

Abstract geometric lines in the top left corner of the slide, consisting of several overlapping, irregular polygons and lines that create a complex, layered effect.

Benni De Jagere

**KEEPING UP WITH YOUR POWER BI
TENANT ADMINISTRATION**



Thanks to our sponsors



Microsoft



RADACAD



INTELLIGENT ANALYTICS



WHO AM I



Power BI CAT

dataMinds.be Member



@BenniDeJagere



/bennidejagere



sessionize

/bennidejagere



/bennidejagere



#SayNoToPieCharts

OBJECTIVES

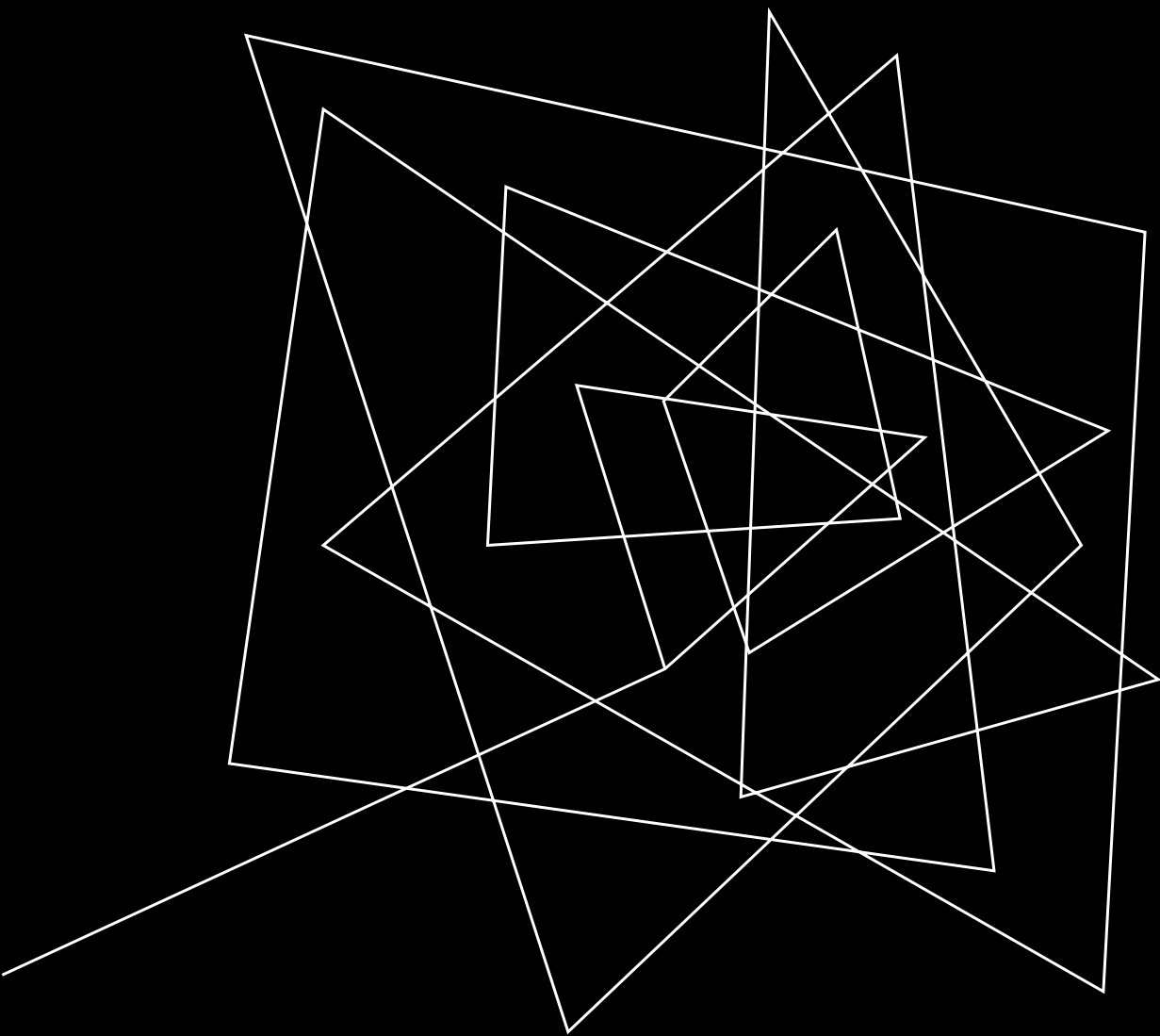


Emphasize role of auditing and logging

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

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

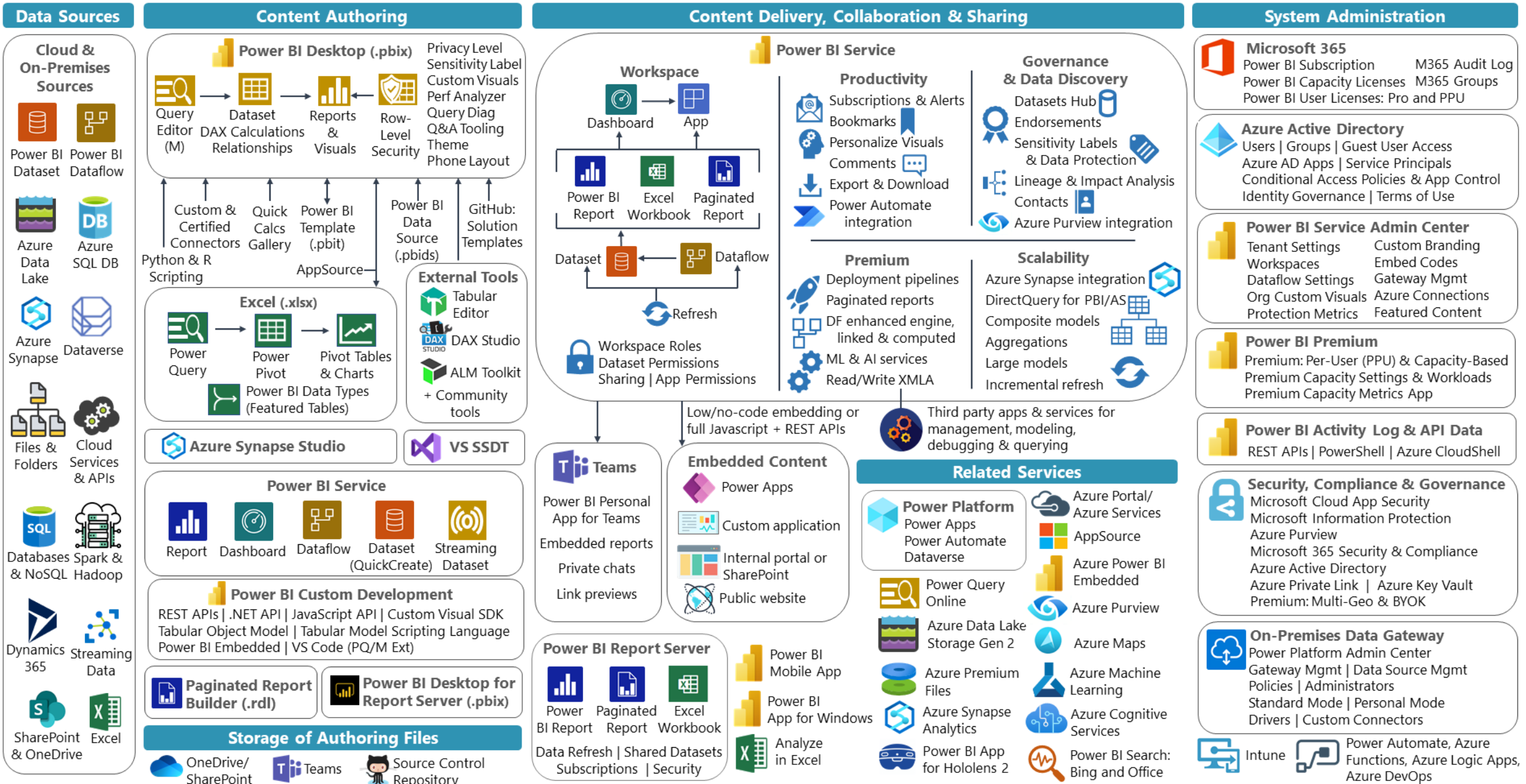
Early experiences were based on trial and error

