about admin units

+ Add or remove admin units

Admin units

DOH Admin unit

Edit policy



Publish to users and groups

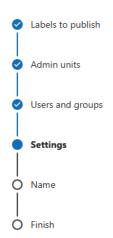
✓ % Users and groups

The labels you selected will be available for the users, distribution groups, mail-enabled security groups, and Microsoft 365 Groups you choose here.

4 Users or groups

Edit

Edit policy



Policy settings

changes and justification text.

Configure settings for the labels included in this policy.

Users must provide a justification to remove a label or lower its classification

Users will need to provide a justification before removing a label or replacing it with one that has a lower-order number. You can use activity explorer to review label

Require users to apply a label to their emails and documents

Users will be required to apply labels before they can save documents or send emails (only if these items don't already have a label applied).

i Support and behavior for this setting varies across apps and platforms. <u>Learn more about managing sensitivity labels</u>

Require users to apply a label to their Fabric and Power BI content

Users will be required to apply labels to unlabeled content they create or edit in Fabric and Power BI. Learn more about mandatory labeling in Fabric and Power BI

Provide users with a link to a custom help page

If you created a website dedicated to helping users understand how to use labels in your org, enter the URL here. Learn more about this help page

O Search **Microsoft Purview**

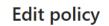














Default settings for documents

Apply a default label to documents

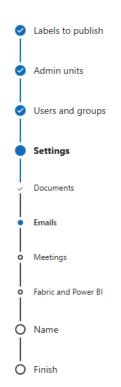
The label you choose will automatically be applied to Word, Excel, and PowerPoint documents when they're created or modified. Users can always select a different label to better match the sensitivity of their document. Learn which Office app versions support this setting

Default label

None

O Search **Microsoft Purview**

Edit policy



Default settings for emails

Apply a default label to emails

The label you choose will automatically be applied to new and existing, unlabeled emails. Users can always change the default label before they send the message. Learn which Outlook versions support these settings

Default label

Same as document

Require users to apply a label to their emails

Inherit label from attachments

If an email is labeled and attachments with higher priority labels are added, you can automatically replace the email's label with the highest priority attachment label or recommend that users do it themselves. If the email isn't labeled, it inherits the highest priority label from attachments. Learn more about label inheritance

Email inherits highest priority label from attachments

Copilot

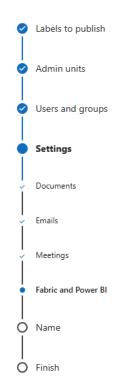








Edit policy

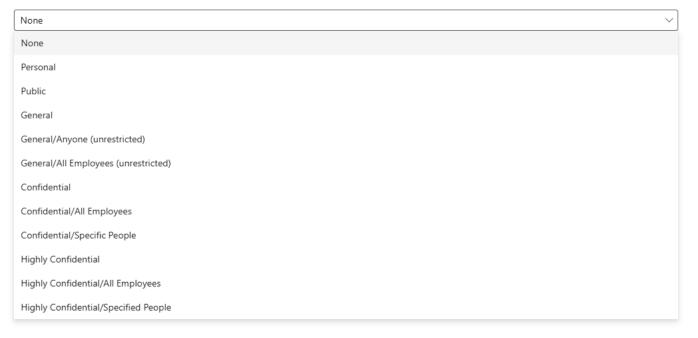


Default settings for Fabric and Power BI content

Apply a default label to Fabric and Power BI content

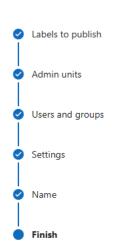
The label you choose will automatically be applied to new Fabric and Power BI reports, dashboards, and datasets. Users can always change the default label if it's not the right one. <u>Learn more about default label policies in Fabric and Power BI</u>

Default label



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Edit policy



Review and finish

Name

Highly Confidential - DOH Only

Description

<u>Edit</u>

Publish these labels

Highly Confidential Highly Confidential/DOH Only

<u>Edit</u>

Publish to users and groups

Exchange email - All accounts

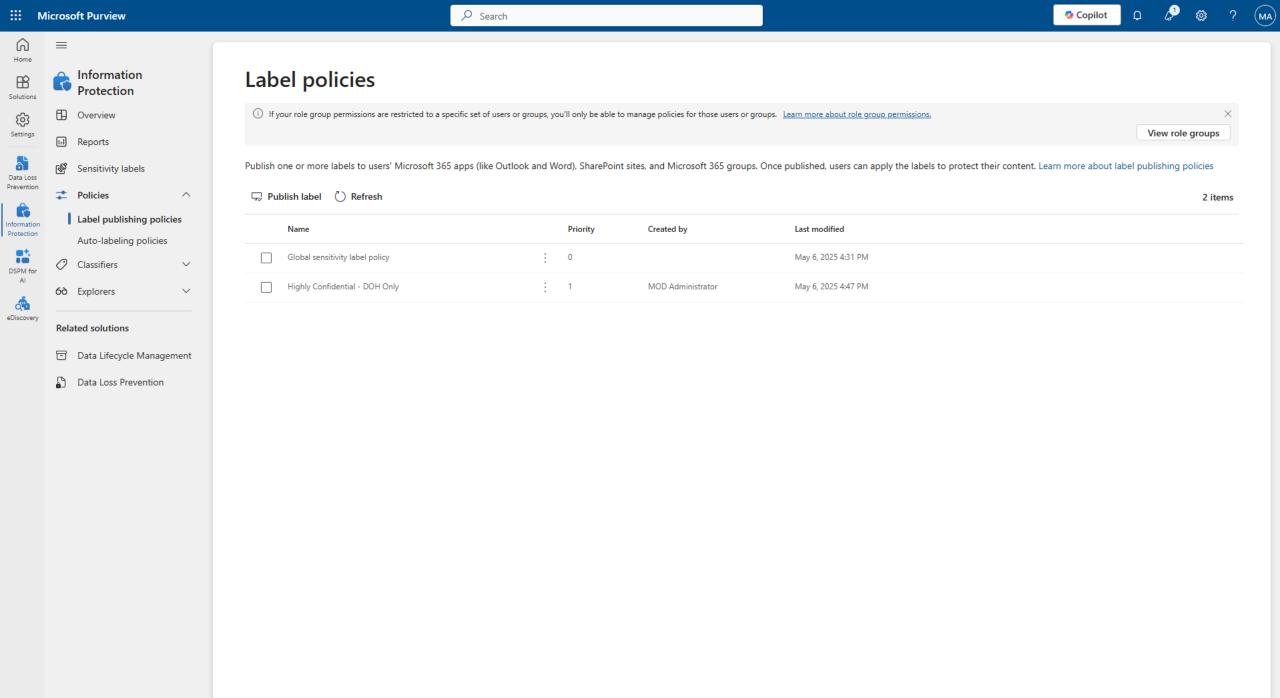
Edit

Policy settings

Users must provide justification to remove a label or lower its classification

Edit

Submit





Enable
Sensitivity labeling in
Power BI Admin center

Capacity settings

Embed Codes

Workspaces

Refresh summary

Organizational visuals

Azure connections

Custom branding

Featured content

Apps

 Δ

Metrics

Learn

Workspaces

0

My

Duse semantic models across workspaces

Define workspace retention period Enabled for the entire organization

Information protection

- Allow users to apply sensitivity labels for content Enabled for the entire organization
- P Apply sensitivity labels from data sources to their data in Power BI Enabled for the entire organization
- Automatically apply sensitivity labels to downstream content Enabled for the entire organization
- △ Allow workspace admins to override automatically applied sensitivity labels Enabled for the entire organization

With this setting enabled, workspace admins can change or remove sensitivity labels that were applied automatically by Power BI, for example, as a result of label inheritance. Learn More

Enabled

① This setting applies to the entire organization

Cancel

Deliver Restrict content with protected labels from being shared via link with everyone in your organization Enabled for the entire organization

Export and sharing settings

- ▶ Allow Azure Active Directory guest users to access Power BI Enabled for the entire organization
- Users can invite guest users to collaborate through item sharing and permissions

Note: Sensitivity label settings, such as encryption and content marking for files and emails, are not applied to content in Fabric. Learn More. Encryption is applied to content

Visit the Microsoft Purview portal to view sensitivity label settings for your organization.

Enabled

① The setting below determines which users in the organization can apply and change sensitivity labels. All other users in the organization can only view the

Apply to:

The entire organization

in supported export paths.

Specific security groups

Except specific security groups













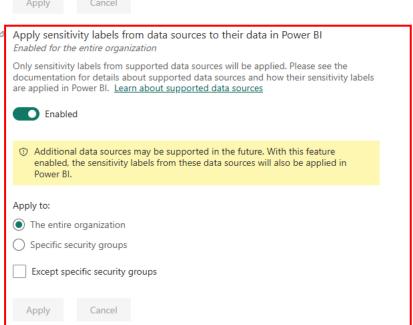






Organizational visuals Azure connections Workspaces Custom branding

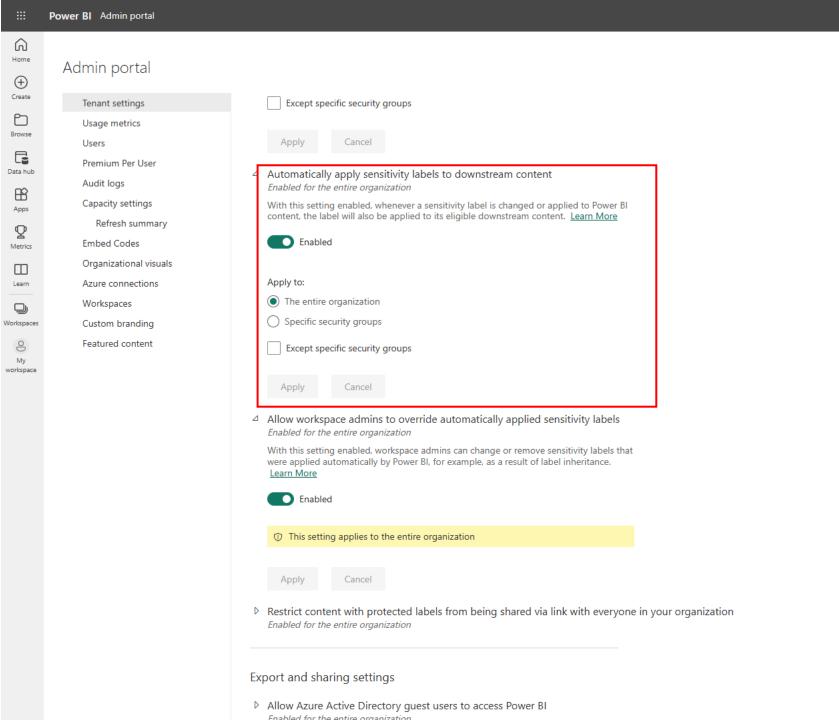
Featured content



- D Automatically apply sensitivity labels to downstream content Enabled for the entire organization
- Delically Allow workspace admins to override automatically applied sensitivity labels Enabled for the entire organization
- P Restrict content with protected labels from being shared via link with everyone in your organization Enabled for the entire organization

Export and sharing settings

- ▶ Allow Azure Active Directory guest users to access Power BI Enabled for the entire organization
- Dusers can invite guest users to collaborate through item sharing and permissions Enabled for the entire organization
- Digital Guest users can browse and access Fabric content Disabled for the entire organization



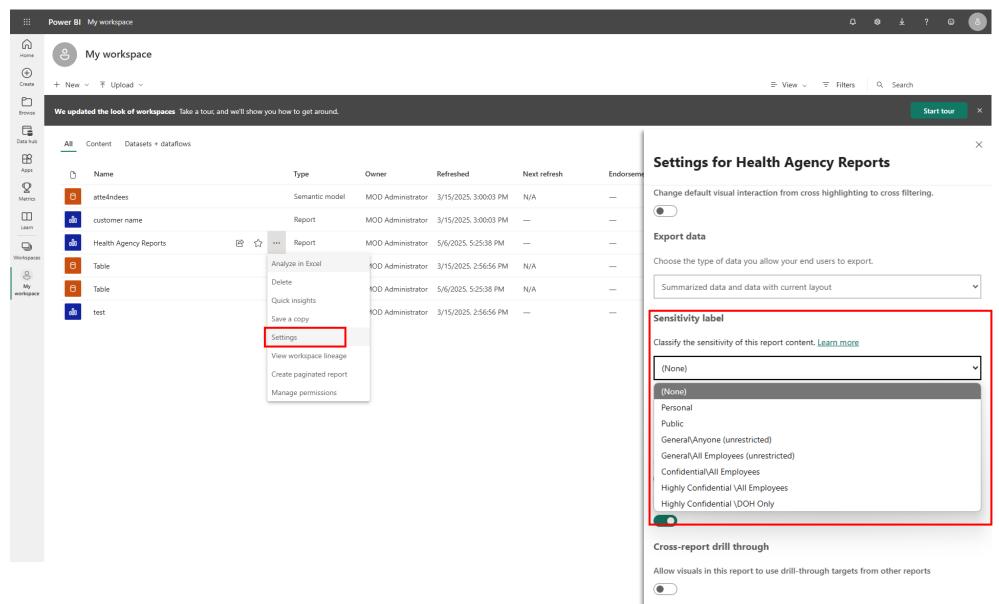




Sensitivity labeling End User experience

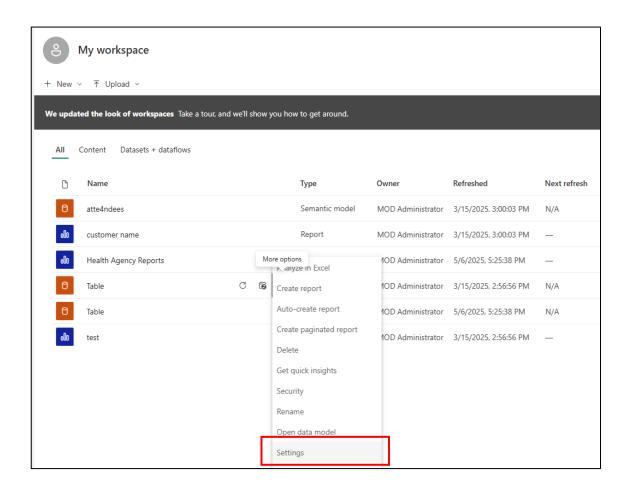
Sensitivity labels in the Power BI Service

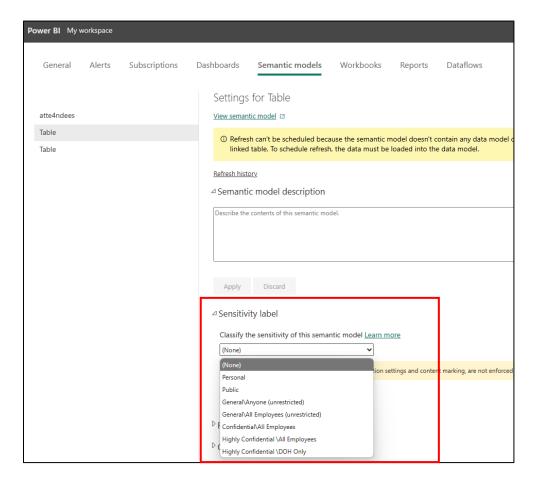
Set the sensitivity label on a report or dashboard



