

KEEPING UP WITH YOUR POWER BI TENANT ADMINISTRATION

WHO AM I

Power BI CAT

data Minds.be Member



@BenniDe Jagere



/bennidejagere



sessionize /bennidejagere



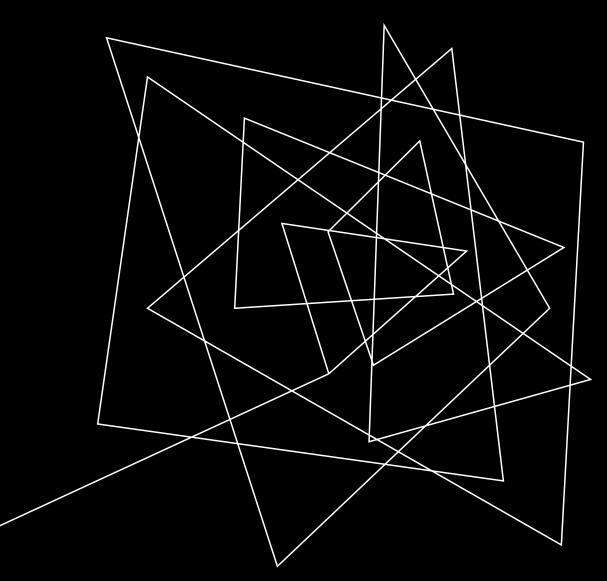
/bennidejagere



#SayNoToPieCharts

OBJECTIVES

Emphasize role of auditing and logging
Eloborate on common patterns
Spark ideas for useful actions
Look at free techniques to implement



HI THERE!

HELLO, (ACCIDENTAL) TENANT ADMIN!

Dedicated resources are not common, especially in SMBs

Overlap with M365 is often not the case

Plenty of admins are appointed by association

le. You're the 'SQL' person, so ...

Early experiences were based on trial and error

Community & Enterprise maturity has risen exponentially

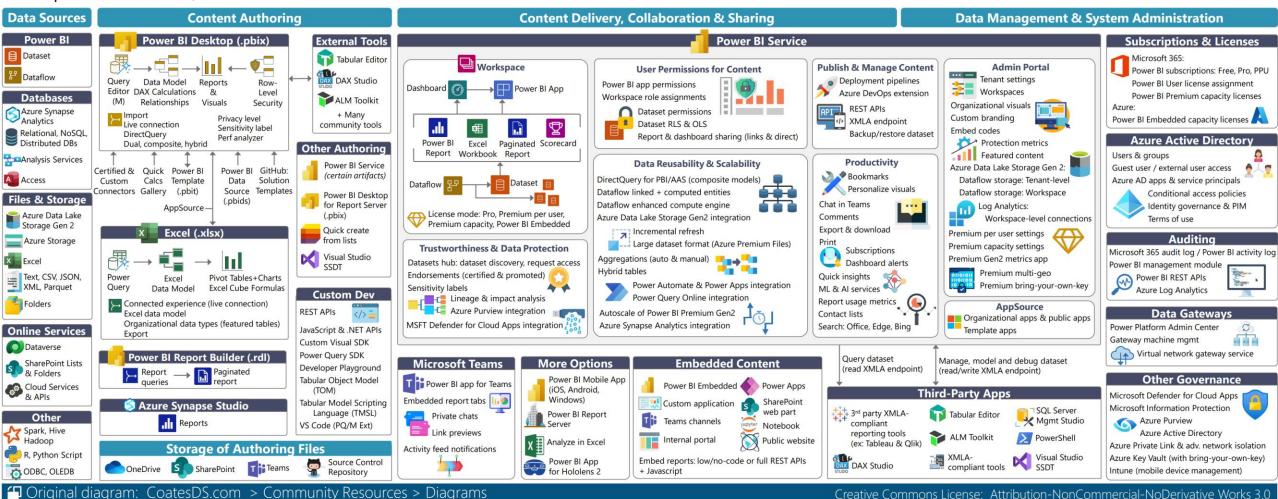
Power BI is a moving target ©

POWER BI END-TO-END

Power BI End-To-End: Top Features, Key Integration Points & Related Services

Last Updated: March 23, 2022





WHAT DOES A TENANT ADMIN DO?



A Tenant Admin should strive to Empower and Enable a Data Culture in their organisation.