Community & Enterprise maturity has risen exponentially

Power BI is a moving target 😊

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

Last Updated: January 4, 2021



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

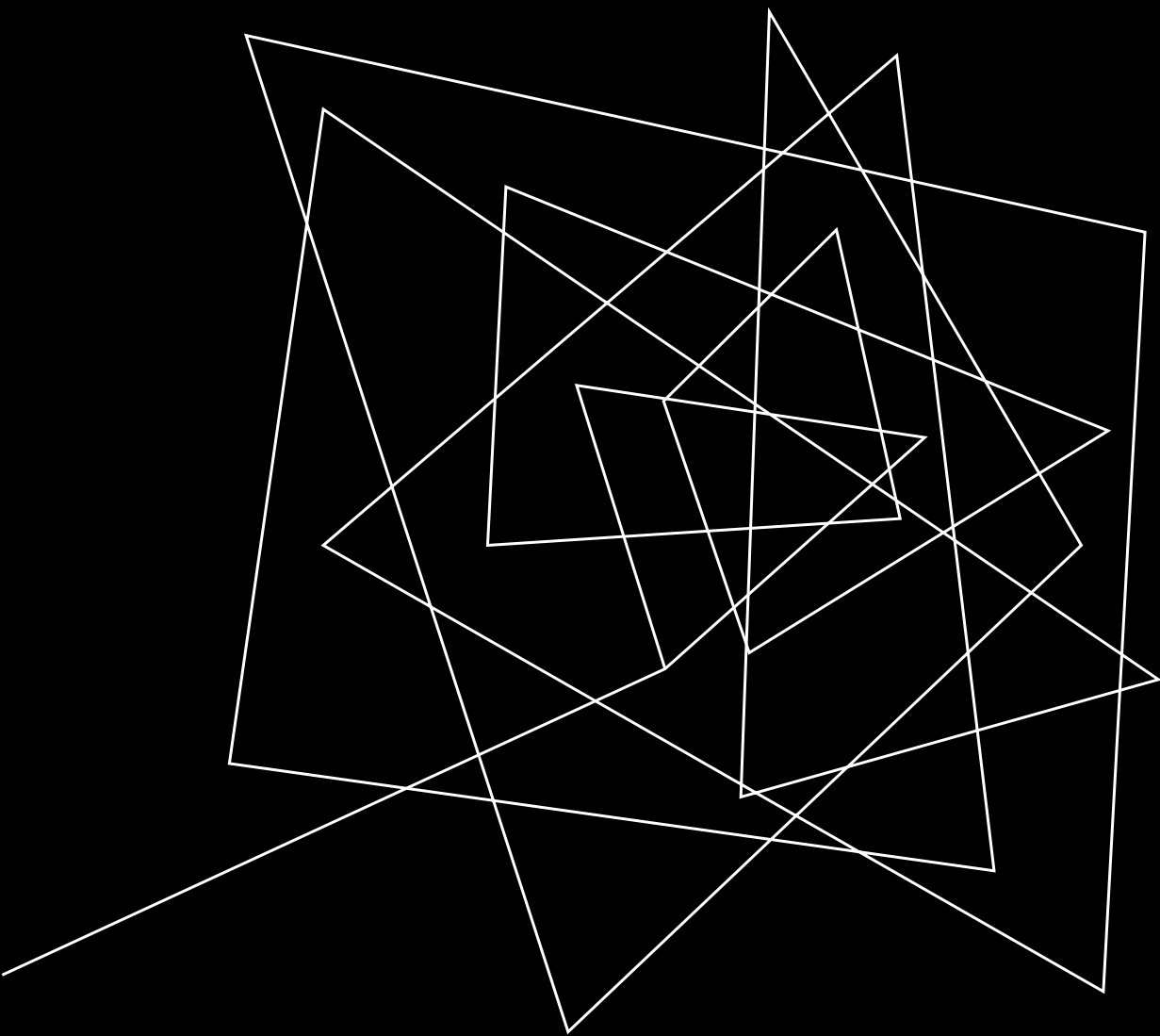
Product Integration

Problem Solving

But most importantly ..