Sensitivity labels in the Power BI Service

Set the sensitivity label on a semantic model or dataflow

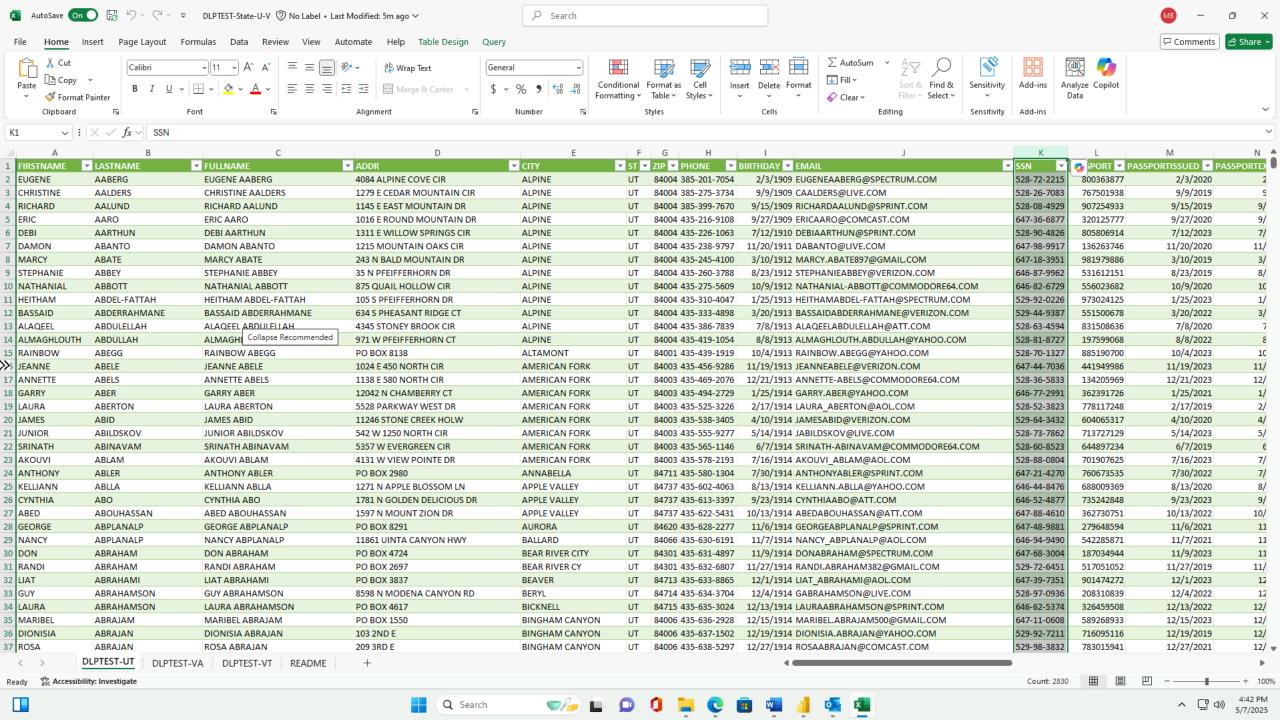


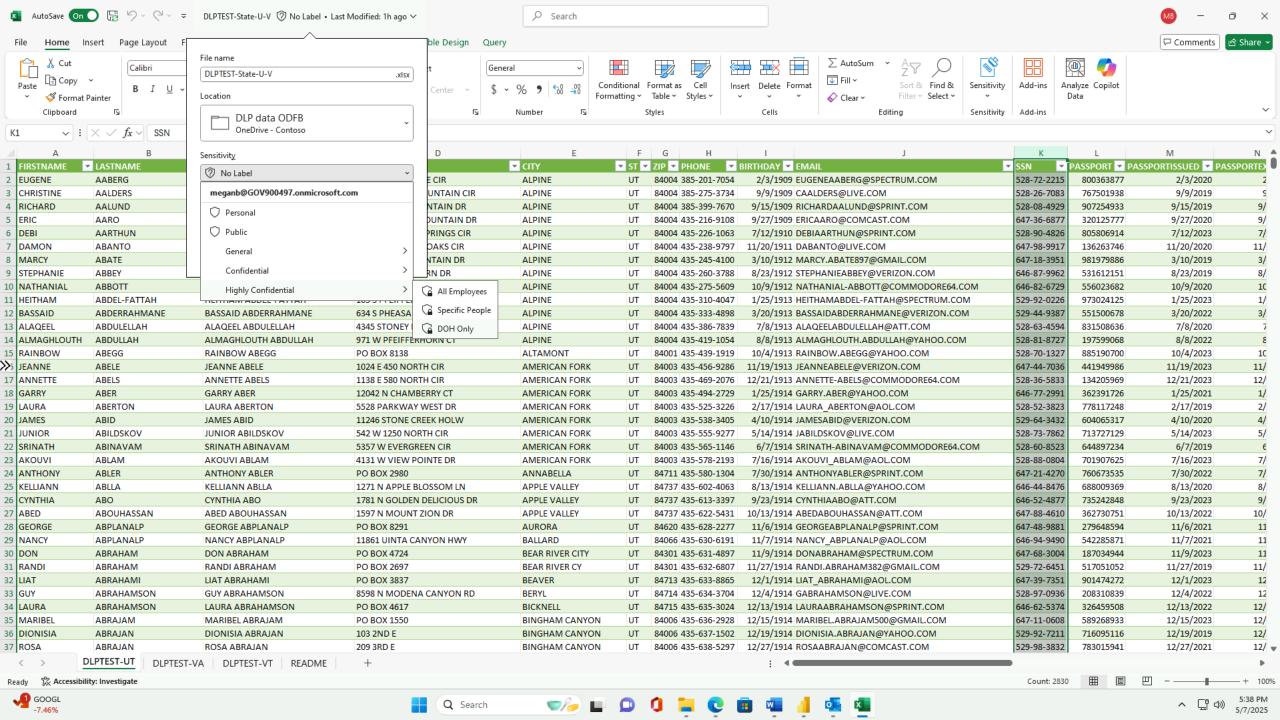


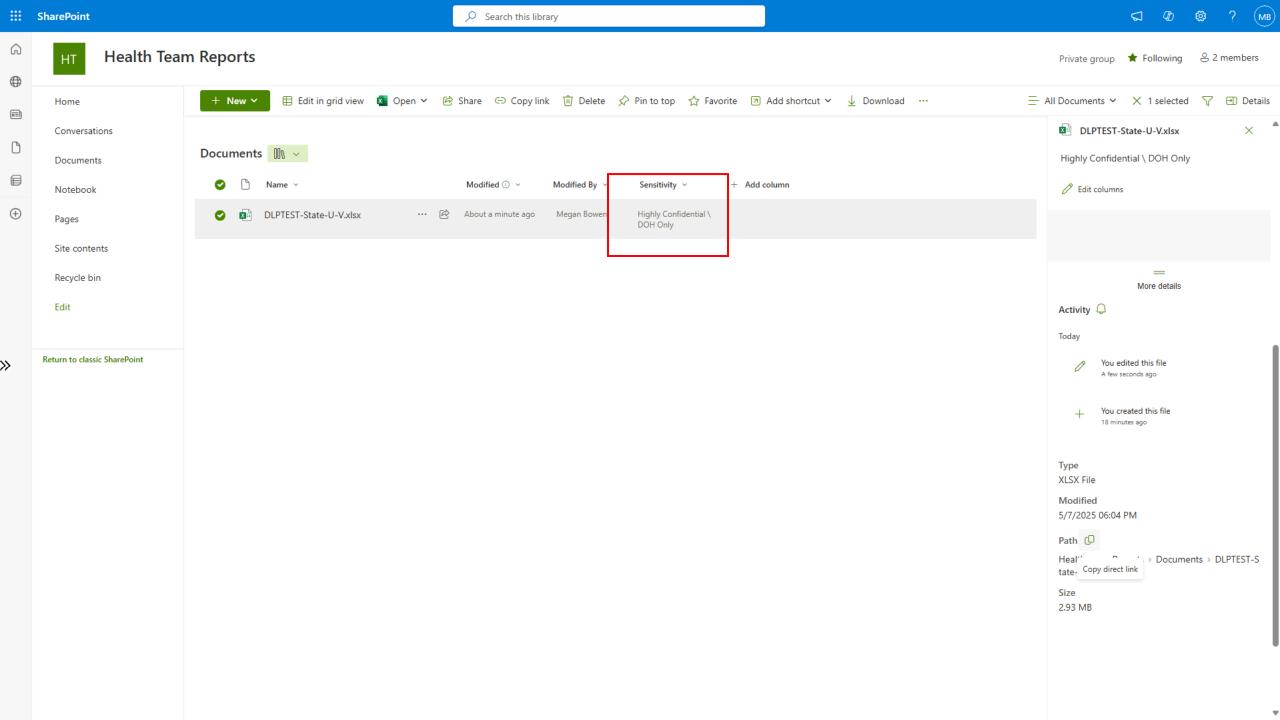


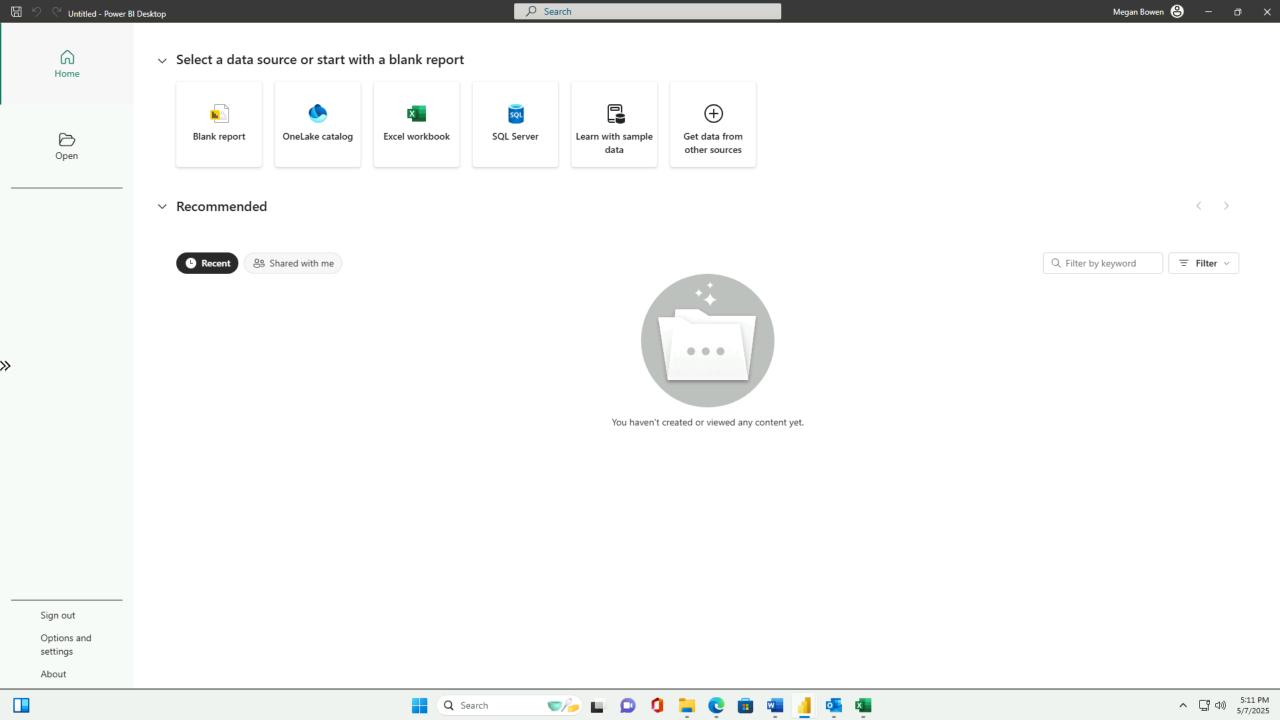
Sensitivity label inheritance from data sources

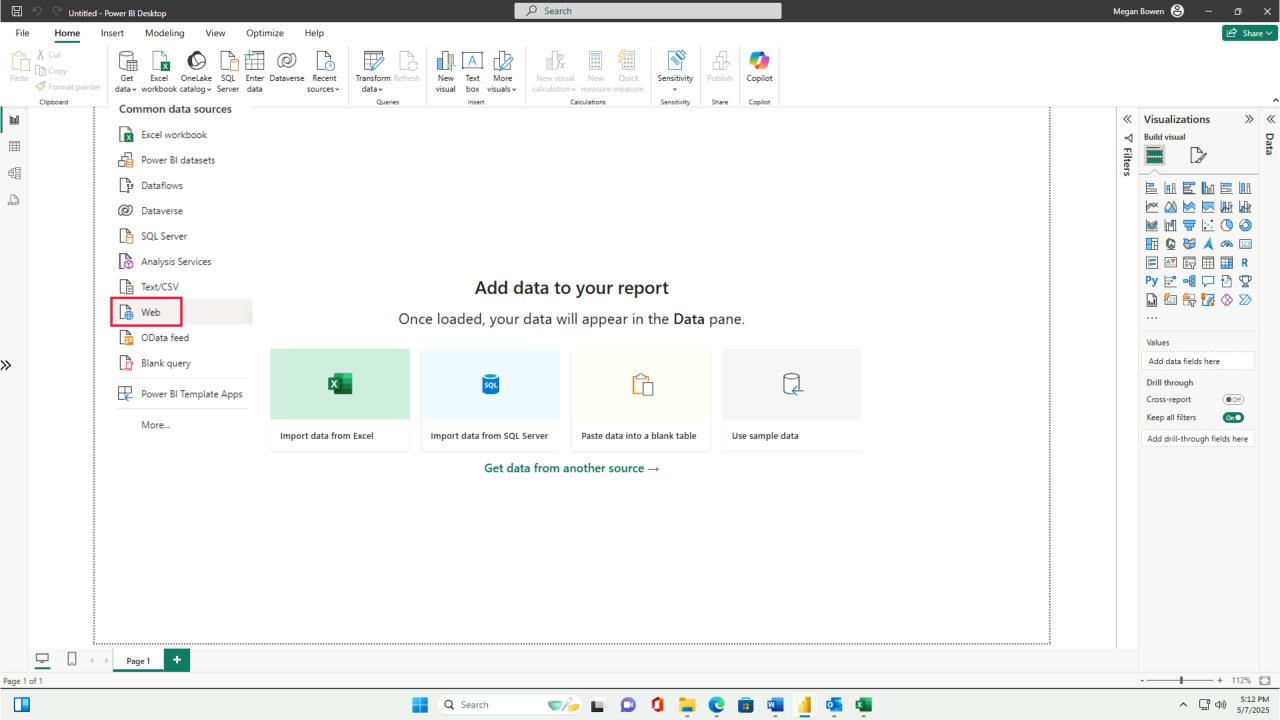
- Power BI can inherit sensitivity labels from supported data sources like:
 - Excel files stored on OneDrive or SharePoint Online*
 - Azure Synapse Analytics (formerly SQL Data Warehouse)
 - Azure SQL Database