Restricting and disabling features means policies, processes, and people need to be able to handle incoming requests and guide along the way.

But they can't do it alone ©

WHAT DOES A TENANT ADMIN DO?

Data Management

Data Governance

Security & Compliance

Change Management

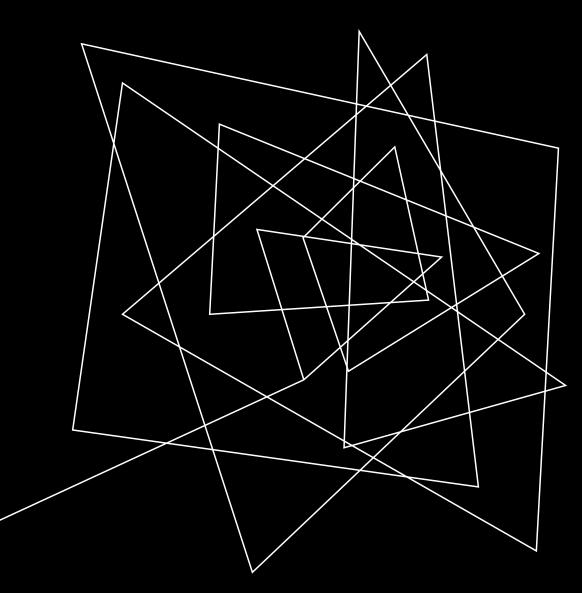
Product Integration

Problem Solving

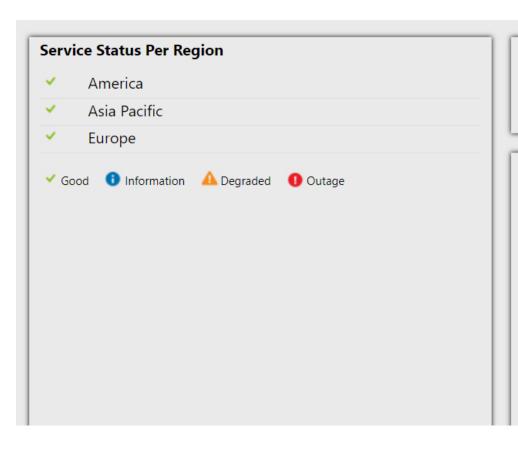
But most importantly ...

WHAT DOES A TENANT ADMIN DO?





Power BI Support



Service Outage/Degradation

No known issues: Power BI is running smoothly

Awareness

- Power BI customers attempting to upgrade a workspace from the settings pane will be redirected to the home page instead of the upgrade UI. As a workaround customers can:
 - 1. Upgrade using the "Upgrade now" link in the banner.
 - 2. Open the report settings pane for any report within the workspace, close the pane, then try to upgrade from the workspace settings pane again.
 - 3. Ask a tenant or Power BI admin to upgrade the workspace from the workspaces page in the admin portal.
 - Engineers have identified the root cause and a fix is expected to be deployed by end-of-day 02/07/2021.

Tenant Settings

Receive email notifications for service outages or incidents Disabled for the entire organization

Mail-enabled security groups will receive email notifications if this tenant is impacted by a service outage or incident.