WHAT DOES A TENANT ADMIN DO?





SERVICE HEALTH

SERVICE HEALTH

Power BI Support

Service Status Per Region

- ✓ America
- ✓ Asia Pacific
- ✓ Europe

✓ Good ⓘ Information ⚠ Degraded ❌ Outage

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.

SERVICE HEALTH

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.

☐ Disabled

Apply

Cancel

SERVICE HEALTH

Microsoft 365 Admin Center

Microsoft 365 admin center

Groups

Roles

Resources

Billing

Support

Settings

Setup

Reports

Health

Service health

Message center

Network connectivity

dataMinds vzw

Dark mode

January 26, 2021 7:42 PM

Service health

All services Incidents Advisories History Reported issues

View info about the history of incidents and advisories that have been resolved.

Report an issue

Preferences

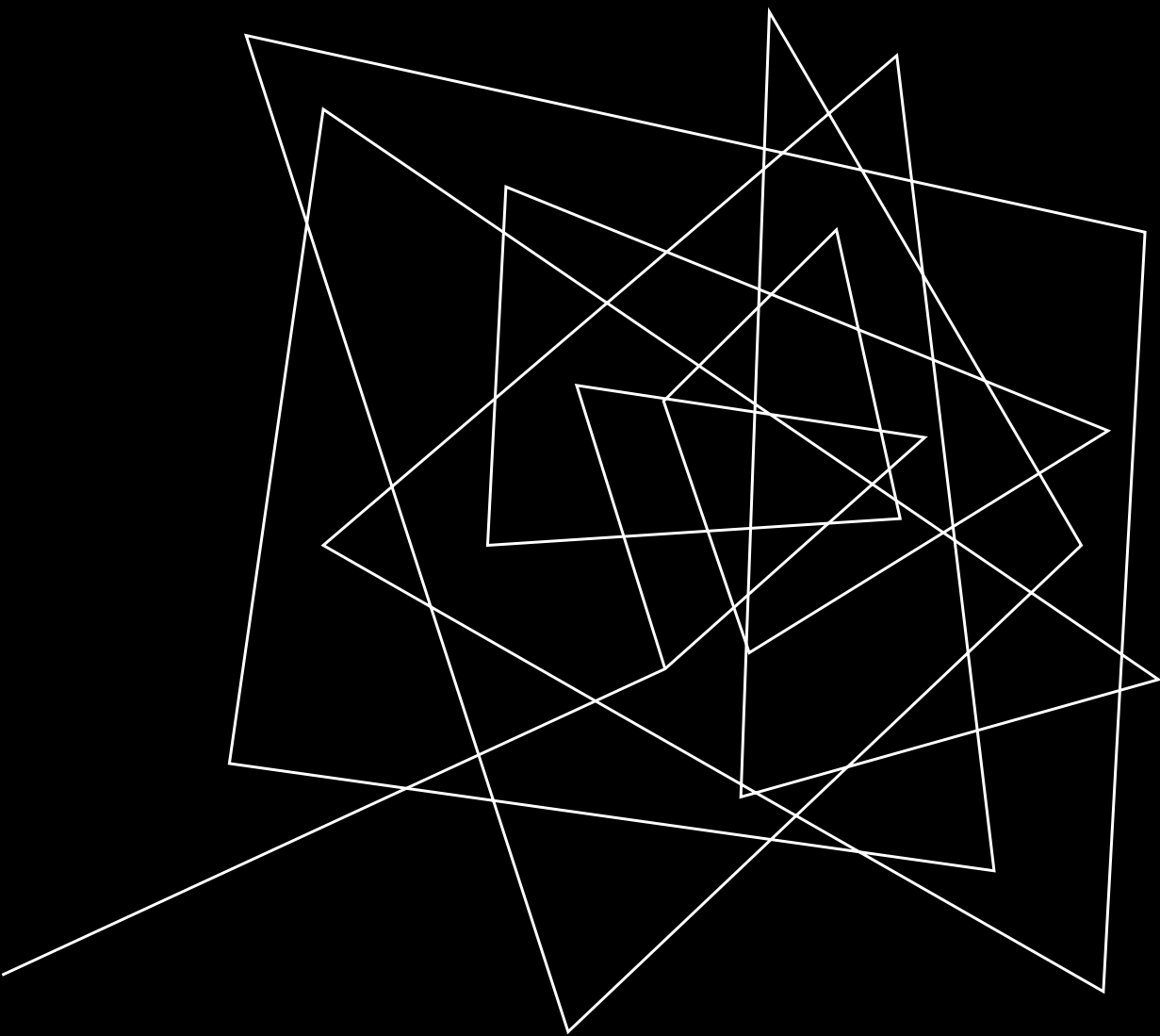
2 items

Search

Past 7 days

Exchange Online

Title	Service	ID	Status	Start time ↓	End time
Some admins may be unable to create new shared mailb...	Exchange Online	EX235961	Service restored	January 25, 2021 2:32 AM	January 25, 2021 3:35
Admins receiving errors when trying to connect to the E...	Exchange Online	EX234352	Service restored	December 31, 2020 8:00 AM	January 22, 2021 5:25



ACTIVITY LOG

THE TREASURE TROVE, AKA THE ACTIVITY LOG

Introduced December 2019 ([LINK](#))