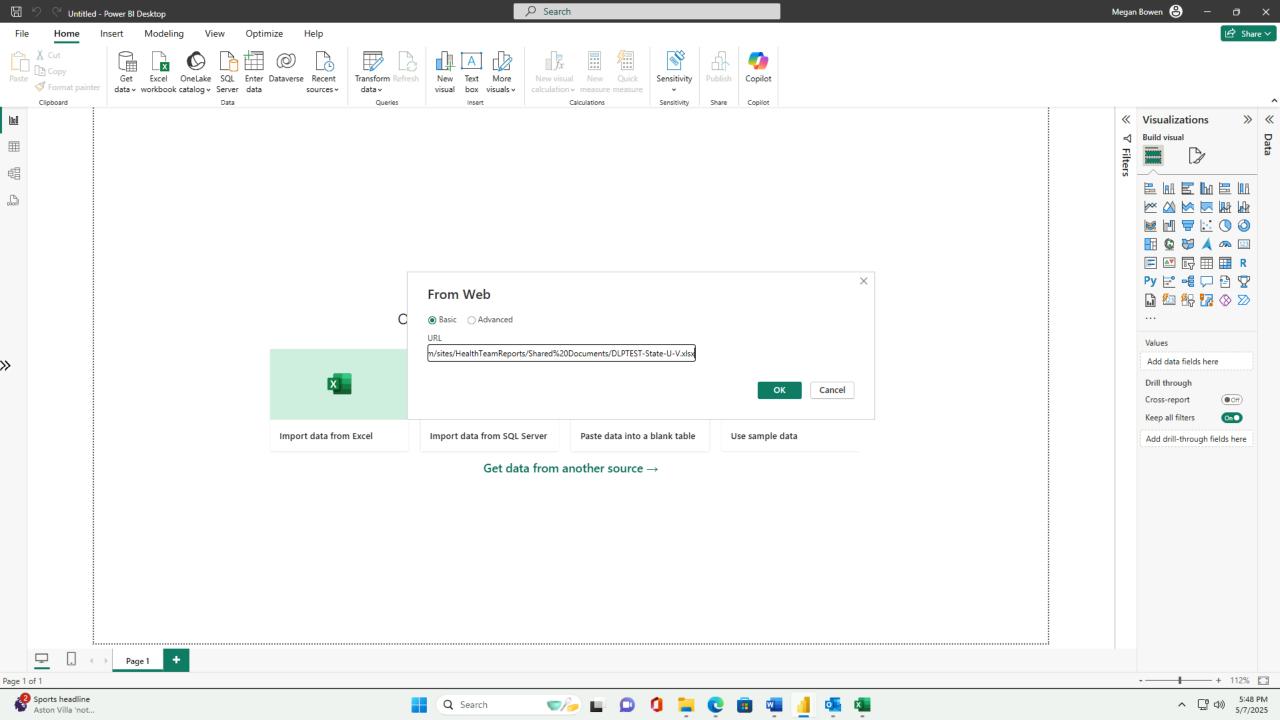


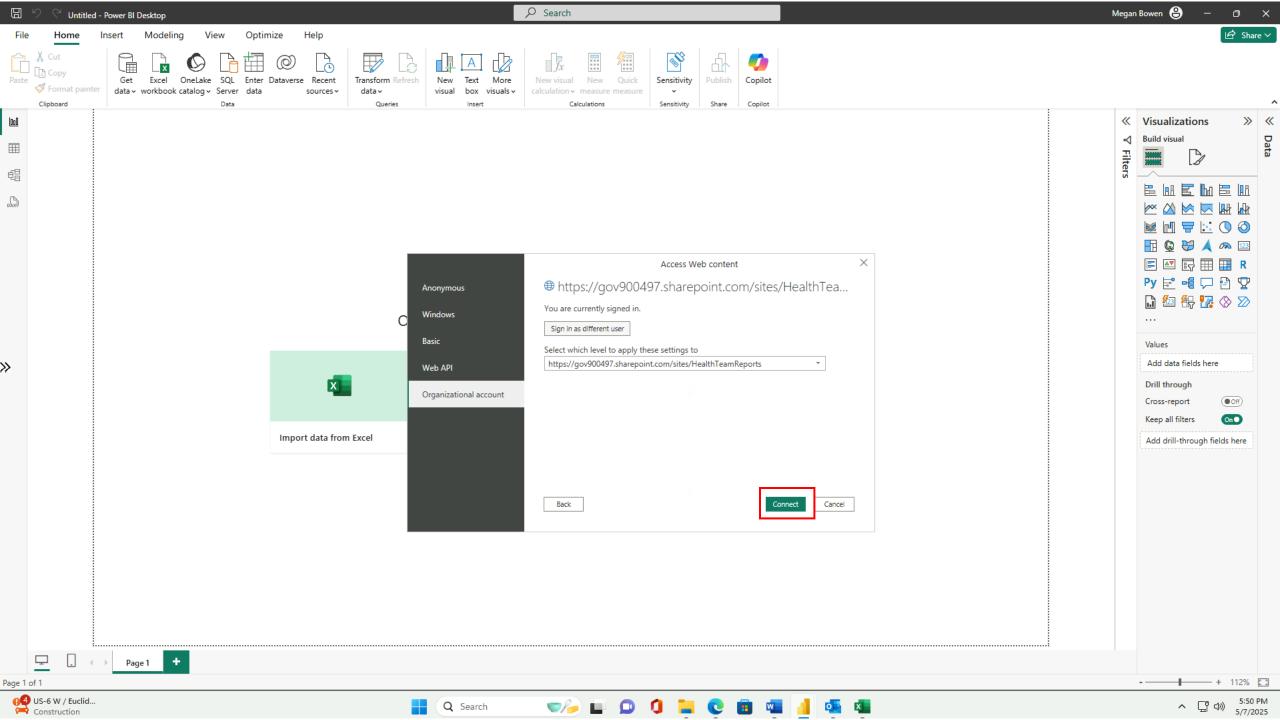


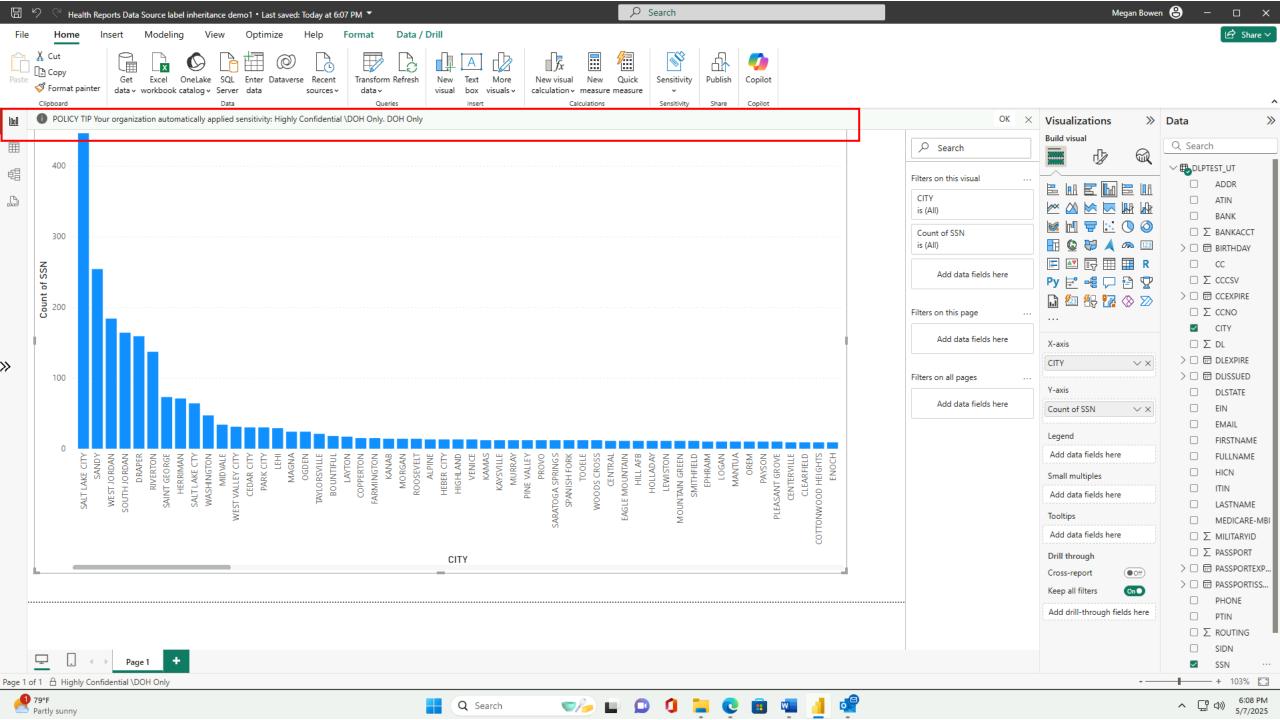


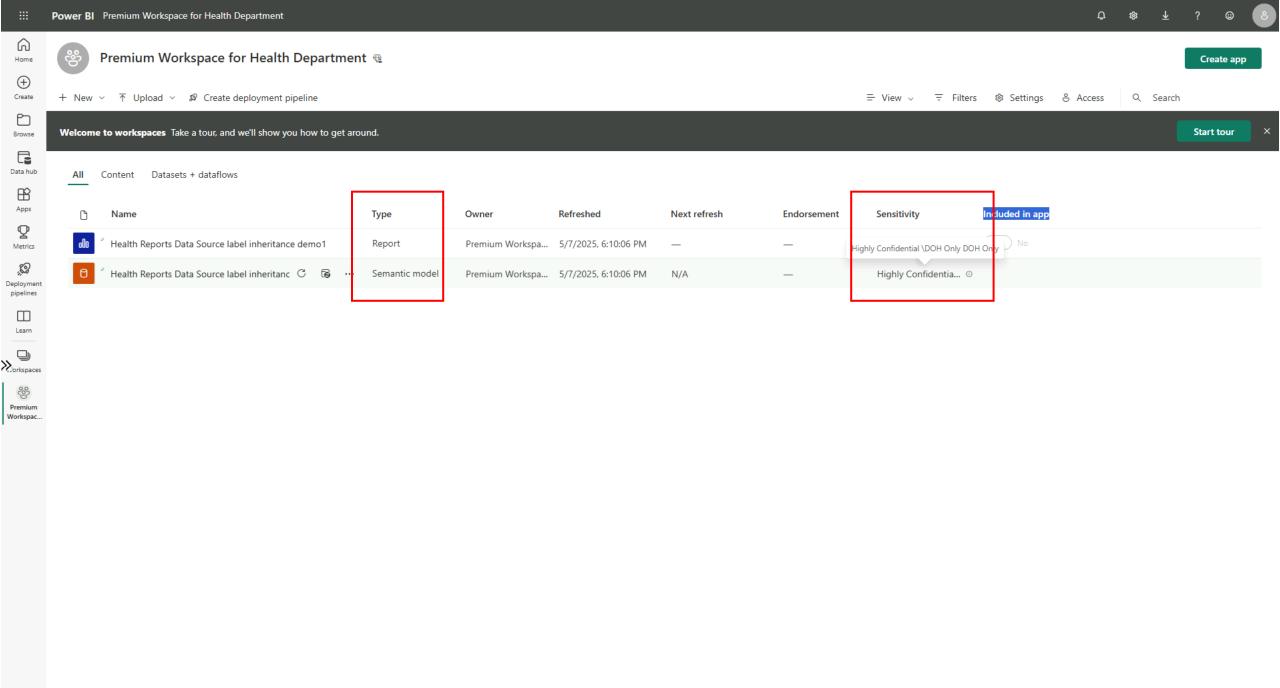


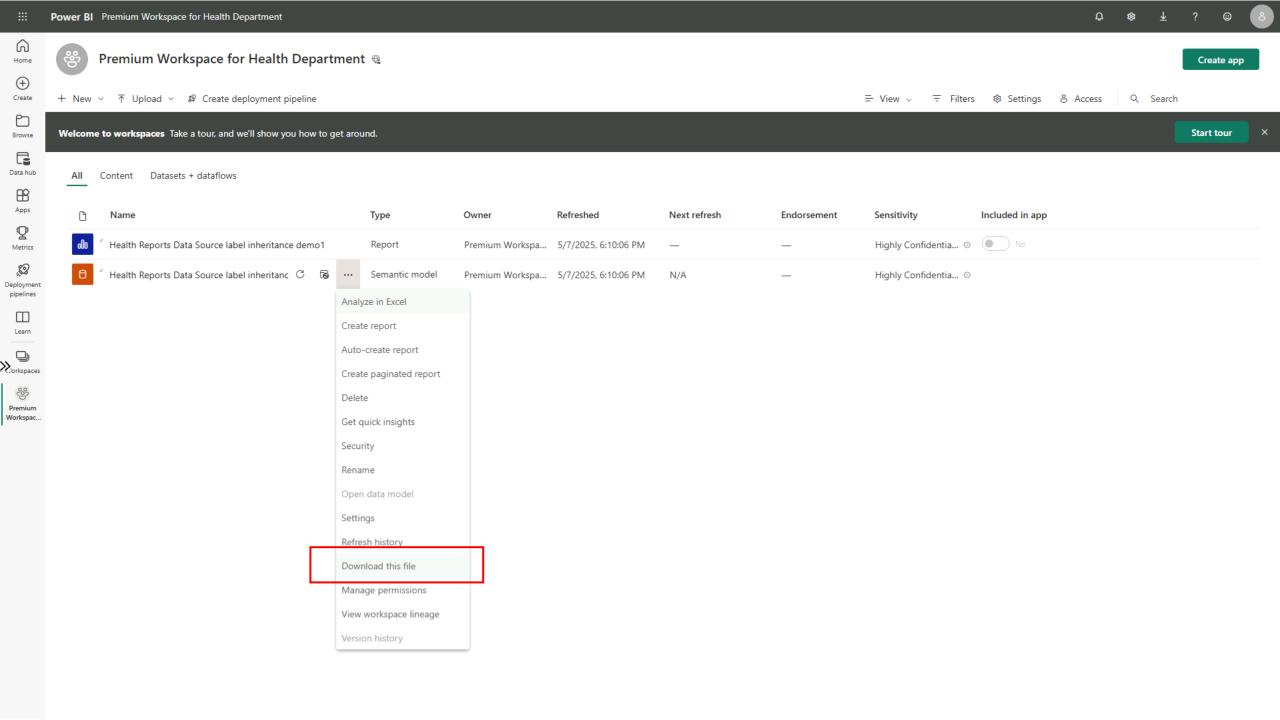




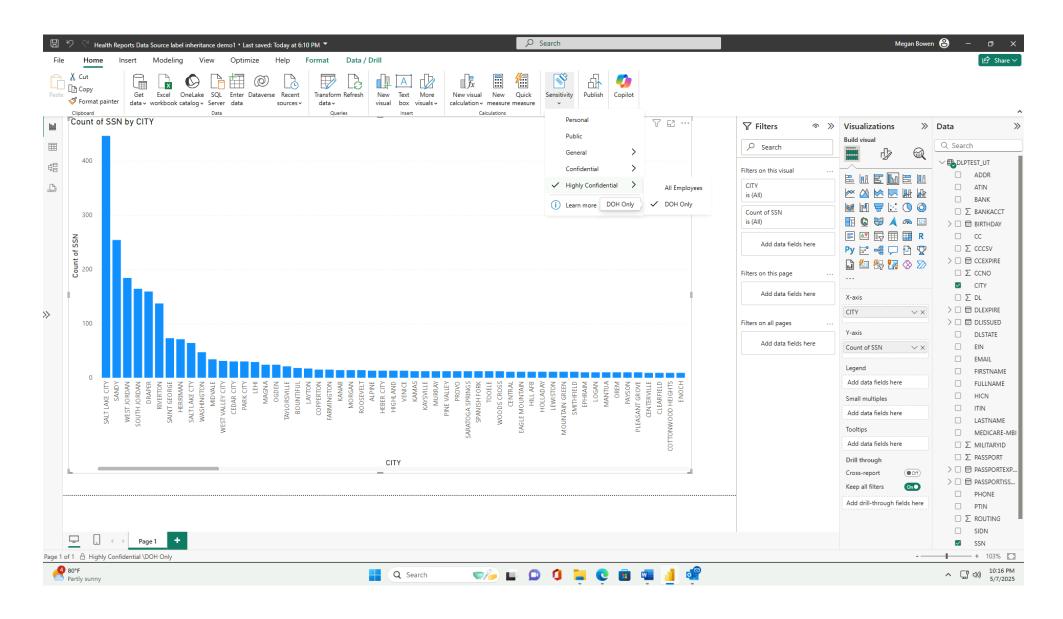








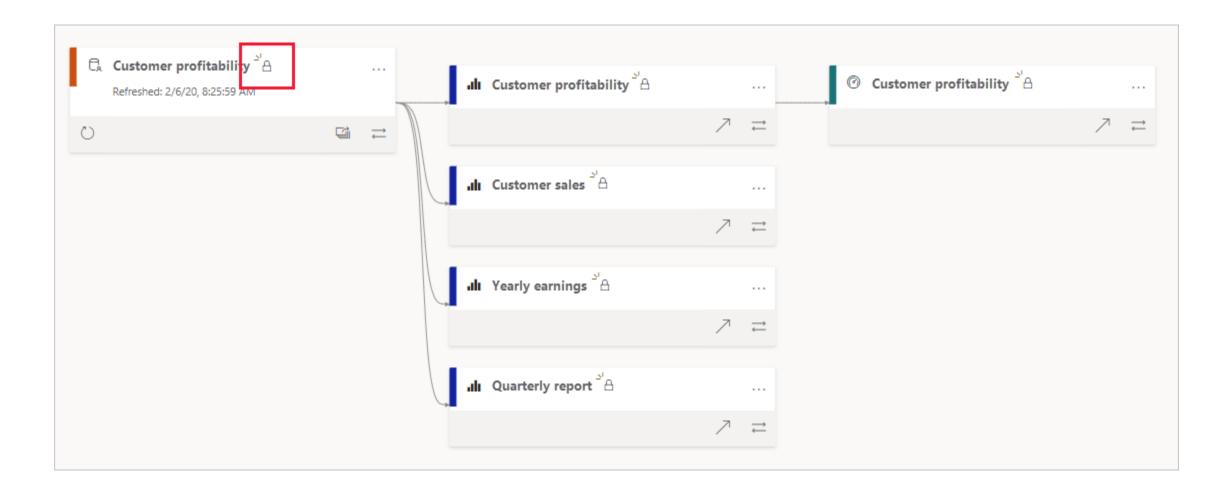
Apply sensitivity labels in Power BI Desktop



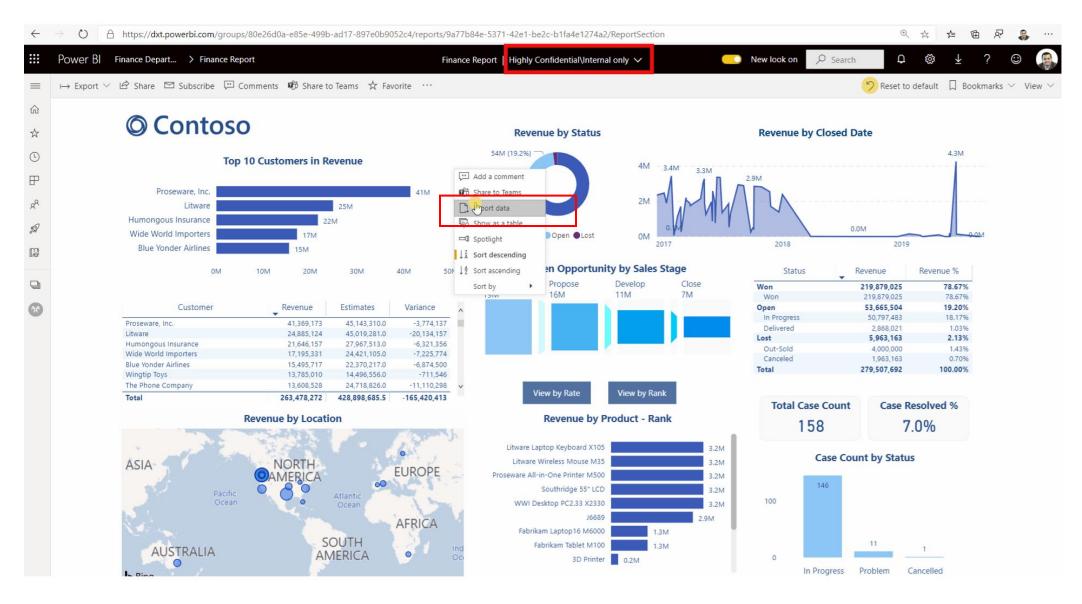


Sensitivity label downstream inheritance

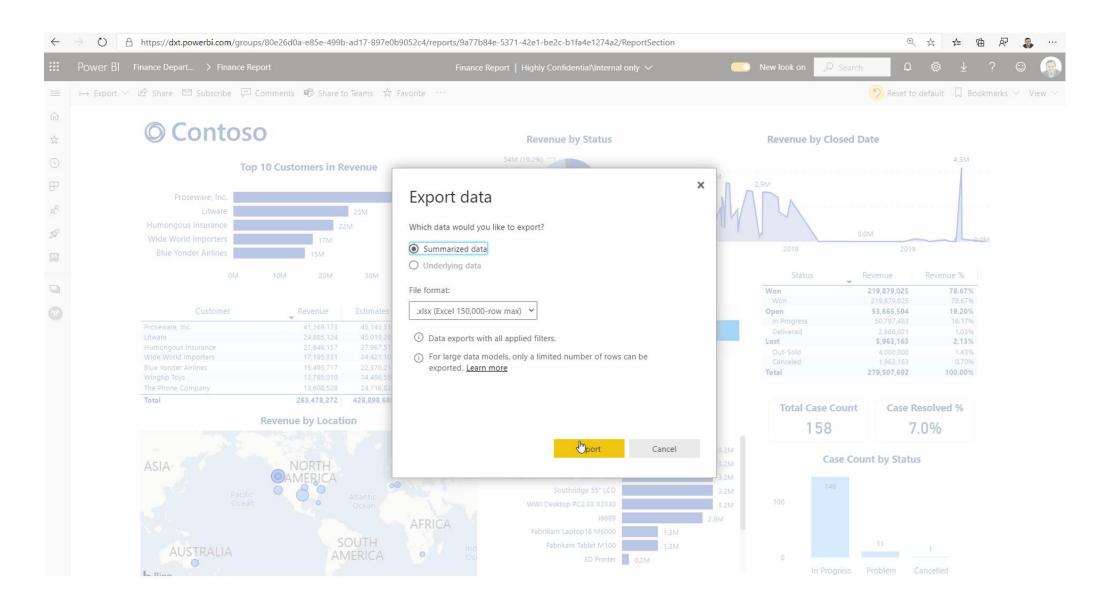
Downstream inheritance

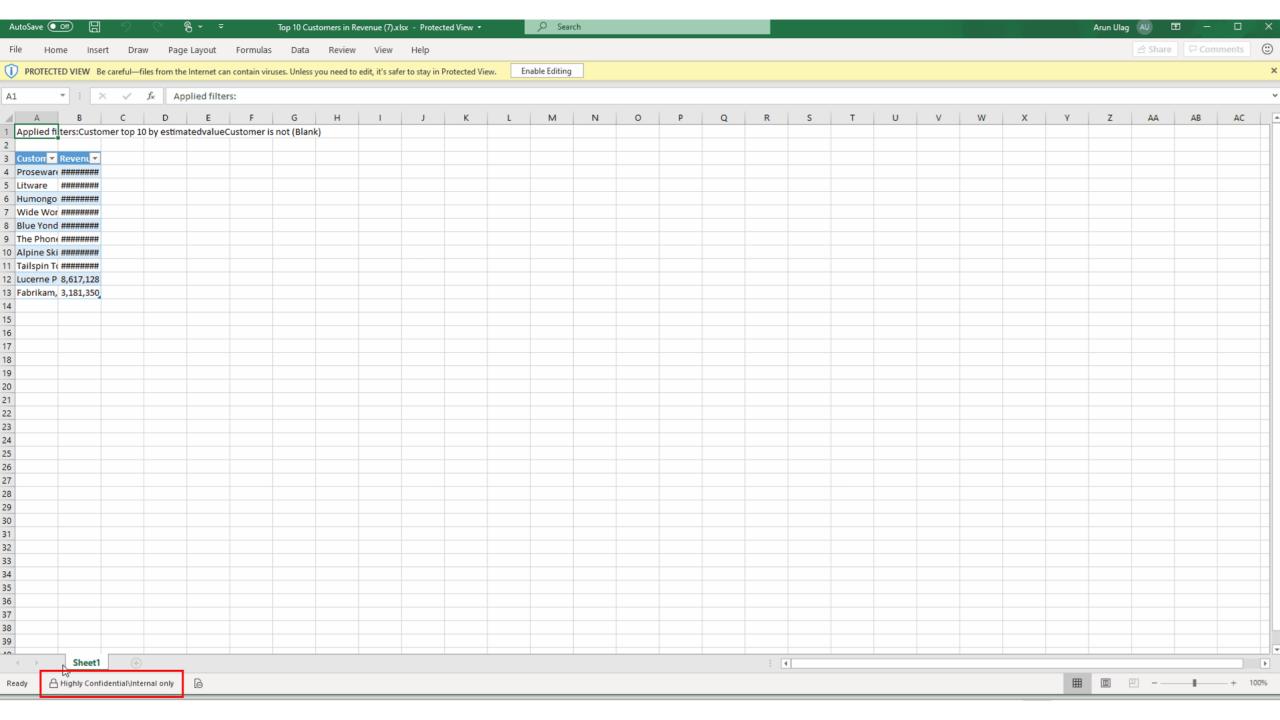


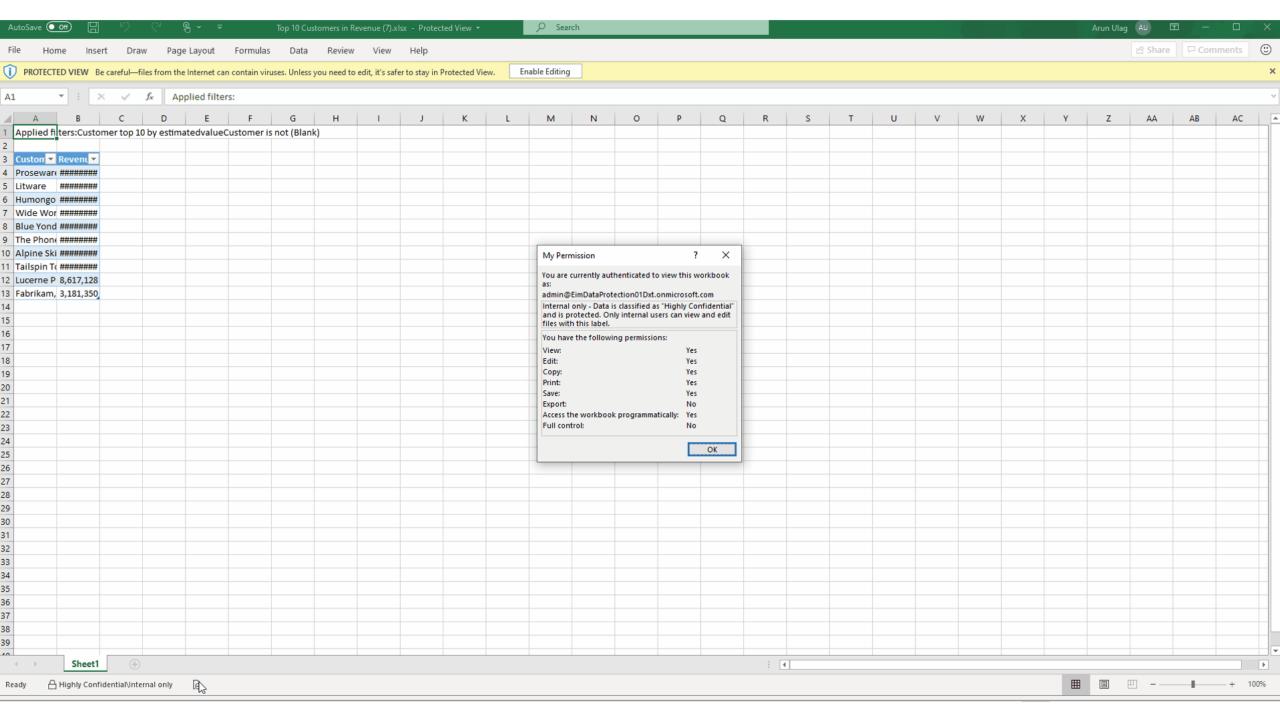
Sensitivity labels and protection on exported data



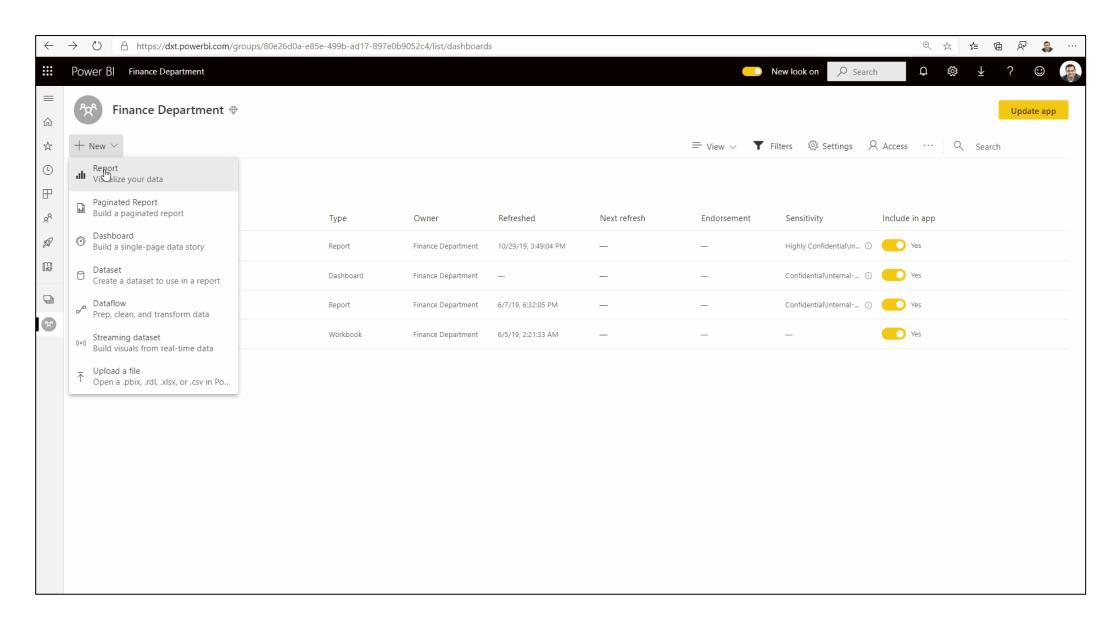
Sensitivity labels and protection on exported data