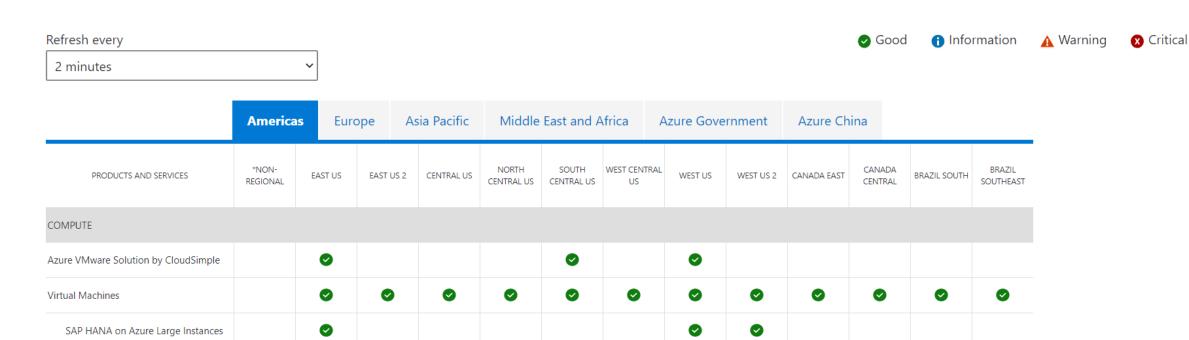
Apply

Cancel

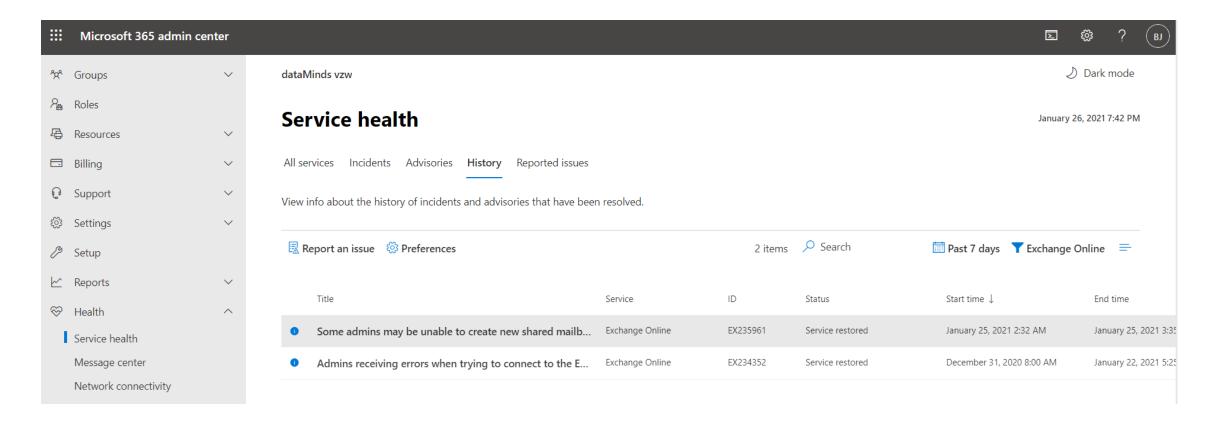
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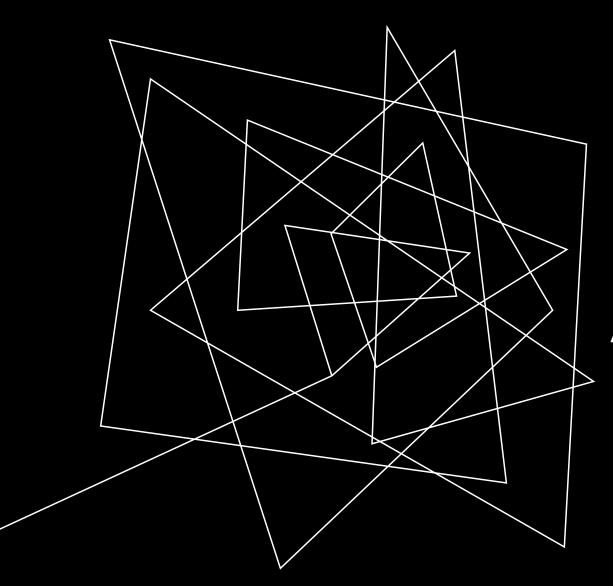
Windows Virtual Desktop

Azure Status



Microsoft 365 Admin Center





ACTIVITY LOG

THE TREASURE TROVE, AKA THE ACTIVITY LOG

Introduced December 2019 (LINK)

Alternative to Office 365 Audit Log

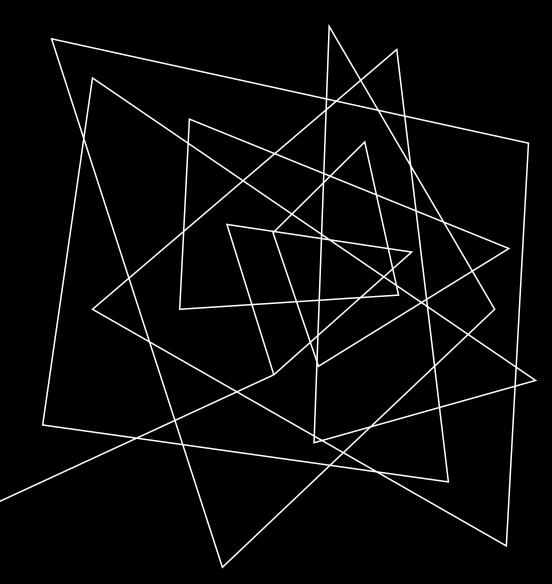
Data is retained for 30 days

Requires Power BI Admin or Global Admin privileges

Your key to many questions

<u>Powershell example</u> (Benni De Jagere)