Alternative to Office 365 Audit Log

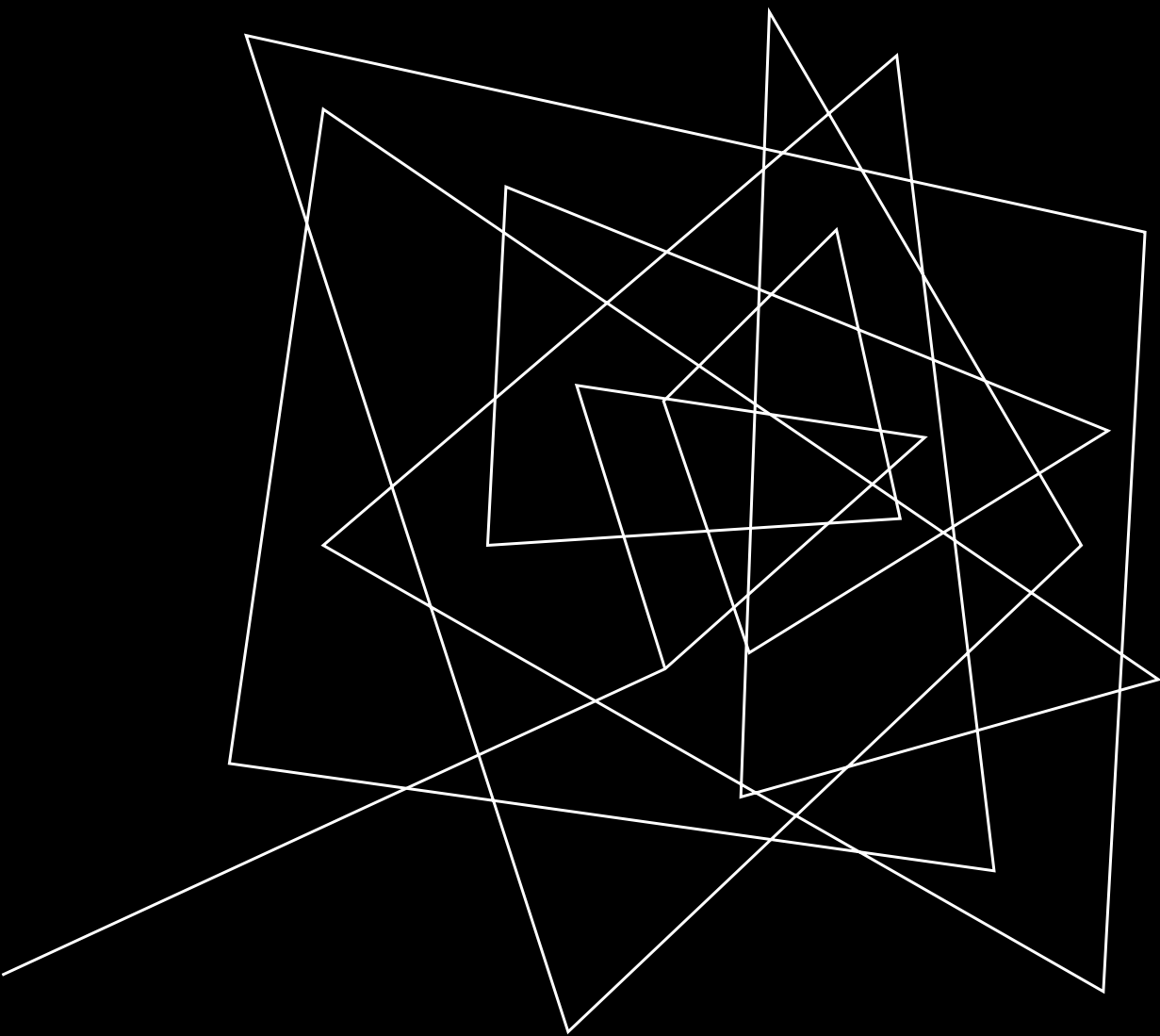
Data is retained for 30 days

Requires Power BI Admin or Global Admin privileges

Your key to many questions

[Powershell example](#) (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.

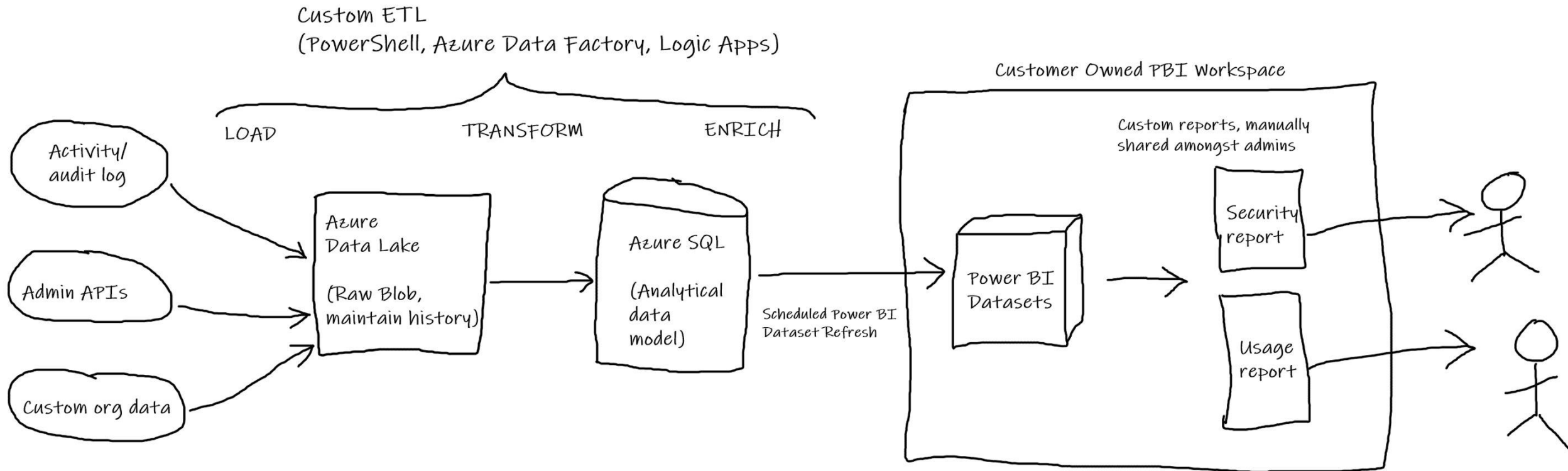
[Service Principal](#) is the road ahead

[Artefact Example \(Just B\)](#)

[Scanner API example \(Tommy Puglia\)](#)

[Power BI DEV Camp – Admin APIs \(Ted Pattison\)](#)

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



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](#)). Learn more: [What's new and planned](#)