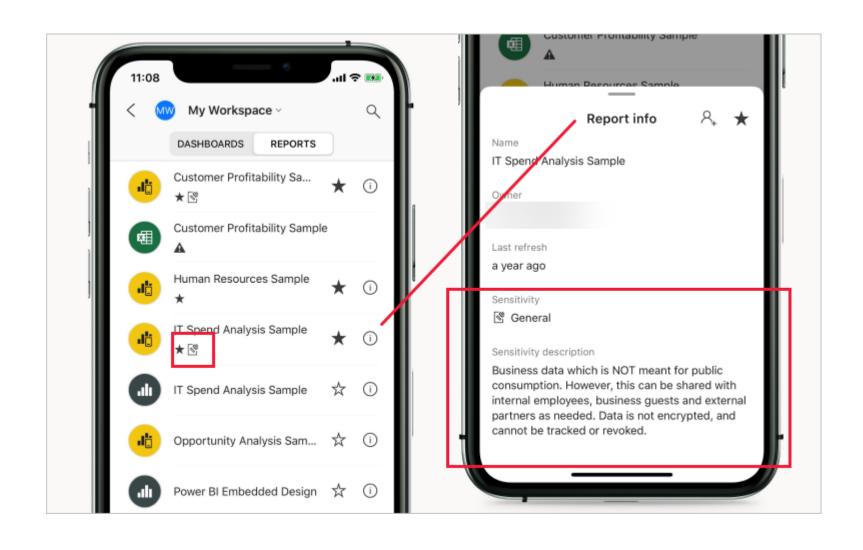




Sensitivity label inheritance upon creation of new content

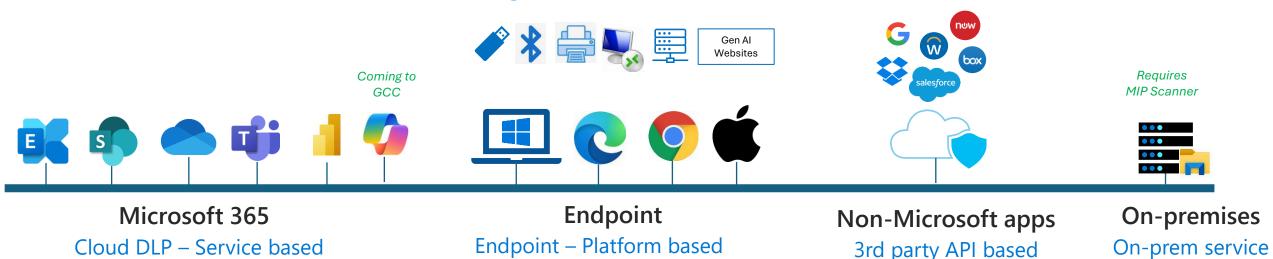


Sensitivity labels in the Power BI mobile apps



Microsoft Purview Data Loss Prevention

Prevent accidental or unauthorized sharing of sensitive data



Data in use

Data in motion

Data at rest

Guided onboarding

Unified & flexible policy management

Integrated with Microsoft Purview Information Protection

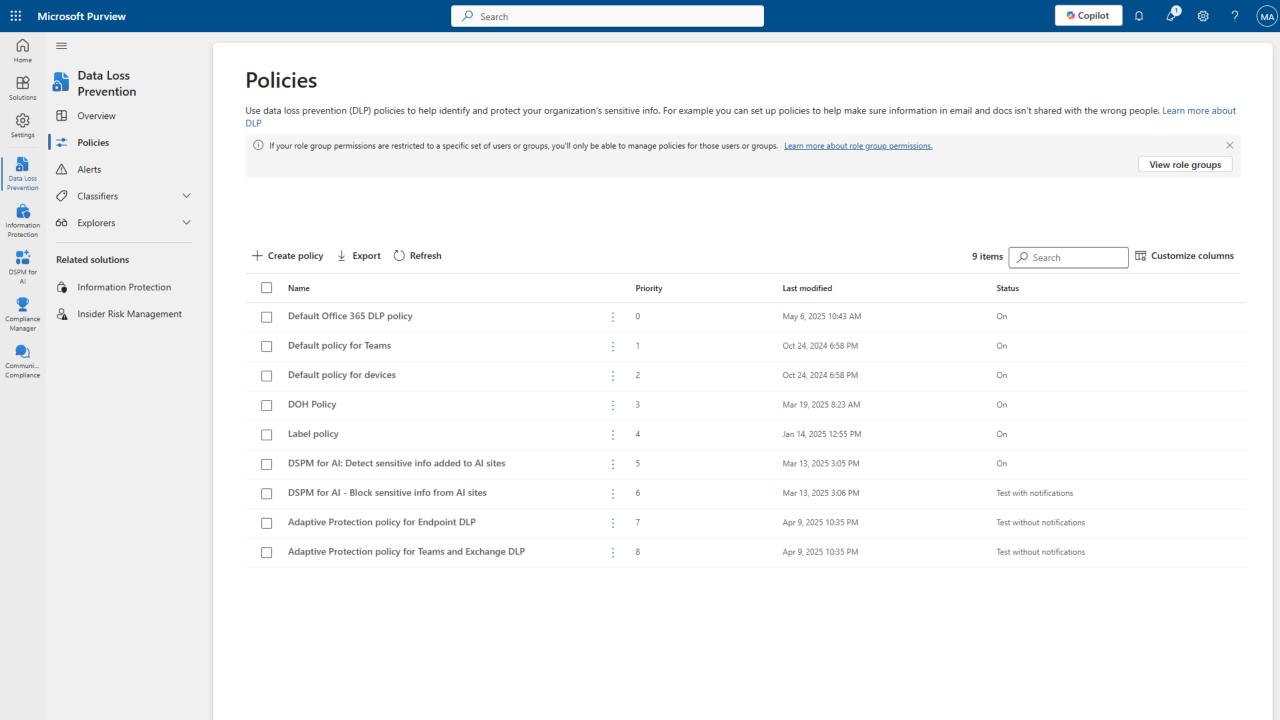
Unified alerting & remediation

Agentless and integrated within end user experiences



DLP – Admin Experience

• DLP Policy Creation



Microsoft Purview



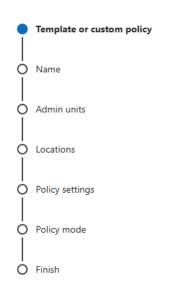






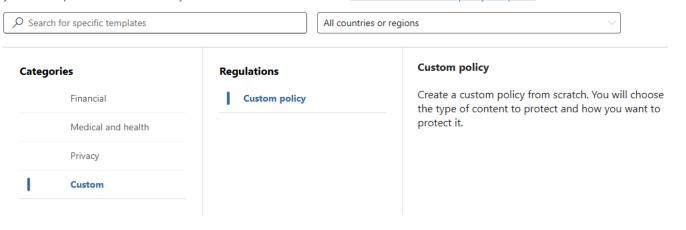
∌ ?





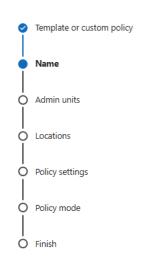
Start with a template or create a custom policy

Choose an industry regulation to see the DLP policy templates you can use to protect that info or create a custom policy start from scratch. If you need to protect labeled content, you'll be able to choose labels later. <u>Learn more about DLP policy templates</u>



Microsoft Purview ∠ Search

Data loss prevention > Create policy



Name your DLP policy

Create a DLP policy to detect sensitive data across locations and apply protection actions when the conditions match.

Name *

DLP Policy for Power BI

Description

Helps detect the presence of information subject to United States Health Insurance Portability and Accountability Act (HIPAA).

Copilot

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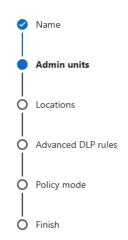






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Assign admin units

Choose the admin units you'd like to assign this policy to. Admin units are created in Microsoft Entra ID and restrict the policy to a specific set of users or groups. Your selections will affect the location options available to you in the next step.

If you want to assign this policy to all users and groups, select 'Next' and proceed. Learn more about admin units

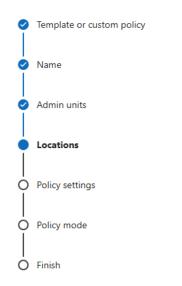
(i) Admin units aren't supported for all locations. Admin units aren't applicable to some locations, such as Fabric and Microsoft 365 Copilot. As a result, if you select admin units here, you won't be able to scope this policy to those locations in the next step.



Admin units

Full directory

Data loss prevention > Create policy



Choose where to apply the policy

We'll apply the policy to data that's stored in the locations you choose.

(i)	Protecting sensitive info in on-premises repositories (SharePoint sites and file shares) is now in preview. Note that there are prerequisite steps needed to support this new
	capability. Learn more about the prerequisites

7) Pay-as-	vou-ao billing	needs to be set u	n to configure	nolices for non	-Microsoft 365 data sources	Learn more about pay-as-you-go billing
۰) ray-as-	you-go billine	J Heeus to be set u	p to confingure	polices for flori	-iviiciosoft 303 data sources.	Learn more about pay-as-you-go billing

	Location	Scope	Actions
	🕼 Exchange email	Turn on location to scope	
	⊗ SharePoint sites	Turn on location to scope	
	⊗ OneDrive accounts	Turn on location to scope	
	€ Teams chat and channel messages	Turn on location to scope	
	■ Devices	Turn on location to scope	
	% Instances	Turn on location to scope	
	■ On-premises repositories	Turn on location to scope	
~	्रावी Power BI workspaces	All workspaces	Edit

Data loss prevention > Create policy



Customize advanced DLP rules

The rules here are made up of conditions and actions that define the protection requirements for this policy. You can edit existing rules or create new ones.

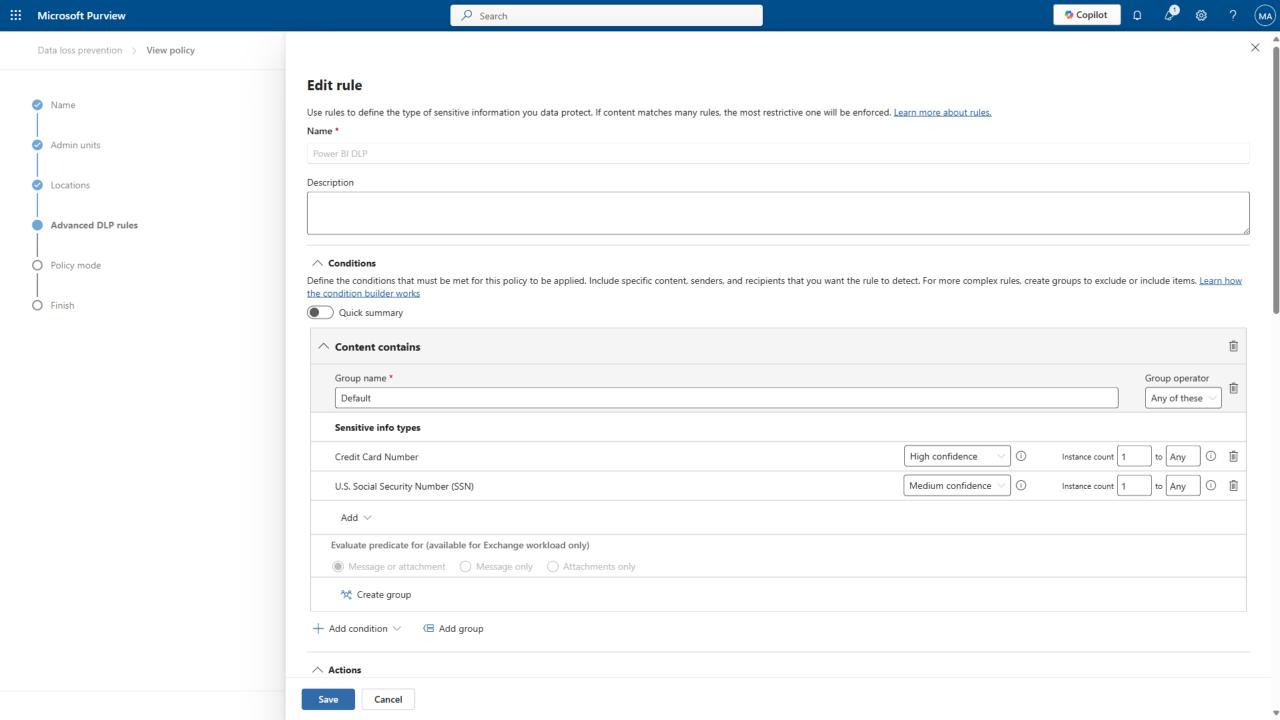
+ Create rule

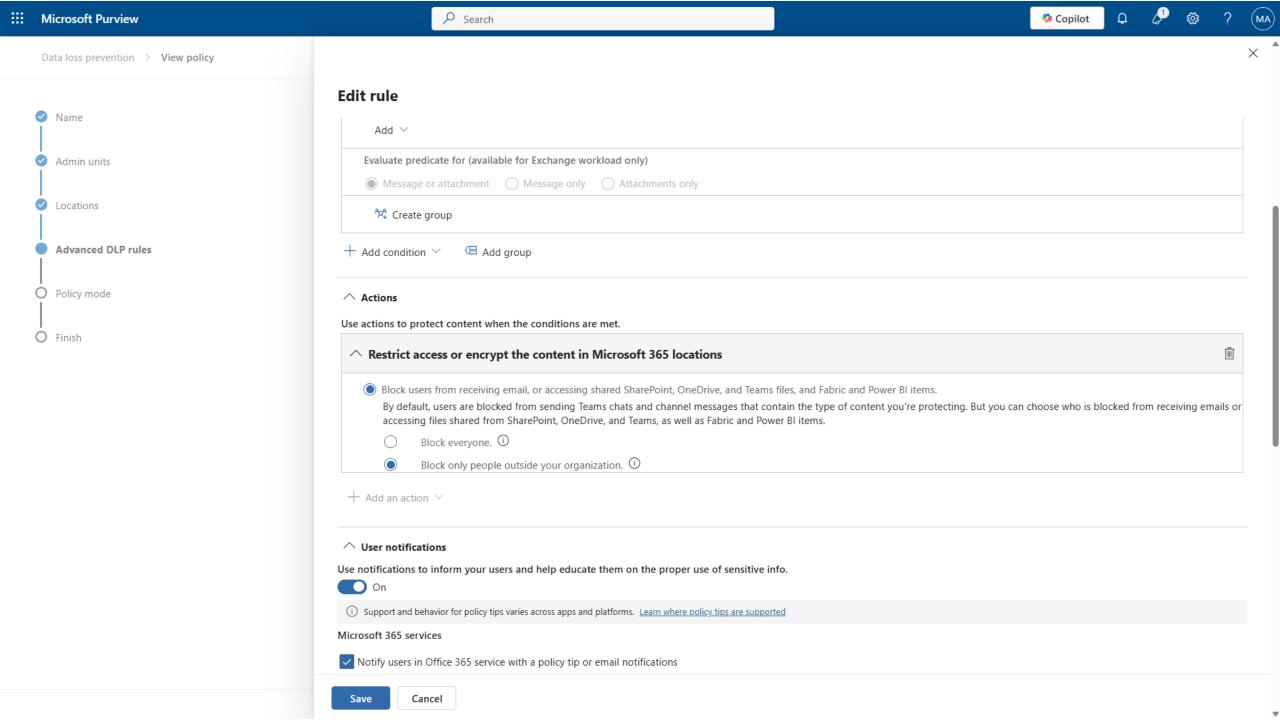
0 items

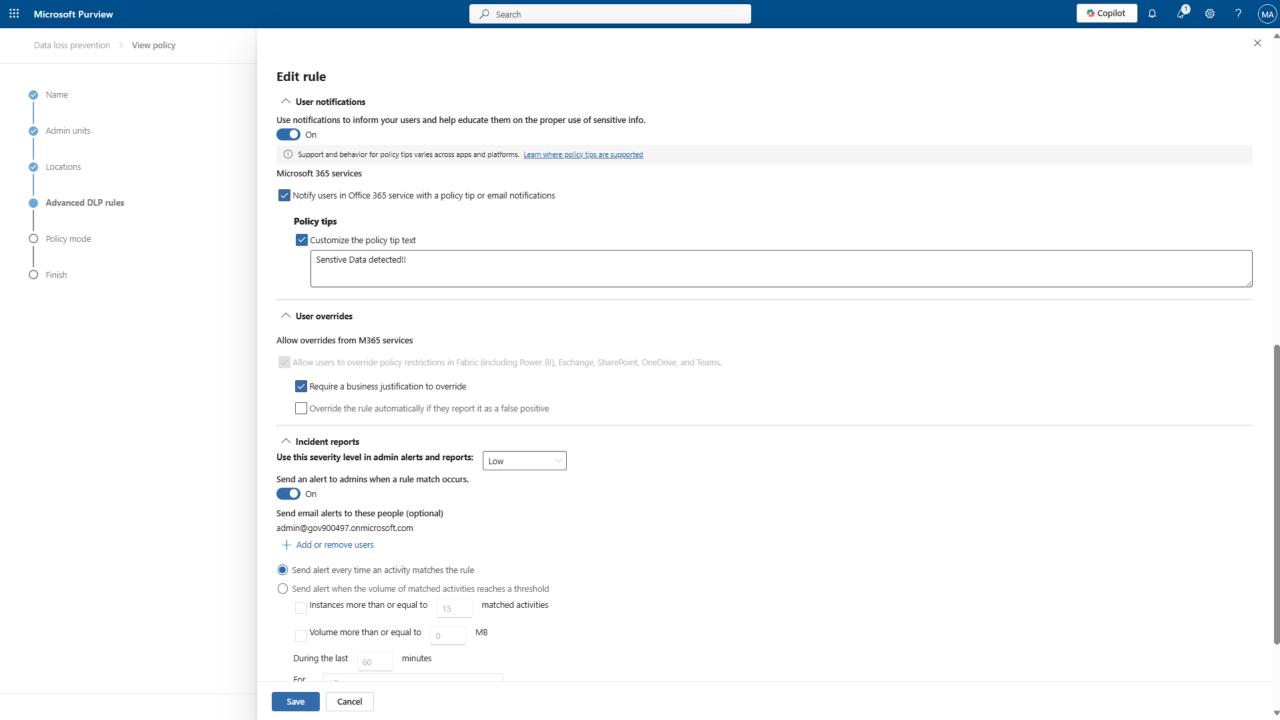
Status

No rules created

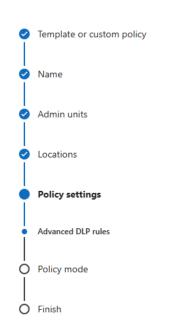
Name

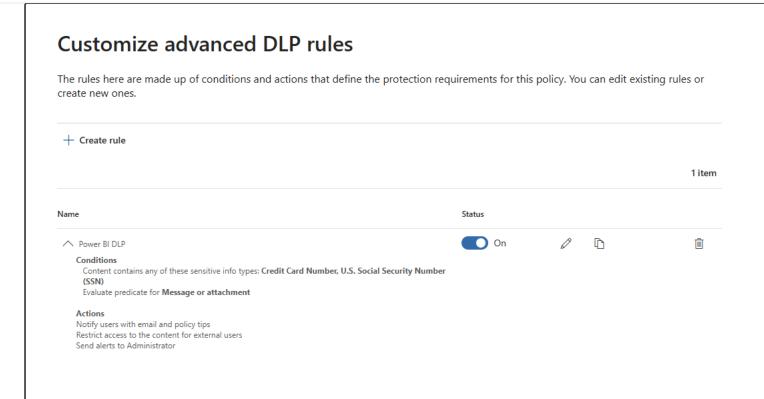






Data loss prevention > Create policy





O Search **Microsoft Purview**









Data loss prevention > Create policy

Policy mode

You can test this policy before turning it on to verify if it needs improvement or if it meets all your objectives. If you turn the policy on right away, you can edit it later and safely test those changes in simulation mode.

Run the policy in test mode

You'll be able to review alerts to assess the policy's impact. Any restrictions you configured won't be enforced. Learn more about test mode

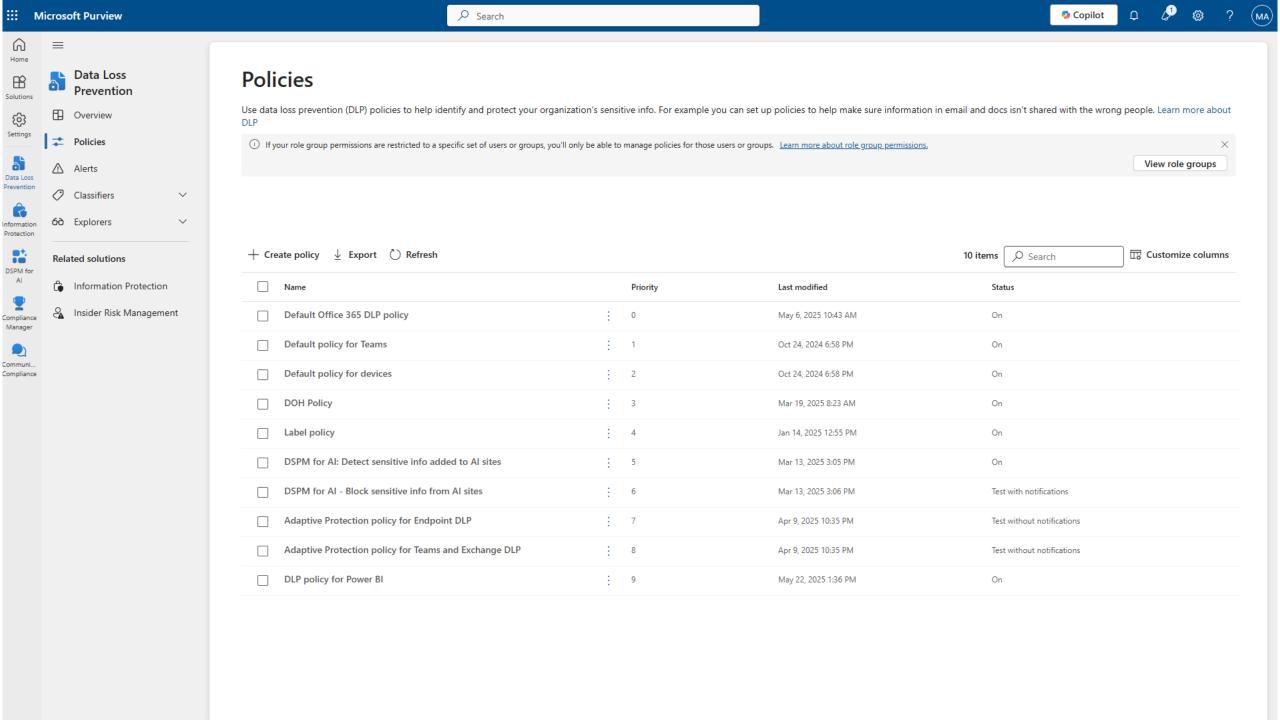
Show policy tips while in simulation mode.