MSFT Docs



ARTEFACT INVENTORY

THE NUGGET FACTORY, AKA PBI ARTEFACTS

Most artefacts can be extracted through APIs

Track details about under/heavily used artefacts

Admin APIs are your friend, especially \$expand

Lineage (Scanner) APIs is where the nuggets are.

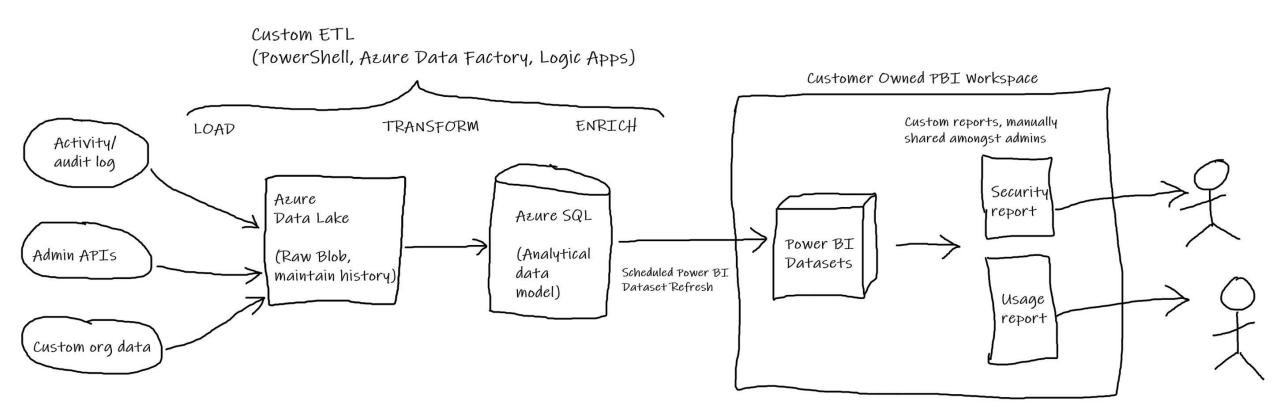
Service Principal is the road ahead

<u>Artefact Example</u> (Just B)

<u>Scanner API example</u> (Tommy Puglia)

<u>Power BI DEV Camp – Admin APIs</u> (Ted Pattison)

TYPICAL AUDITING SOLUTION



HOLD ON ..

Administrative insights with long-term historical tenant activity retention, central metadata, and built-in reports