Turn the policy on immediately

After the policy is created, it'll take up to an hour before any changes are enforced.

Leave the policy turned off

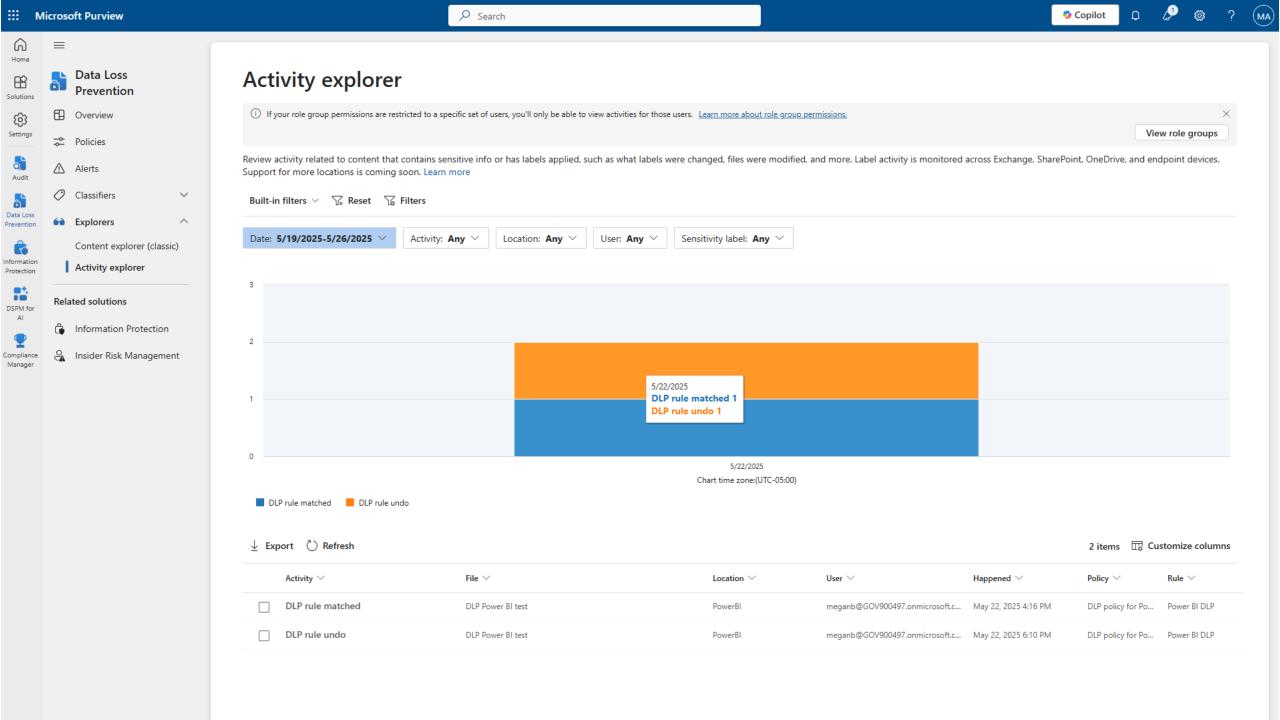
Decide to test or activate the policy later.

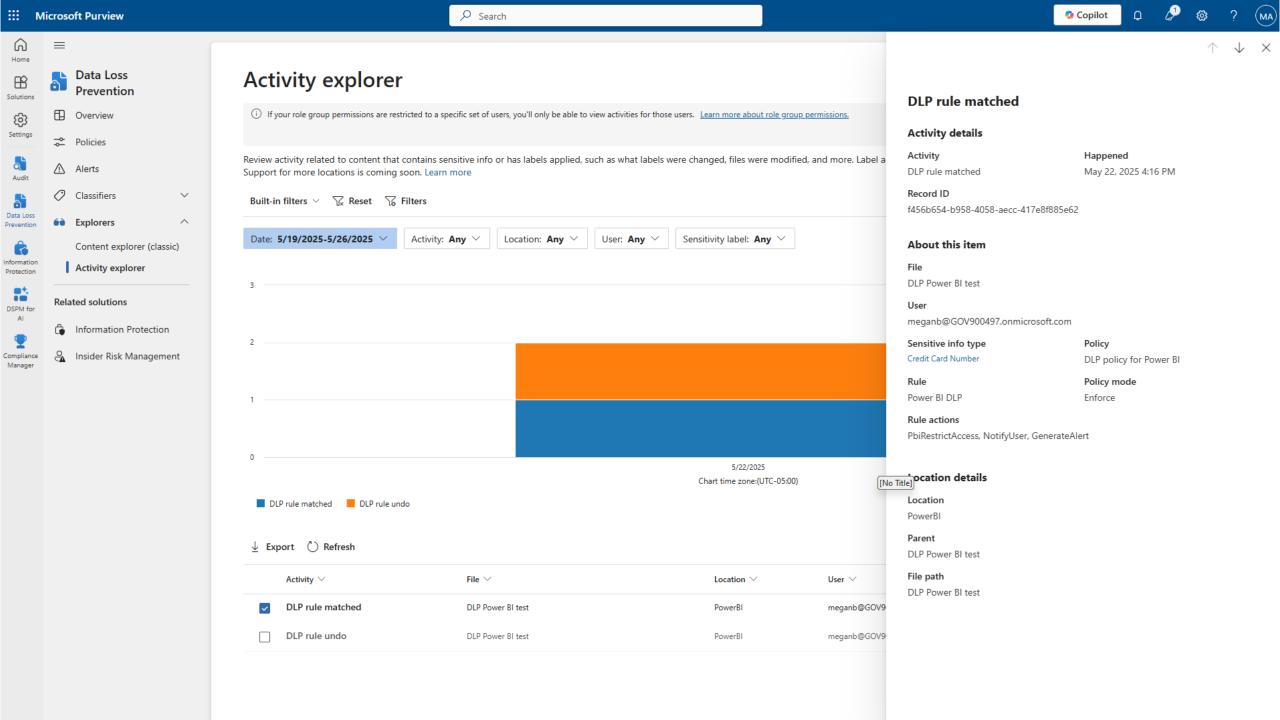


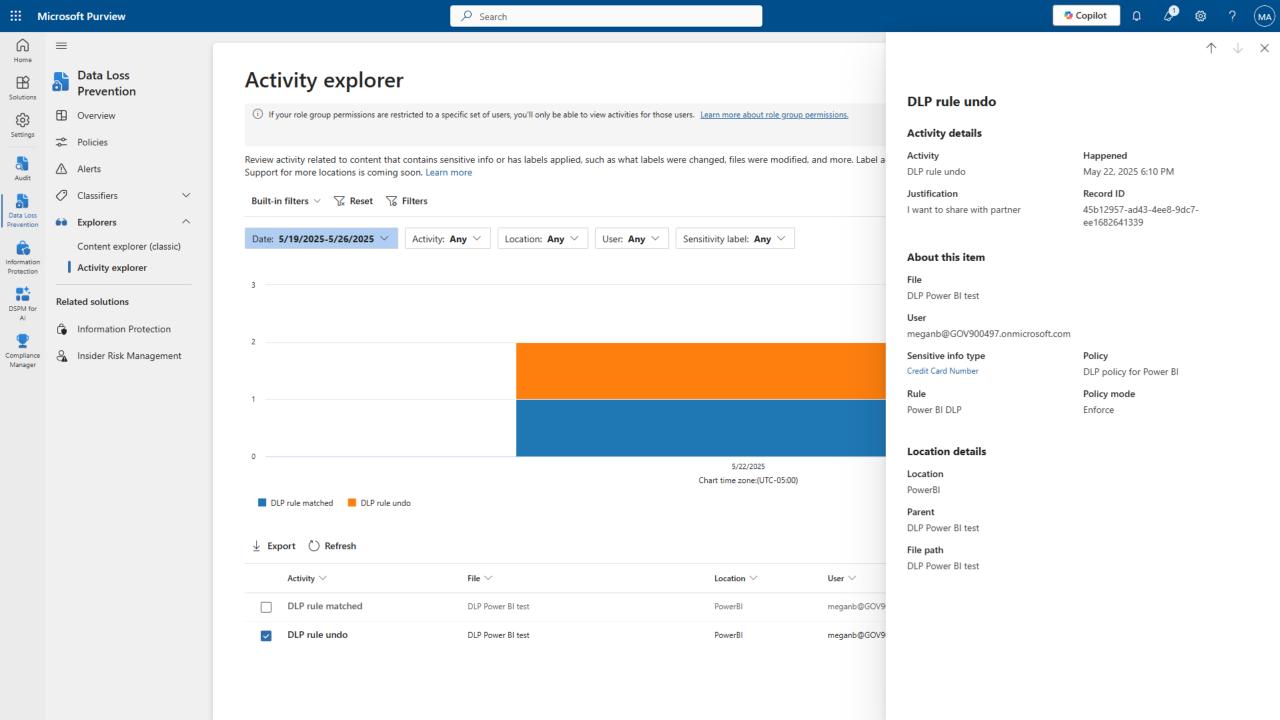


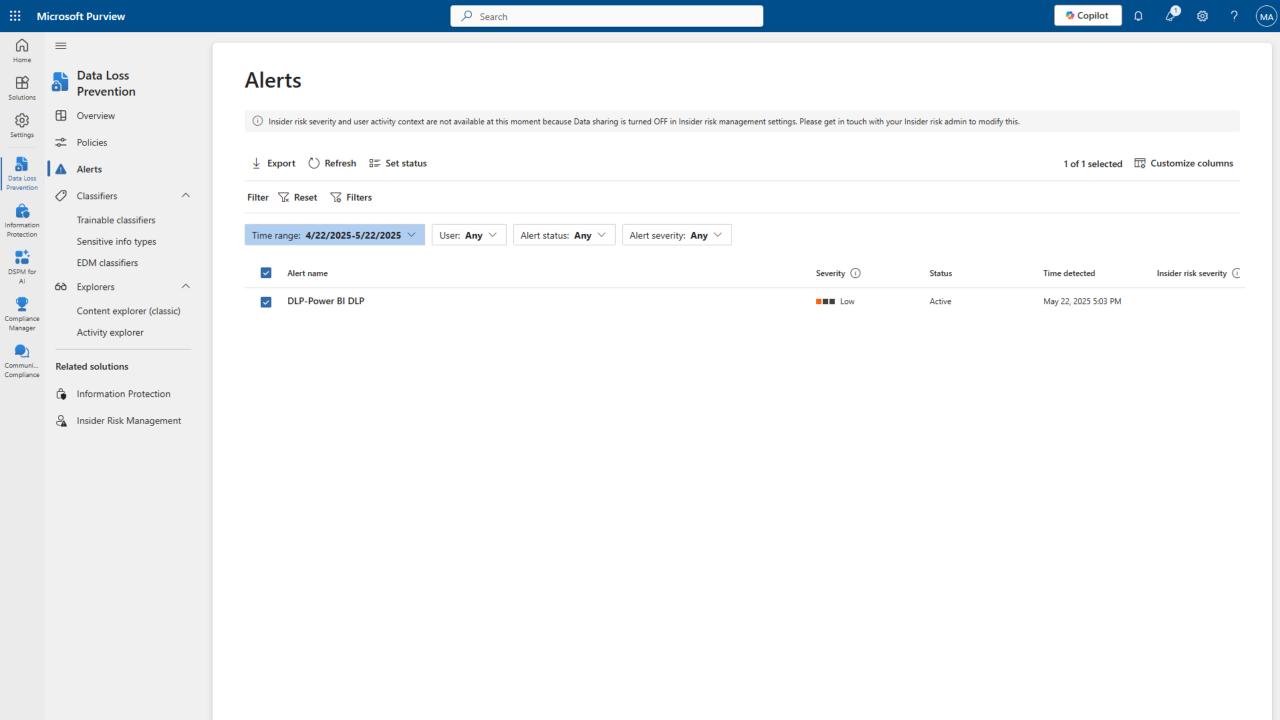
DLP – Admin Experience

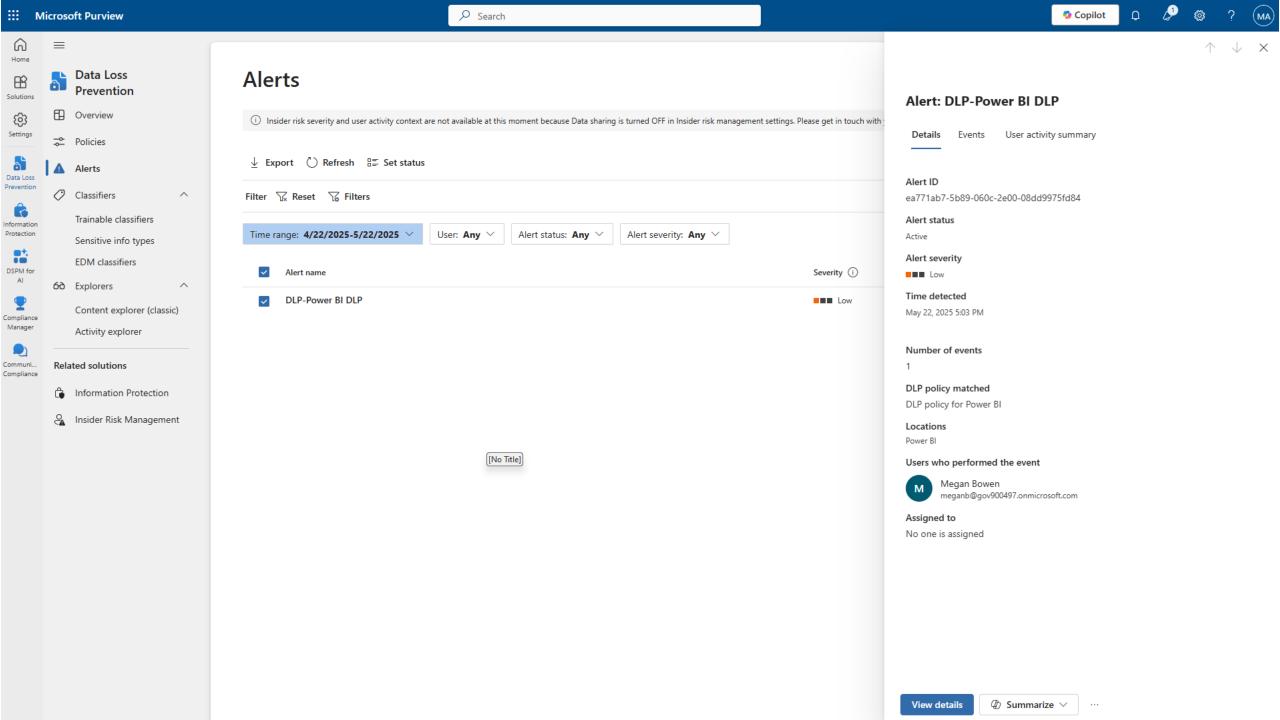
• DLP Policy Matches

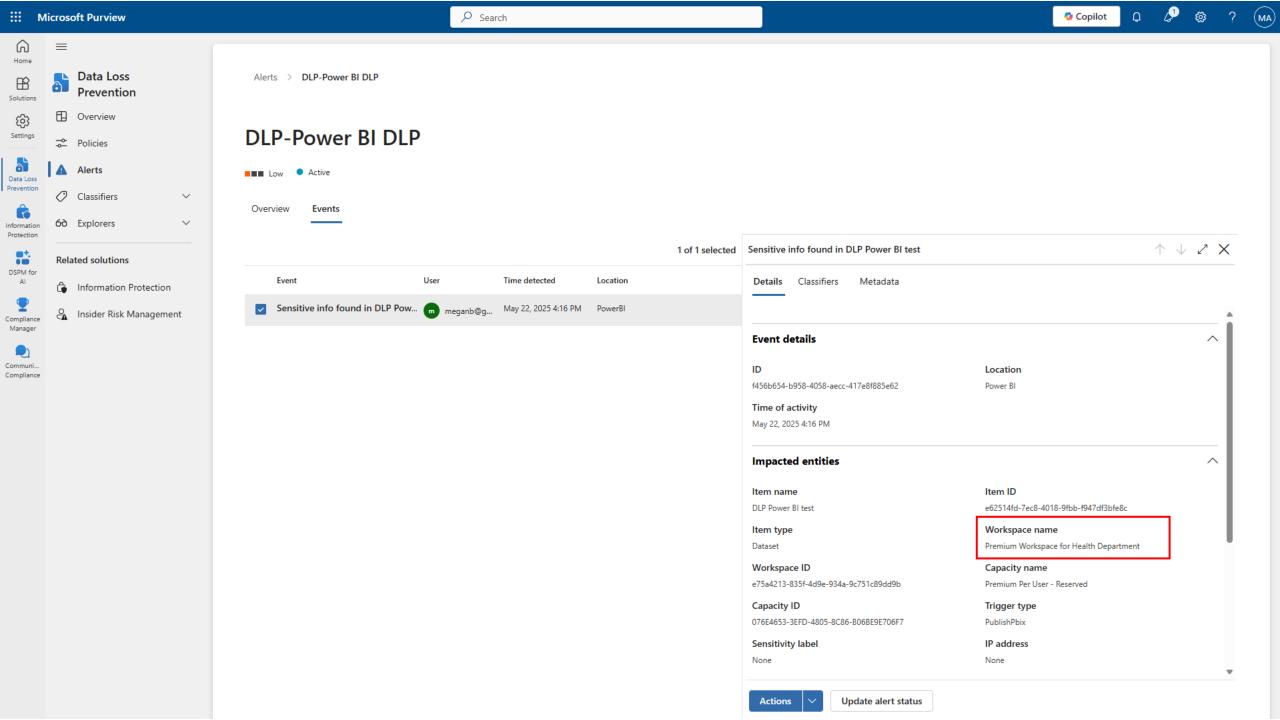


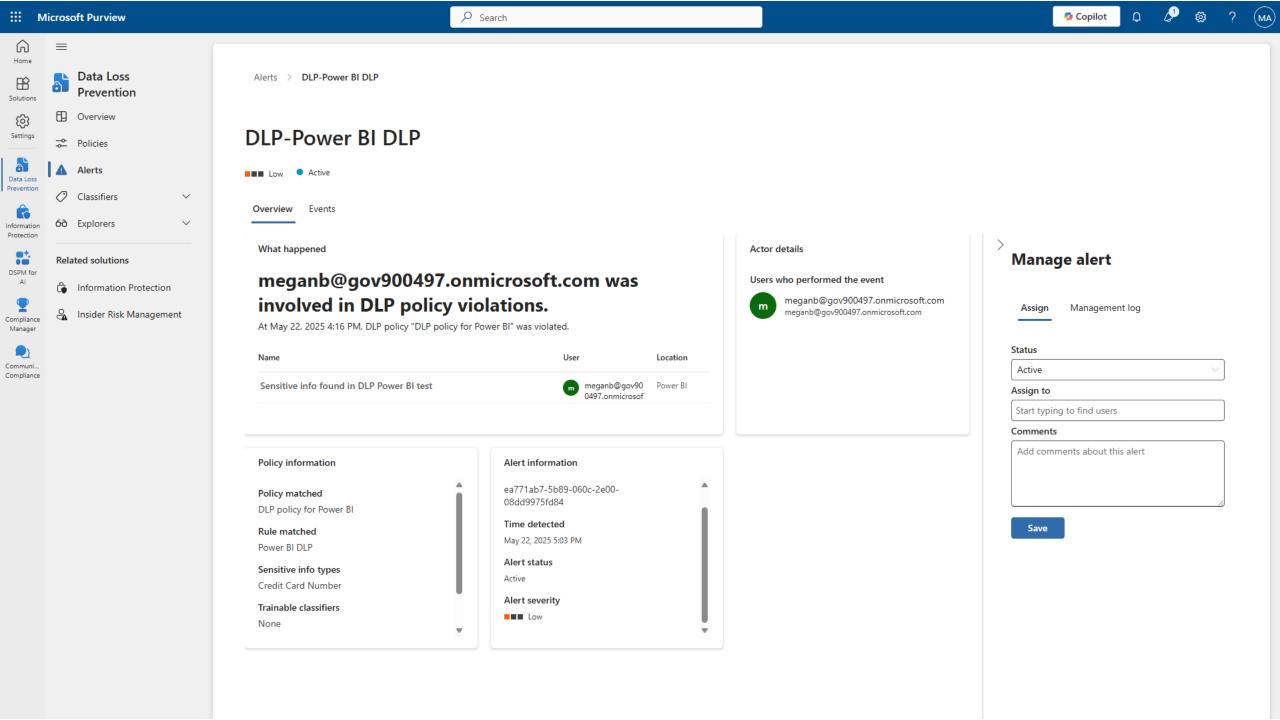








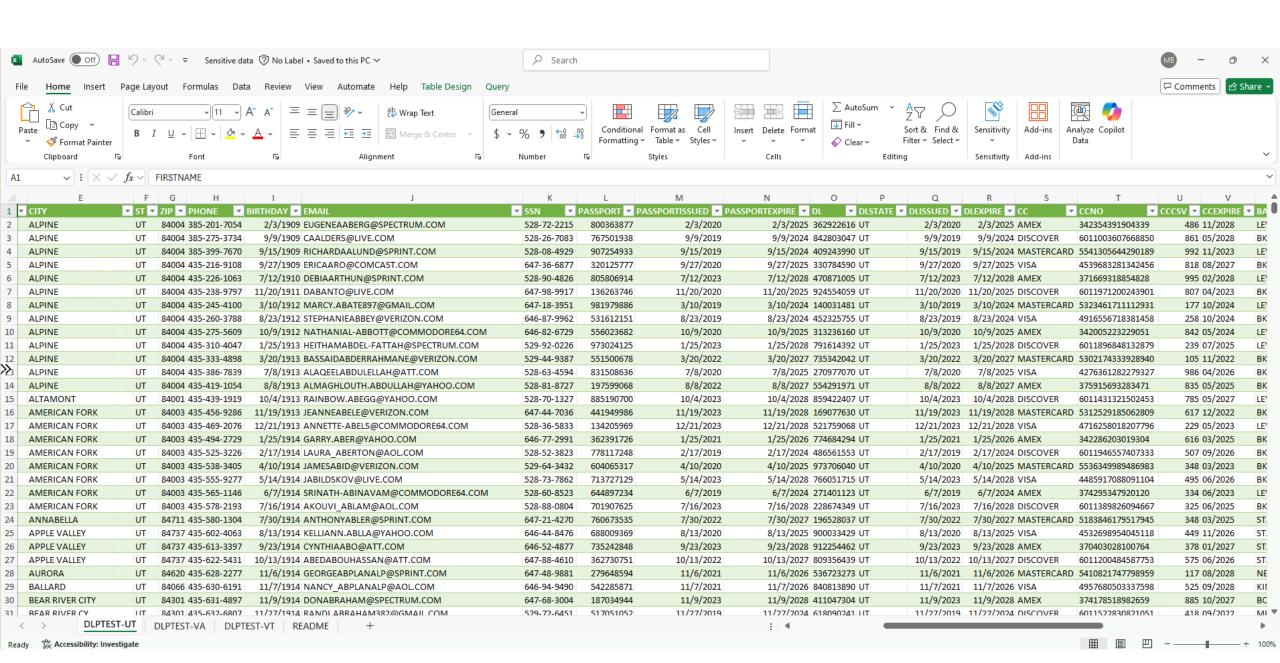




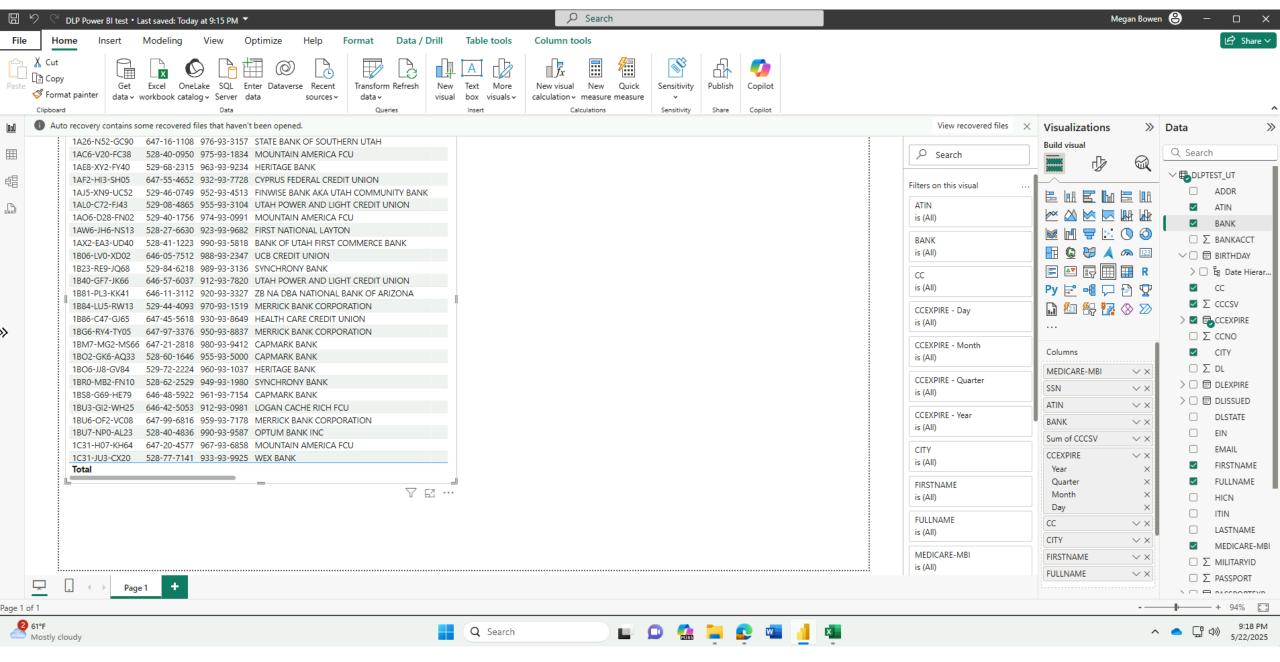


DLP – End User Experience

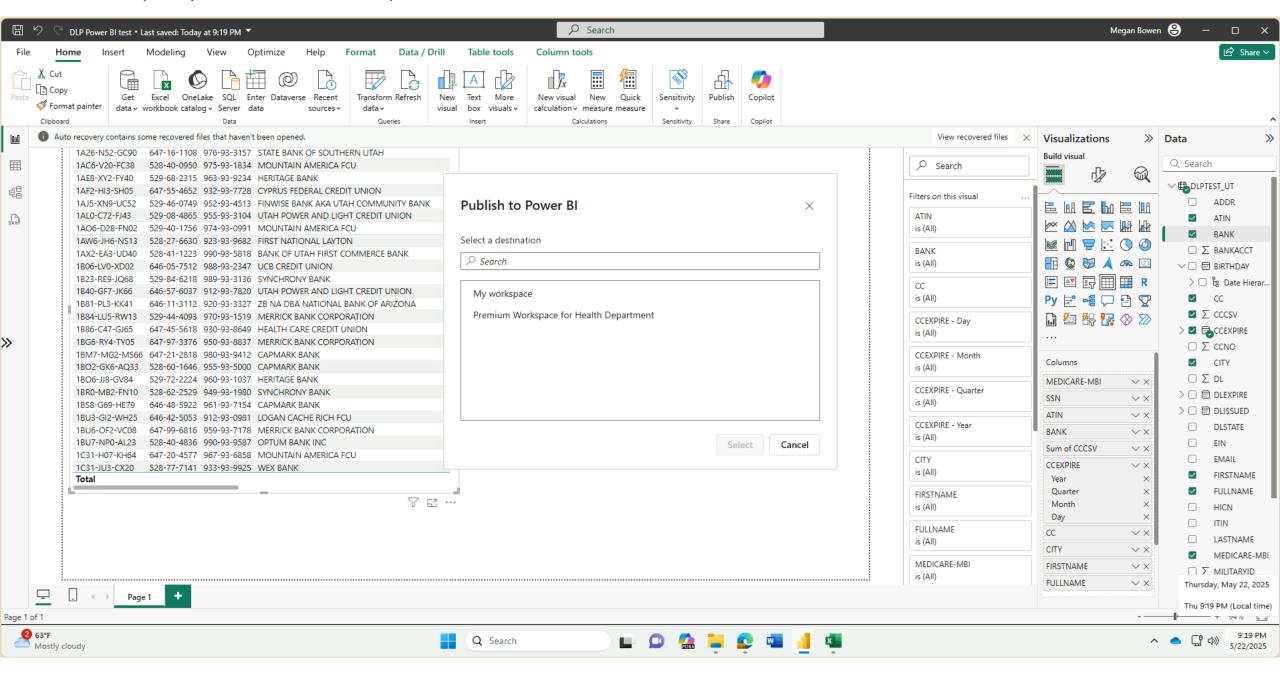
Excel data that contains sensitive info

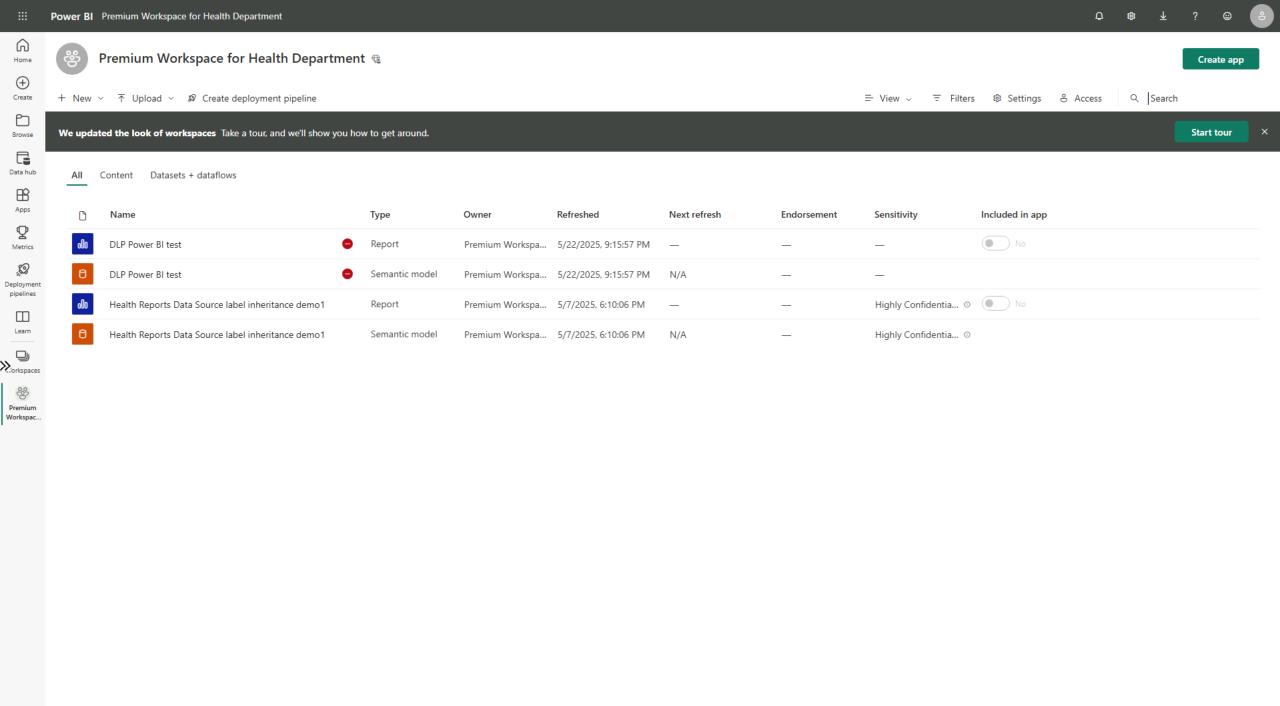


Power BI report created from the sensitive data source

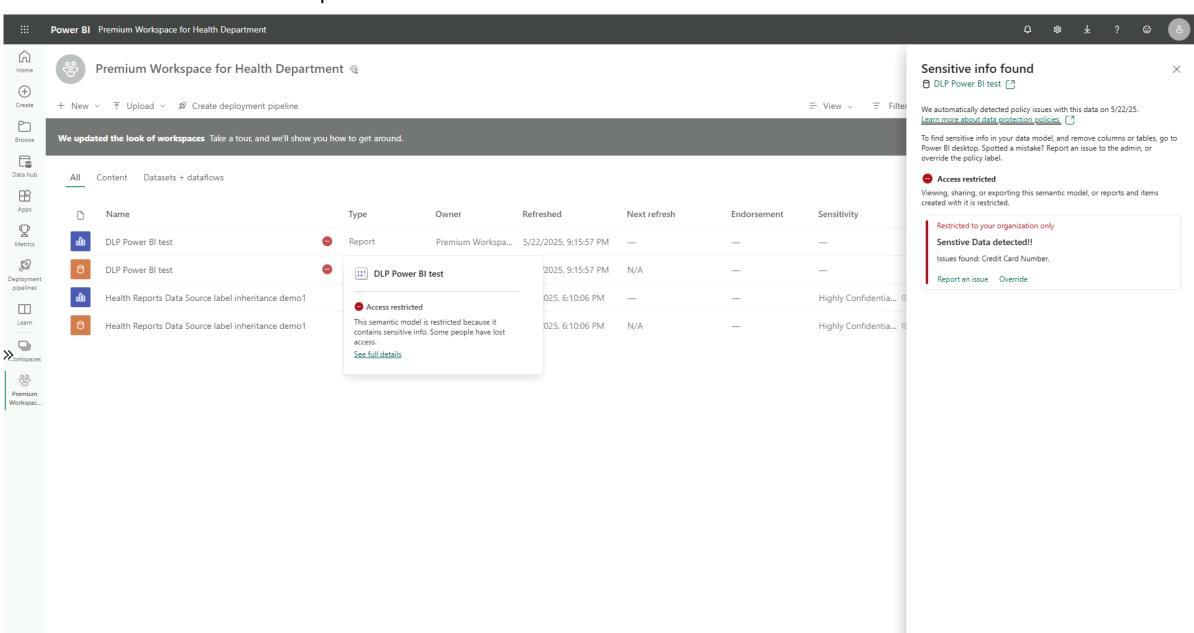


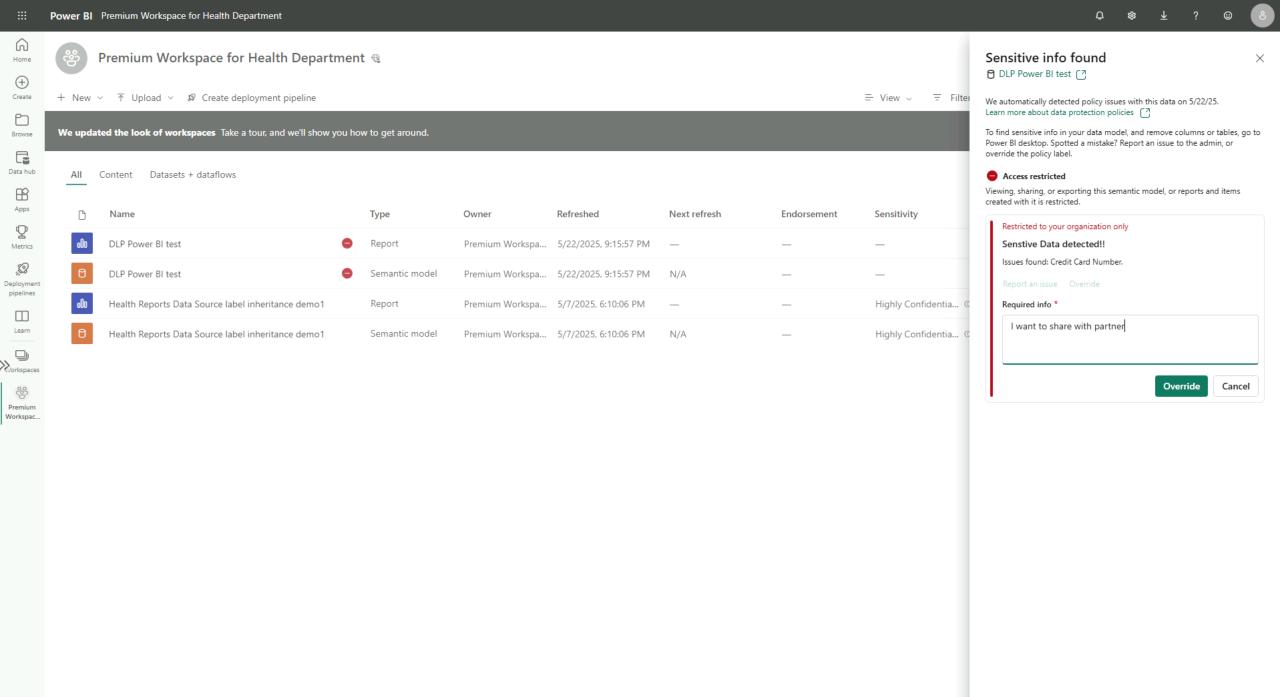
Power BI report published to Workspace

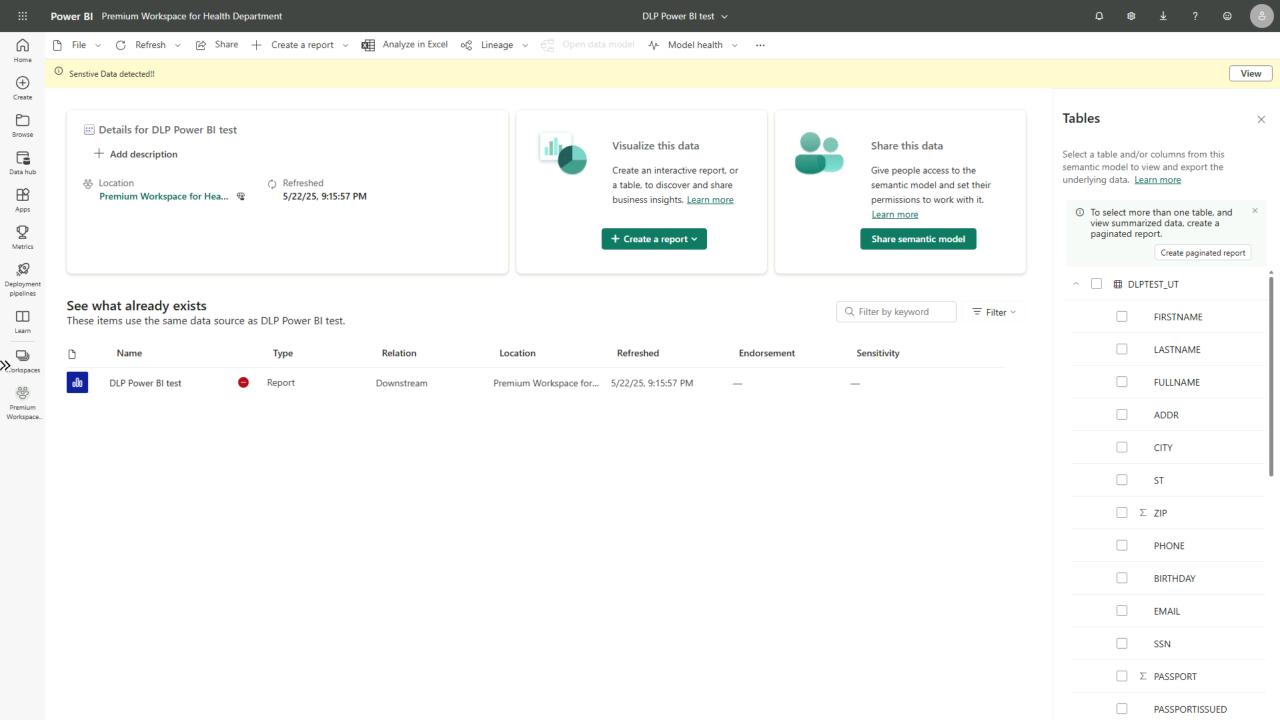


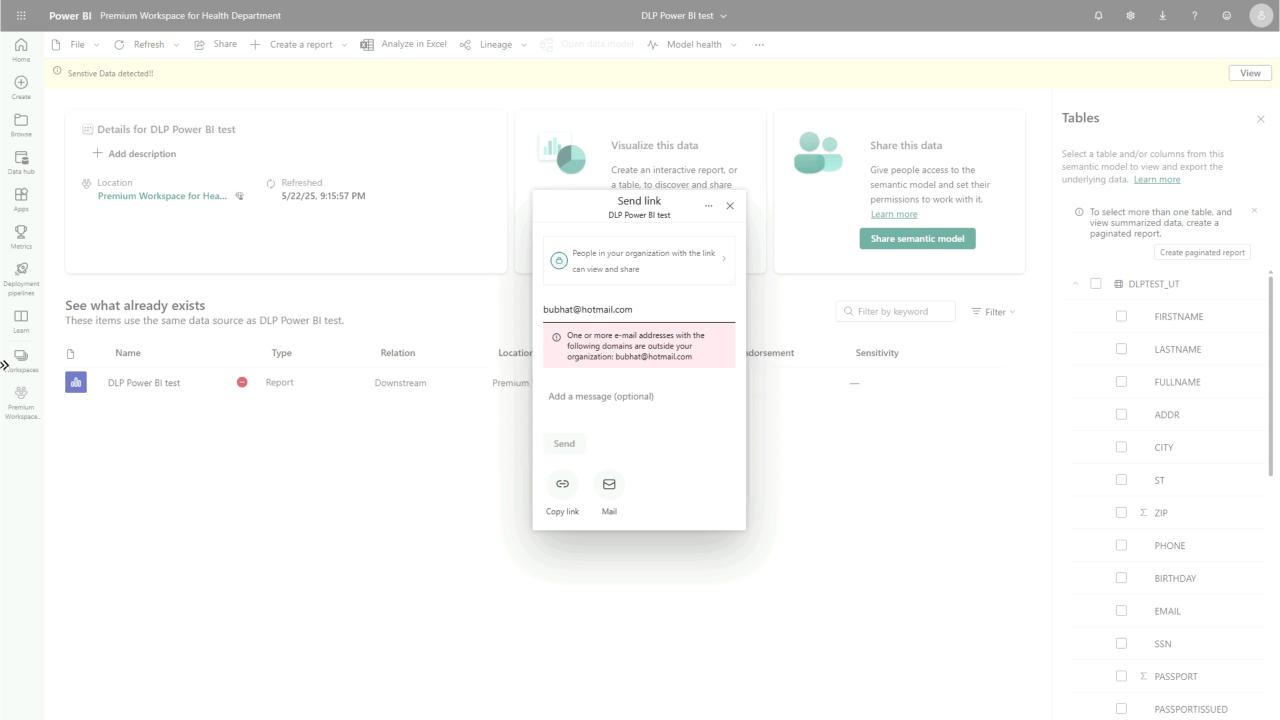


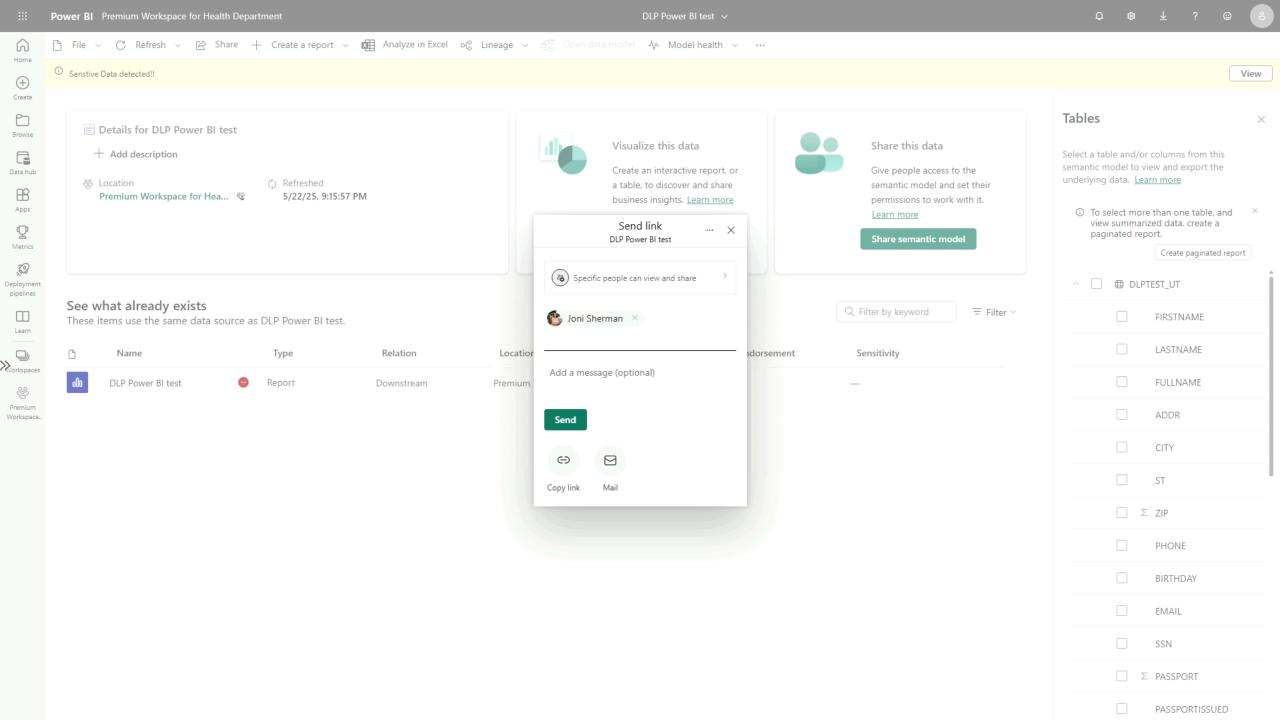
Power BI data set inside the workspace













Microsoft Defender for Cloud Apps for Power BI

Using Cloud App Security, it is possible to detect and control risky Power BI sessions in real time, thus reducing the chance of damage that could be caused by content and data being accessed by malicious actors.

Defender for Cloud Apps Policies for Power BI

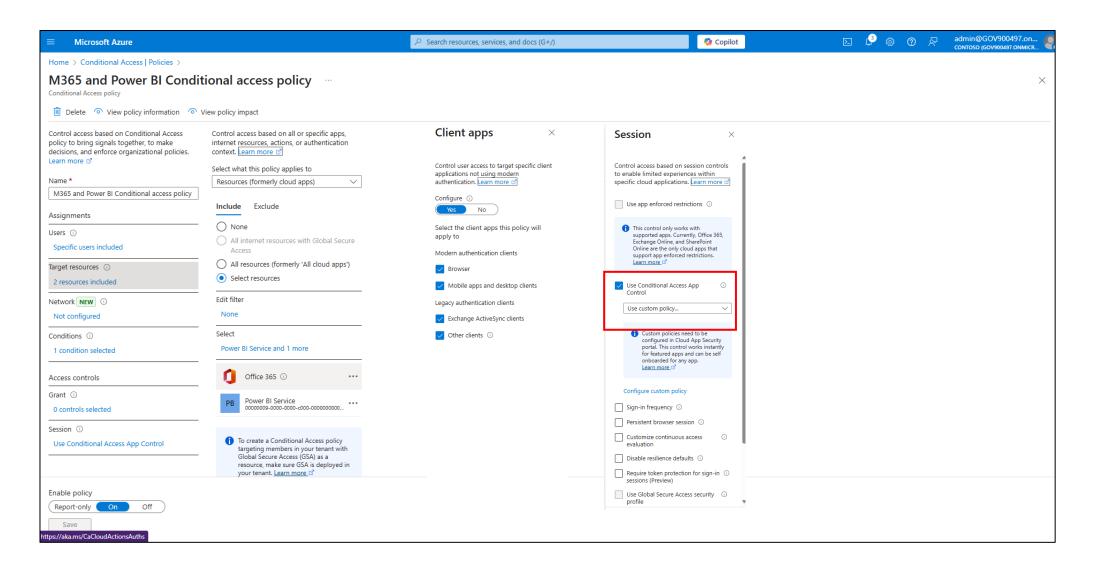
Monitor, block, or control user sessions in <u>real time</u>.