Article • 02/11/2022 • 2 minutes to read • 2 contributors

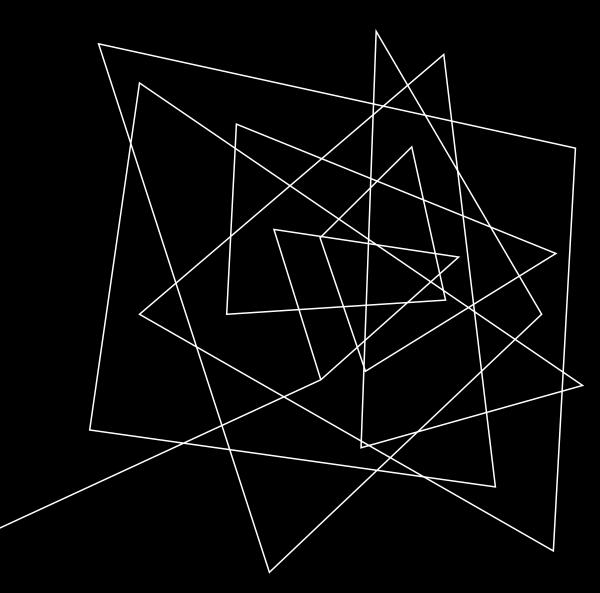


(i) Important

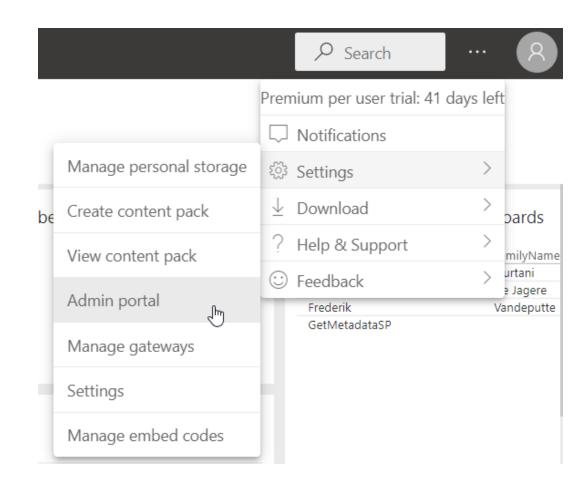
Some of the functionality described in this release plan has not been released. Delivery timelines may change and projected functionality may not be released (see Microsoft policy 2). Learn more: What's new and planned

Enabled for	Public preview	General availability
Admins, makers, marketers, or analysts, automatically	Mar 2022	Sep 2022

Roadmap item



Admin Portal to control behaviour
Document settings
Changes are not easily captured
Activity Log
Cloud App Security Center



Most settings can be scoped to:

Enable/Disable behaviour

Entire Organisation

Include/Exclude Groups

Mail-Enabled Security Groups work best

Info by Fourmoo

Create workspaces (new workspace experience) Unapplied changes
Users in the organization can create app workspaces to collaborate on dashboards, reports, and other content. Even if this setting is disabled, an upgraded workspace will be created when a template app is installed.
Enabled
Apply to:
The entire organization
Specific security groups
Enter security groups
✓ Except specific security groups
Enter security groups
Apply Cancel

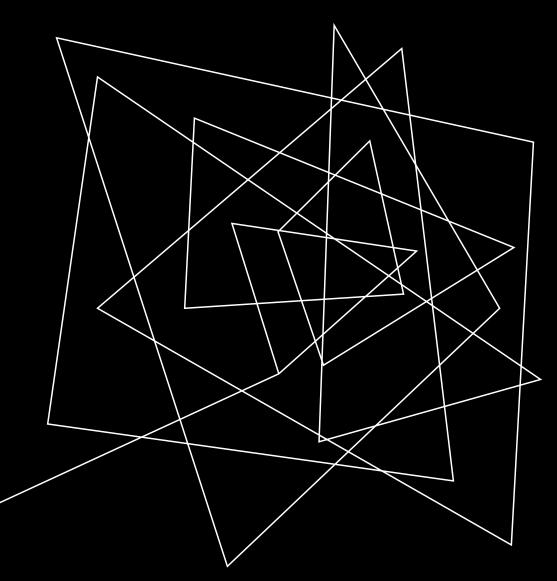
Pay special attention to:

Workspace Settings

Export and Sharing Settings

Power BI Visuals

<u>Tenant Settings – Docs Page</u> <u>Tenant Settings – Guidance</u>



ORGANISATIONAL VISUALS

ORGANISATIONAL VISUALS

Tenant setting to control Custom Visuals

Power BI visuals

- Allow visuals created using the Power BI SDK Enabled for the entire organization
- Add and use certified visuals only (block uncertified)
 Enabled for the entire organization

Users in the organization with permissions to add and use visuals can add and use certified visuals only. Visuals allowed in the "Organizational visuals" page are not affected by this setting, regardless of certification. Learn more



Apply

Cancel

ORGANISATIONAL VISUALS

Add visuals you trust and approve

Organizational visuals

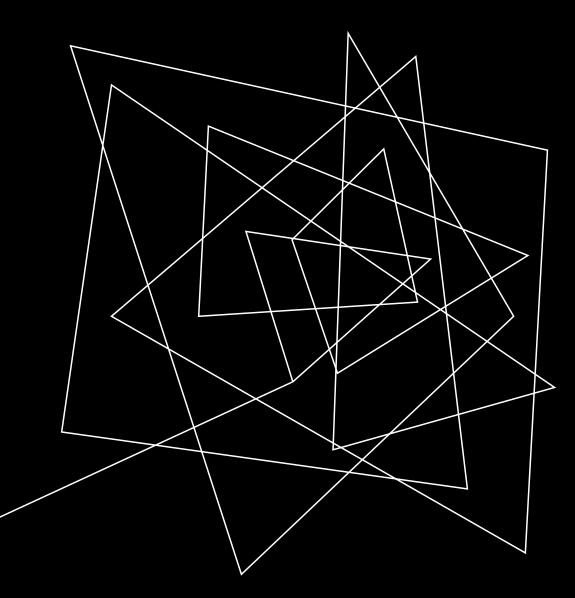
Add and manage Power BI visuals for your organization. Learn more



From a file

Get visuals that are privately available for your organization.