- Access Policies Controls whether a user is allowed to sign in to a cloud application like the Power BI service.
- Session Policies Allows access for the user while monitoring or limiting what actively occurs during their session.

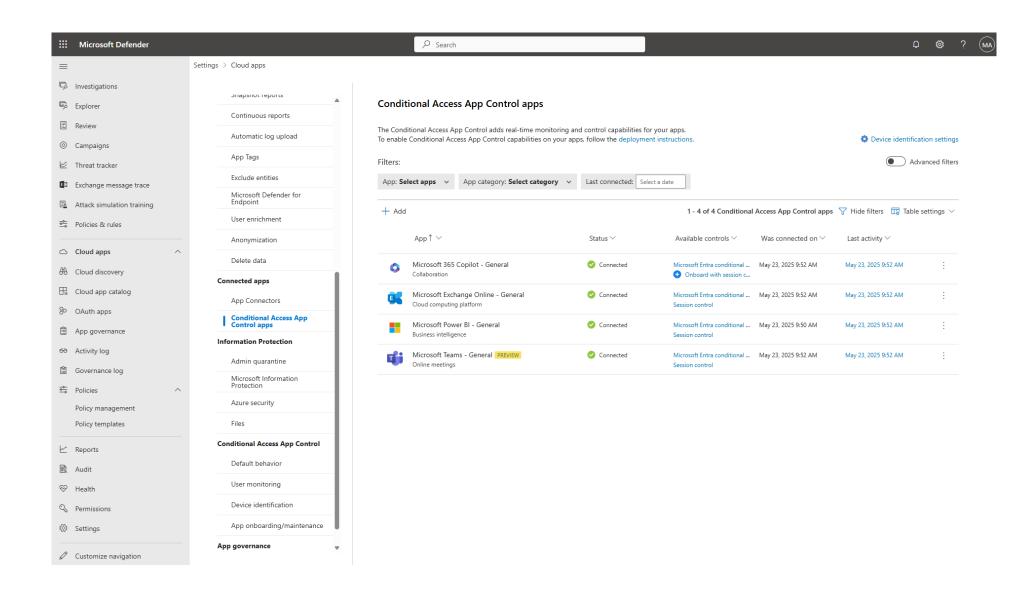
Monitor and act on activities recorded in Power BI activity log (Non-Real time policies)

 Activity policies – Take Governance actions based on a single or repeated activity already performed by the user

Create Conditional access policies in Microsoft Entra ID



Defender for Cloud Apps – Conditional Access App control

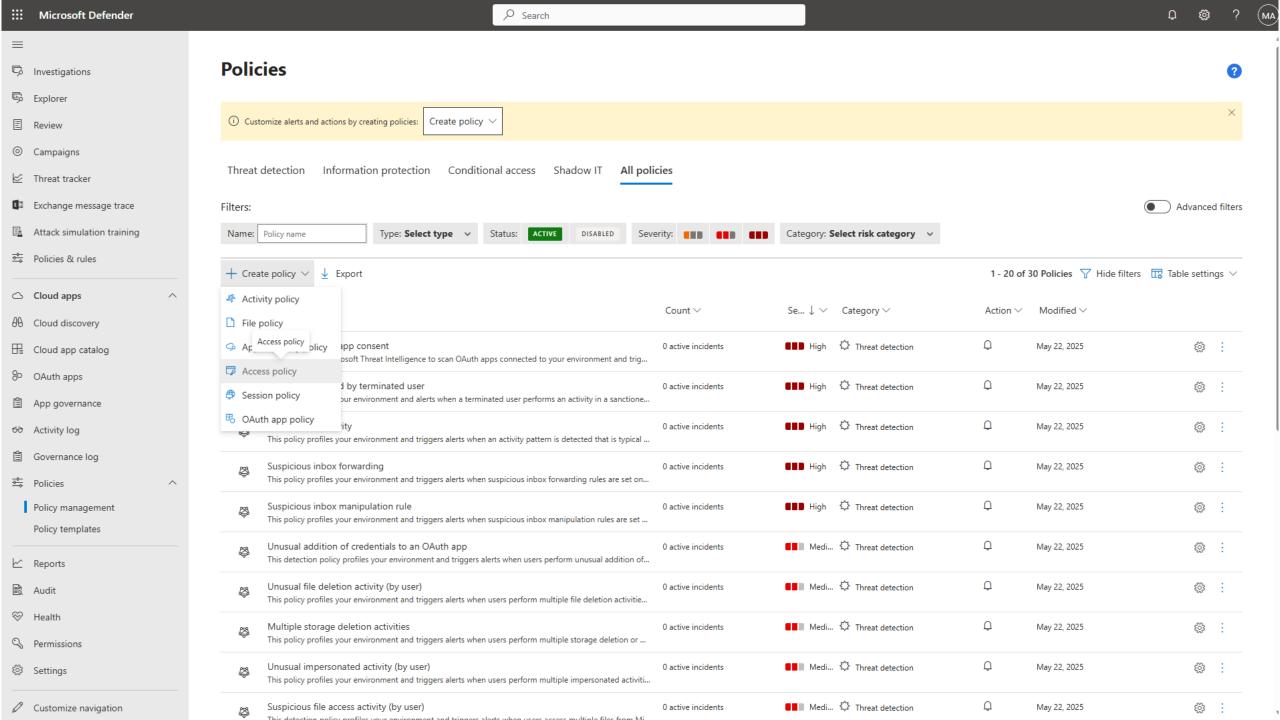


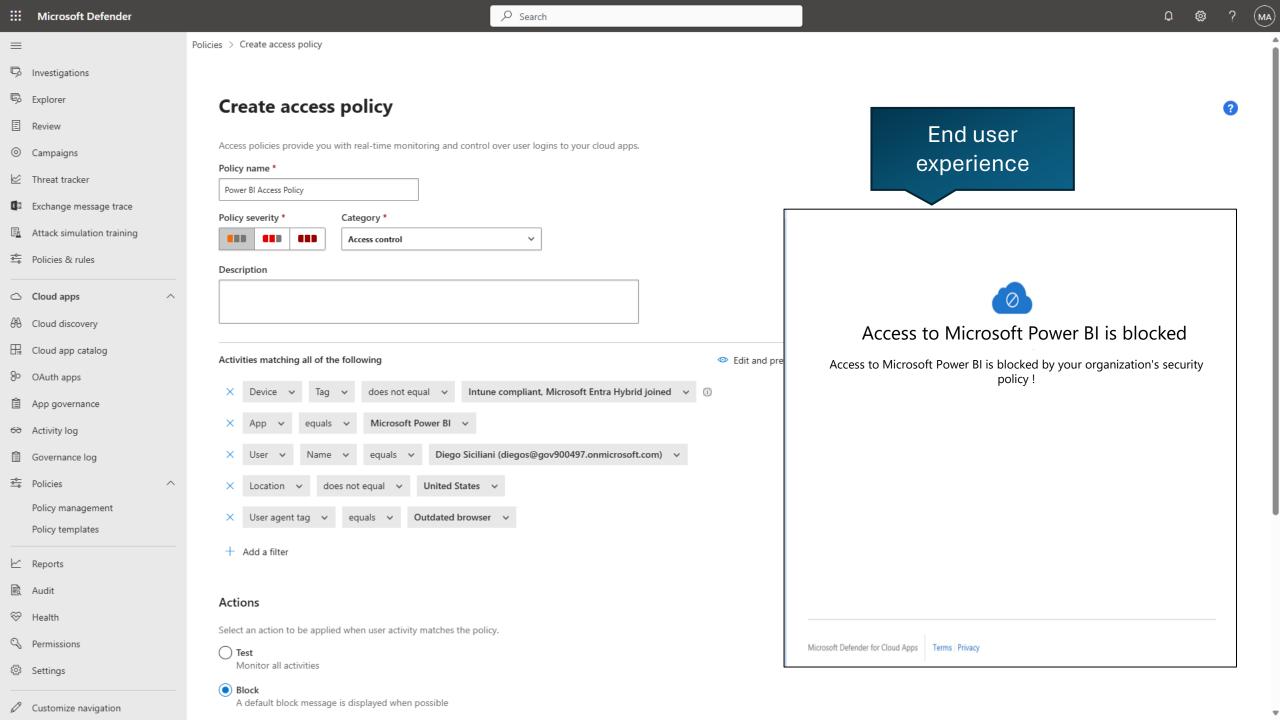
Custom access policies for Power BI

An access policy created in Defender for Cloud Apps controls whether a user is allowed to sign in to a cloud application like the Power BI service.

Examples to use access policies to block access to the Power BI service:

- Unexpected user
- Non-managed device
- Outdated browser or operating system
- Unknown location or IP address

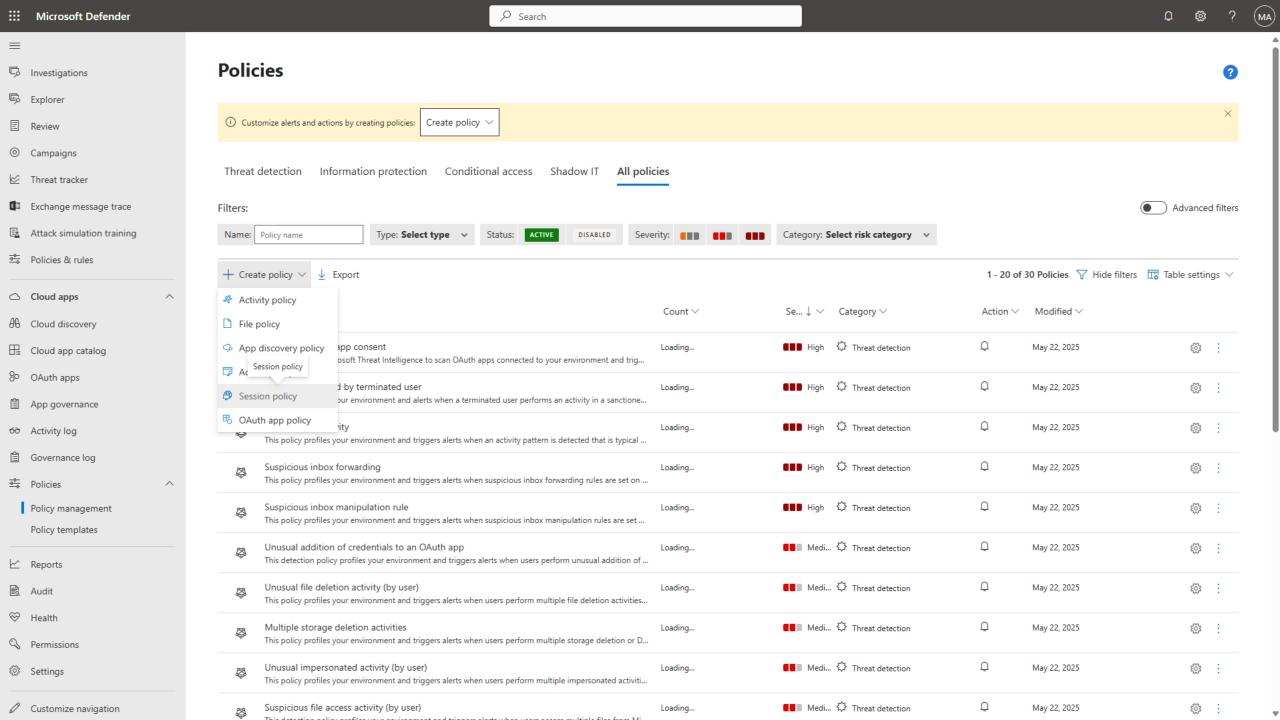


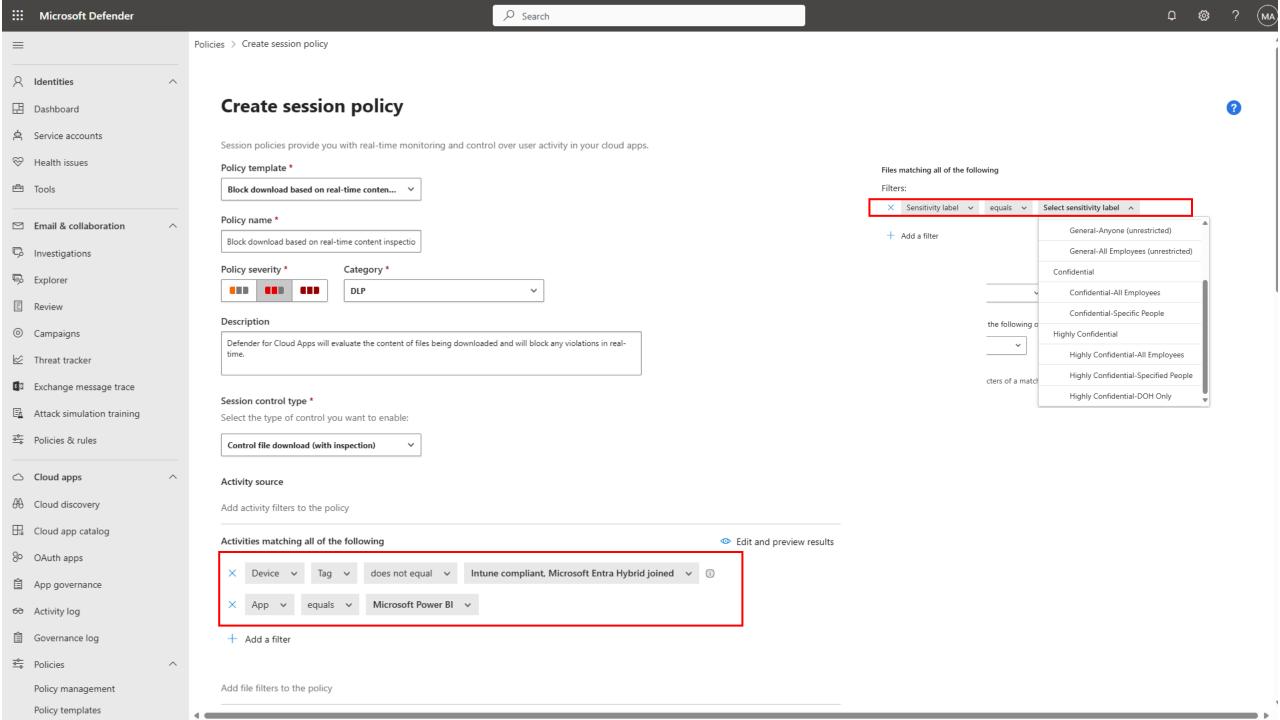


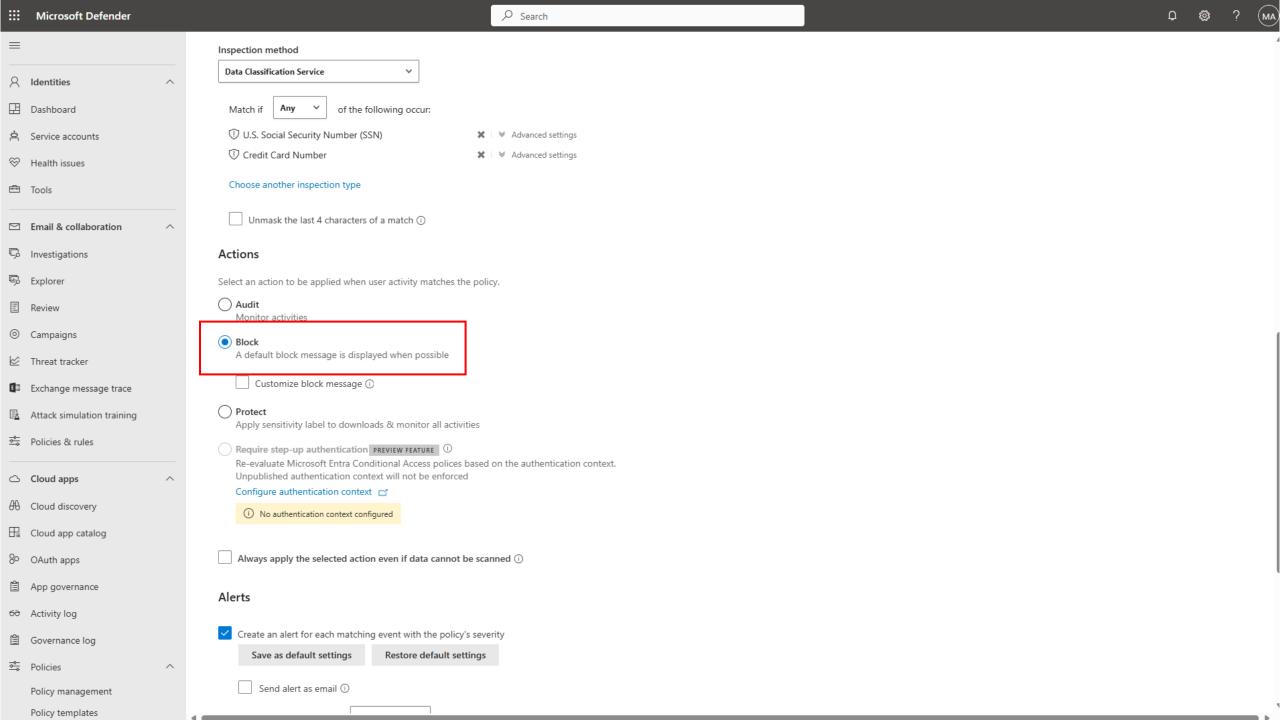
Custom session policies for Power BI

Use session policies to monitor, block, or control user sessions in the Power BI service. Useful when you don't want to allow or block access completely.

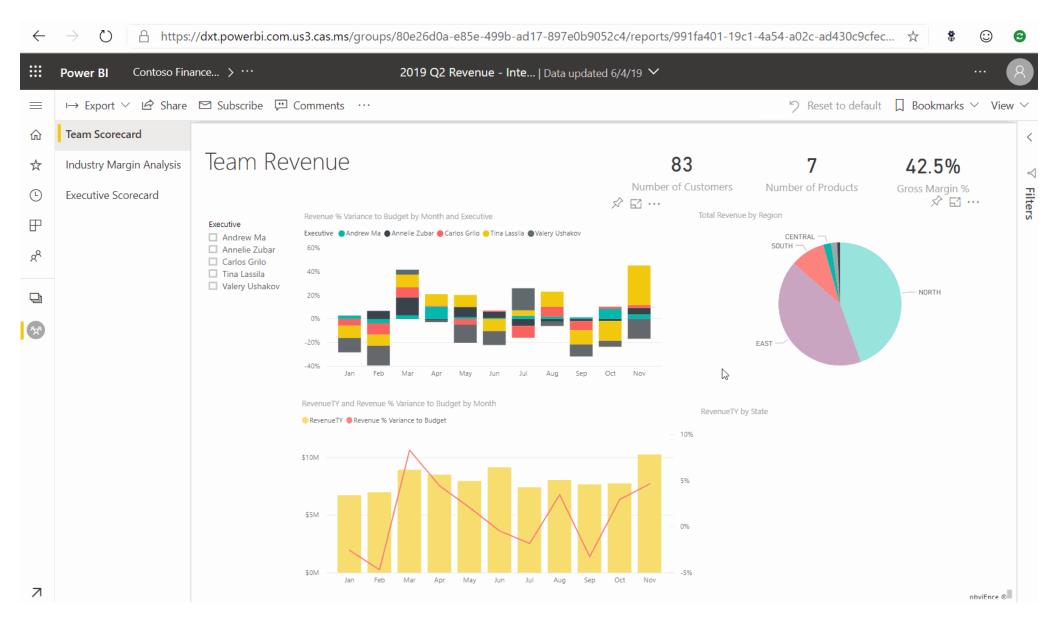
- Example:
 - Block downloads and exports when a specific sensitivity label, like *Highly Restricted*, is assigned to the item in the Power BI service.
 - Monitor when a user, who meets certain conditions, signs in.
 - Control file uploads with session policies



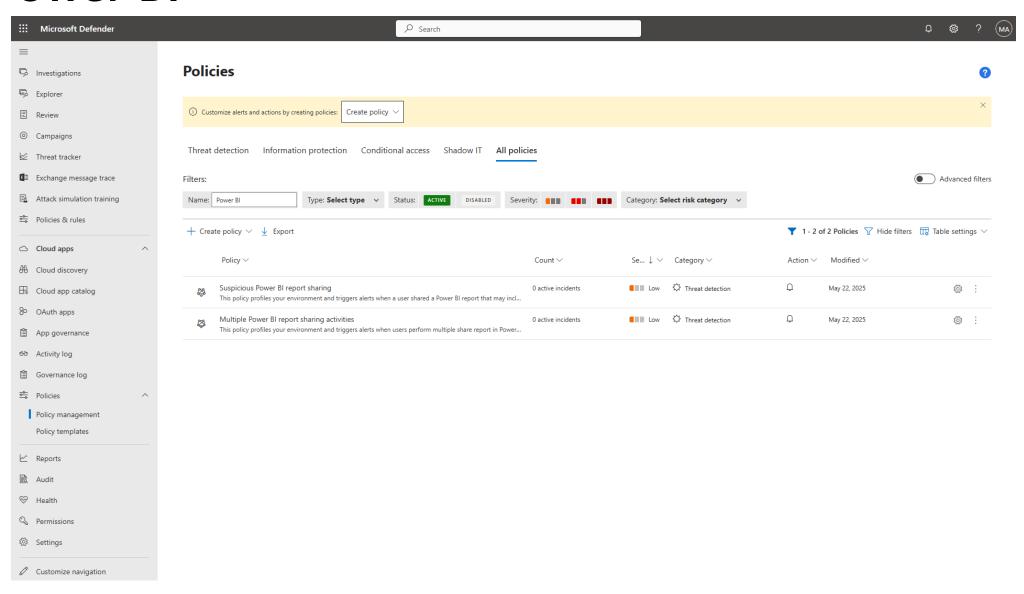




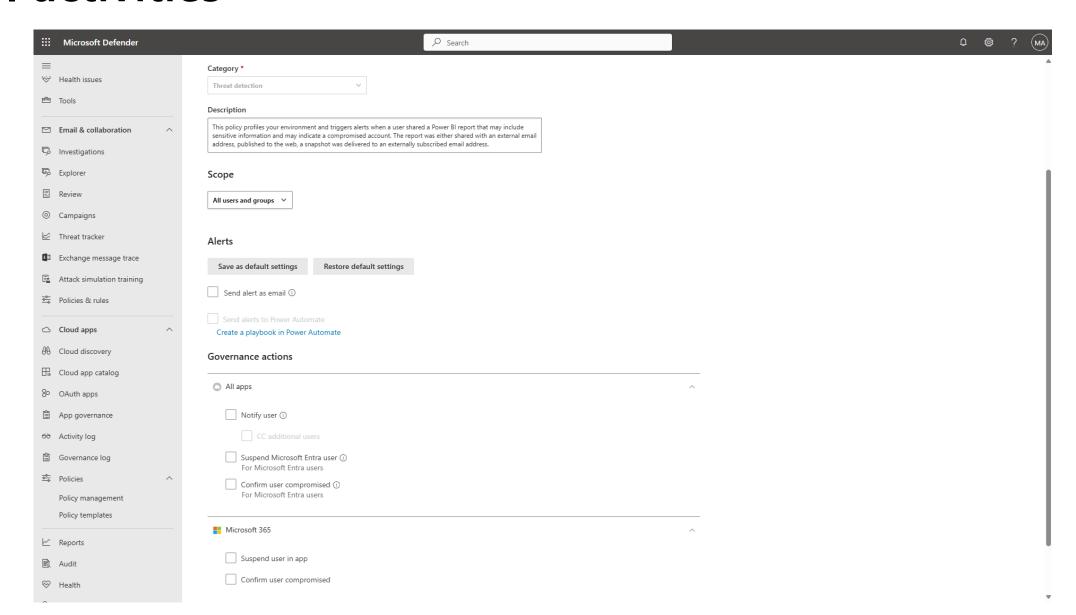
Real Time Controls through session policies



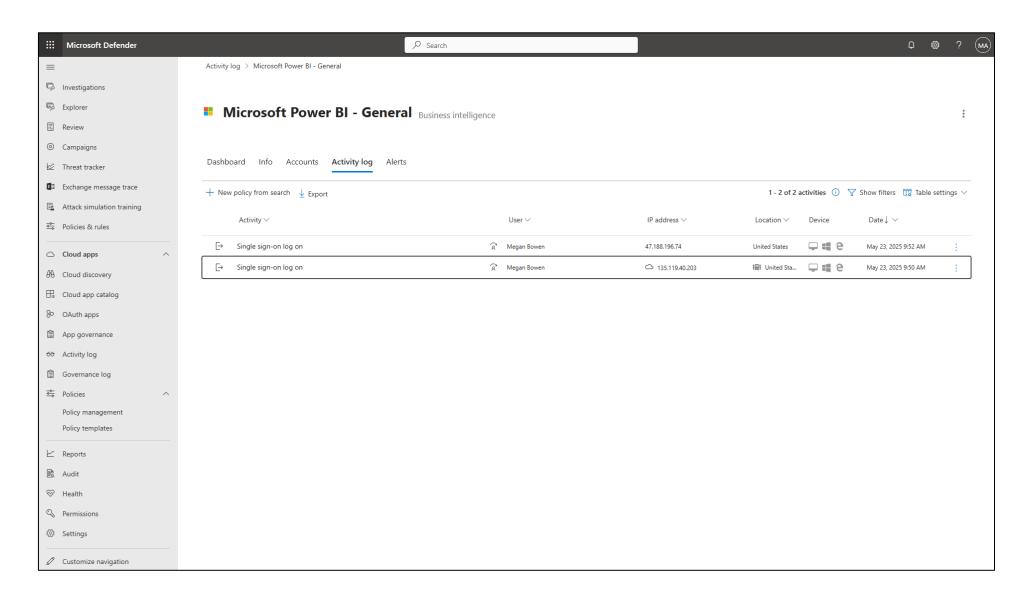
Built-in Defender for Cloud Apps detections for Power BI



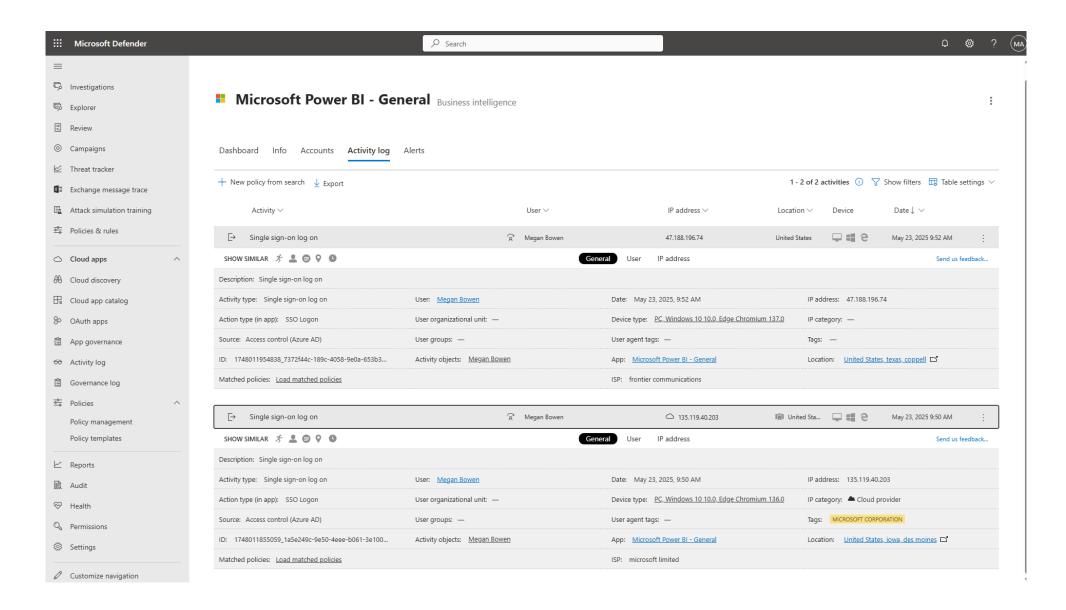
Set anomaly detection policies to monitor Power BI activities



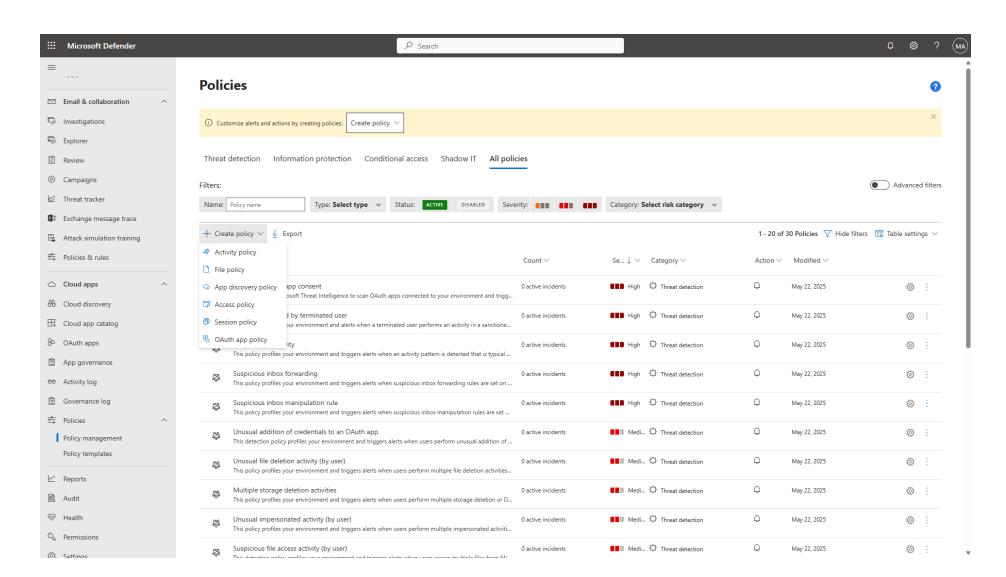
Defender for Cloud Apps - Activity Log for Power BI



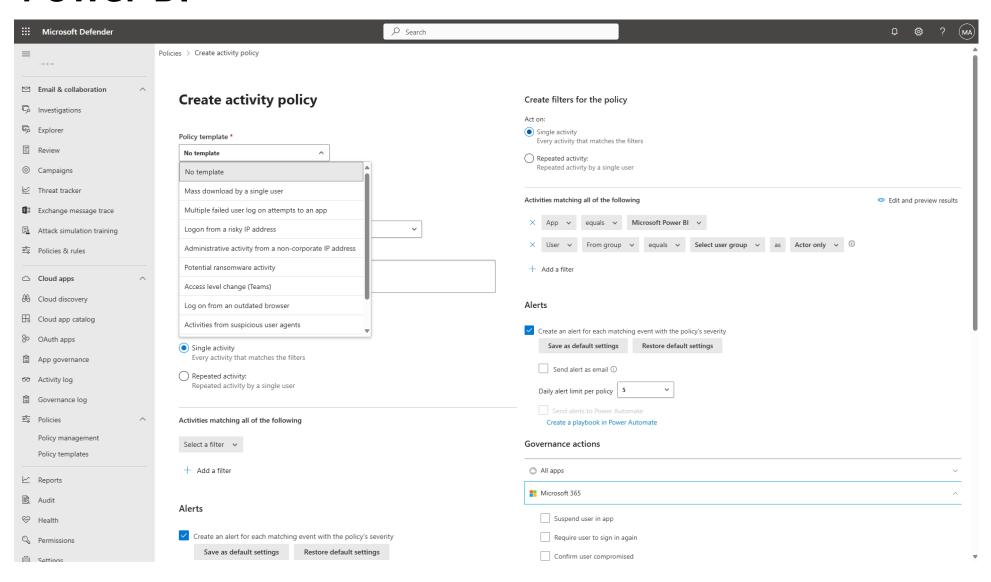
Defender for Cloud Apps -Activity Log for Power BI



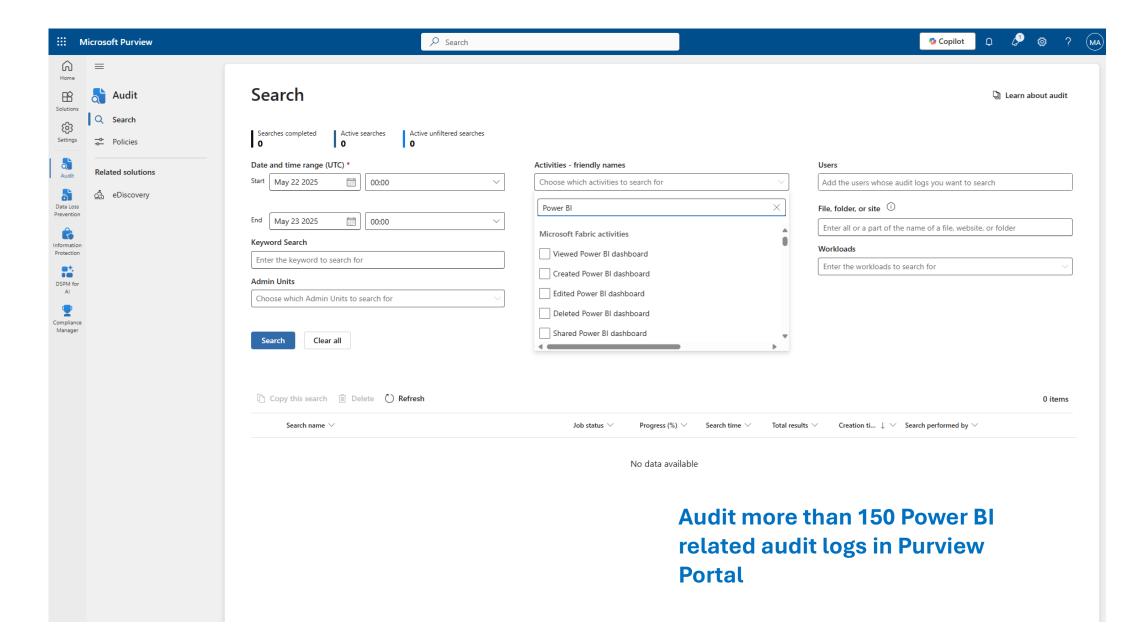
Custom policies to alert on suspicious user activity in Power BI



Custom policies to alert on suspicious user activity in Power BI



Power BI Audit logs in Microsoft Purview



Power BI Security Licenses for GCC

Feature	Required Licenses
Sensitivity Labels	Power BI Pro OR Premium Per User (PPU) + M365 G3/AIP P2/M365 G5 IP&G/M365 G5 Compliance/G5 licenses
<u>DLP Policies</u>	Power BI Premium capacity OR Premium Per User (PPU) + M365 G5 IP&G/M365 G5 Compliance/M365 G5 licenses
Security Monitoring	M365 G5 IP&G/M365 G5 Compliance/M365 G5 licenses
Audit Log Retention (1 year)	M365G5 eDiscovery & Audit /M365 G5 Compliance/M365 G5 licenses

Additional Info

- References:
 - Info Protection and DLP for Power BI
 - Sensitivity labels in Power BI
 - Defender for Cloud Apps for Power BI
 - Auditing of information protection and data loss prevention for Power BI
- **Next Session** Guidance on CJIS Compliance for State and Government agencies.
- Schedule a meeting with a SLG Purview Specialist for any questions or live demonstrations. Email: <u>MSSLGCompliance@microsoft.com</u>