From AppSource
Get visuals that are publicly available on AppSource.



DATA ACCESS

WHO CAN ACCESS YOUR DATA?

Access is determined by:

Workspace Access

Workspace App Access

Manual Report Sharing

Dataset Permissions (Build vs. Read)

Row-Level Security

Object-Level Security (Preview since Feb. 2021)

WHO CAN ACCESS YOUR DATA?

Workspace Admin, Member, or Contributor have:

No RLS/OLS applied

Implicit Build Permissions

Monitor key assets closely

An Admin (PBI/Global) can give access to anyone in all New (v2) Workspaces

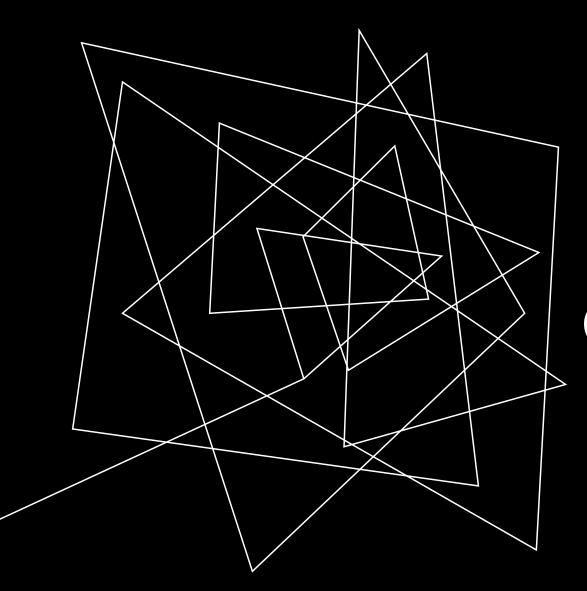
WHO CAN ACCESS YOUR DATA?

For a global overview, use:

Lineage (Scanner) APIs, with \$getArtifactUsers

Specific APIs for Reports, Apps, Dashboards

(Ie. GetAppUsersAsAdmin)



GATEWAYS

GATEWAYS

Allow users that publish new datasets and reports to datasources

By default, any user can install personal and on-premises data gateways

Potentially, this opens up corporate data

Debate the policy for personal gateways in your organisation

Power Platform admin center

Disallow installation of Personal Gateways

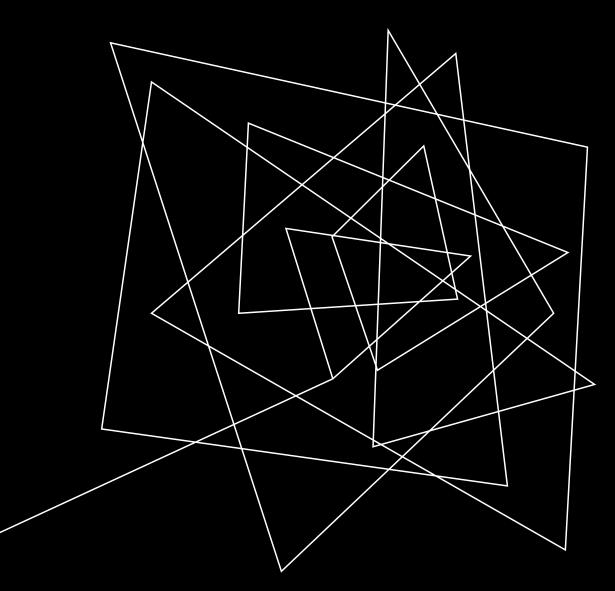
GATEWAYS

Be aware of the resources your gateway machines need Query Folding (or lack thereof) has a large impact

The gateway machine will perform the heavy lifting on dataset refreshes using the gateway

<u>Chris Webb – Speed up Power BI Refresh by increasing memory on the on-premises gateway</u> machine

<u>Fourmoo – Enable StreamBeforeRequestCompletes</u>



MONITORING

MONITORING

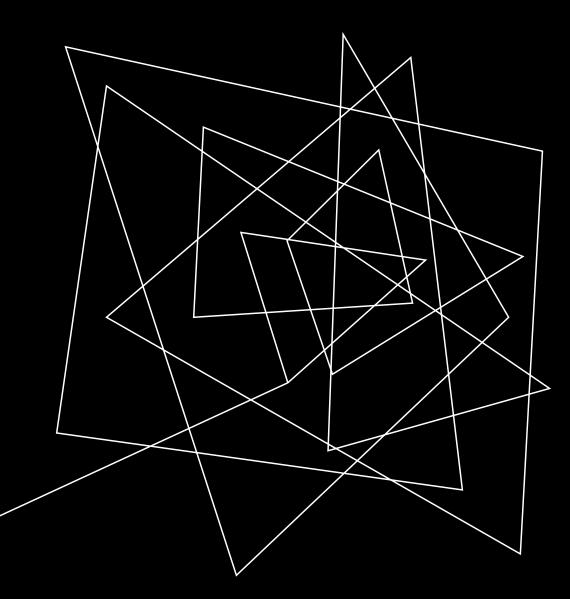
Consider setting up simple alerts you want to follow-up

Set up a dashboard tile, with simple count for your actions

Possible actions to monitor closely:

- Changes to Tenant Settings
- Publish To Web
- In Product Trial Experiences
- Export Data
- Delete ...
- Create/Edit Gateway

Rui Romano's Power BI Monitor



PREMIUM PER USER (BONUS)

PREMIUM PER USER

By default users can:

Self-assign an In Product Trial Experience

Create workspaces, and assign to a PPU Capacity

PREMIUM PER USER

Identify usage by:

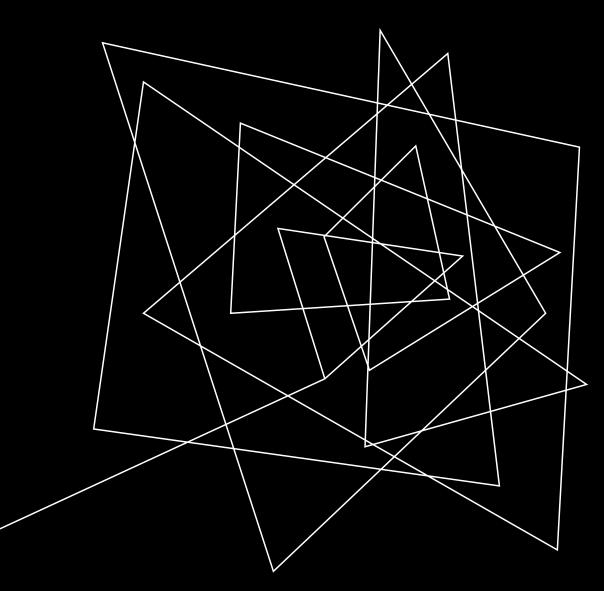
Get Workspace Inventory, correlate with

Capacity Information

Get License Information

Track the Power BI Activity Log

My chase down the rabbit hole



TAKEAWAYS

TAKEAWAYS

Set up:

An extraction process for the Power BI Activity Log

Scoped Tenant Settings for key areas

Alerting for external failures

Alerting for internal usage

Monitoring for creation and configuration of Data Gateways

Foster a Data Culture in your organisation

Try to keep yourself updated

TAKEAWAYS



STAY UPDATED

Power BI Roadmap

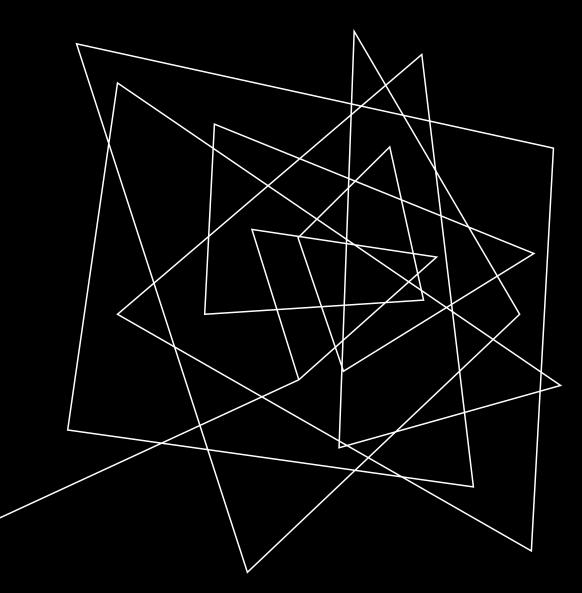
Power BI Blog

Power Platform Release Waves

Many community authors and iniatives

Maybe even <u>a training course</u>?

Pro Tip: Check the release date, as information ages quickly



API

https://docs.microsoft.com/en-us/rest/api/power-bi

https://azure.microsoft.com/en-us/updates/power-bi-rest-api-tryit-tool/

https://docs.microsoft.com/en-us/power-bi/admin/read-only-apis-service-principal-authentication

https://github.com/sqlchick/Presentations/tree/main/Power-BI-Activity-Log-And-REST-APIs

https://github.com/itsnotaboutthecell/PowerBI-cmdlets

https://github.com/SQLvariant/Demos/tree/master/Presentations/PowerShell-for-PowerBl

https://www.fourmoo.com/2021/01/06/you-can-now-view-the-power-bi-rest-api-calls-via-the-audit-log/

BI Elite - Admin View (Part 1 - 4)

https://www.youtube.com/watch?v=cTqFNg_y9lw

https://www.youtube.com/watch?v=2RZkc_qrV1g

https://www.youtube.com/watch?v=Z4E2jSZ4r6A

https://www.youtube.com/watch?v=BxKIJL5baAU

Power BI Log Analytics Starter Kit (Nassim Kasdali)

https://github.com/kasdali/pbila

Power BI Monitor (Rui Romano)

https://github.com/RuiRomano/pbimonitor

Power BI Whitepapers, Roadmaps, Frameworks

https://aka.ms/PBIEnterpriseDeploymentWP

https://docs.microsoft.com/en-us/power-bi/guidance/whitepaper-powerbipremium-deployment

https://docs.microsoft.com/en-us/power-bi/admin/service-admin-power-bi-security

https://docs.microsoft.com/en-us/power-bi/guidance/center-of-excellence-establish

https://github.com/pbiaf/powerbiadoption

https://docs.microsoft.com/en-us/power-bi/guidance/powerbi-adoption-roadmap-overview

Gateways

https://medium.com/microsoftazure/on-premises-data-gateway-monitoringseries-part-0-why-should-i-care-about-monitoring-b8211ce428

https://medium.com/microsoftazure/on-premises-data-gateway-monitoring-series-part-1-standard-log-files-2a339df746a8

https://medium.com/microsoftazure/on-premises-data-gateway-monitoring-series-part-2-cpu-counters-99631a0a5b17

https://medium.com/microsoftazure/on-premises-data-gateway-monitoring-series-part-3-ram-counters-7e676c0b340b

https://medium.com/microsoftazure/on-premises-data-gateway-monitoring-series-part-4-query-logs-explained-9d2baad13678

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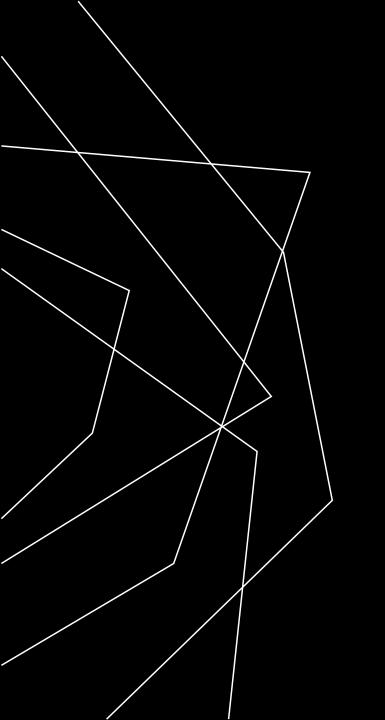


SLIDES CAN BE FOUND AT:

https://github.com/BenniDeJagere/Presentations

/{Year}/{Date}_{Event}





THANK YOU!