Enabled for

Admins, makers, marketers, or analysts, automatically

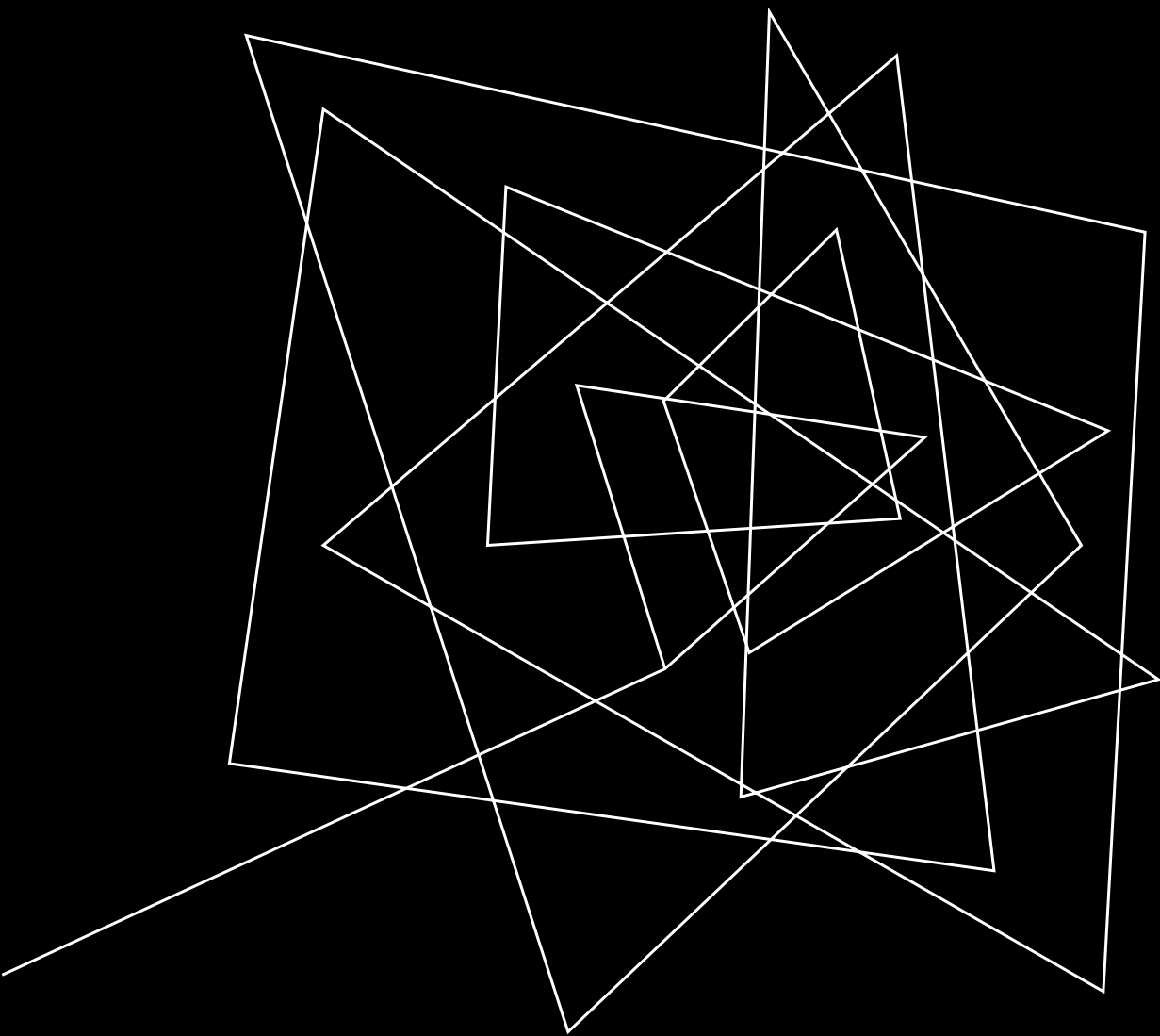
Public preview

Mar 2022

General availability

Sep 2022

[Roadmap item](#)



TENANT SETTINGS

TENANT SETTINGS

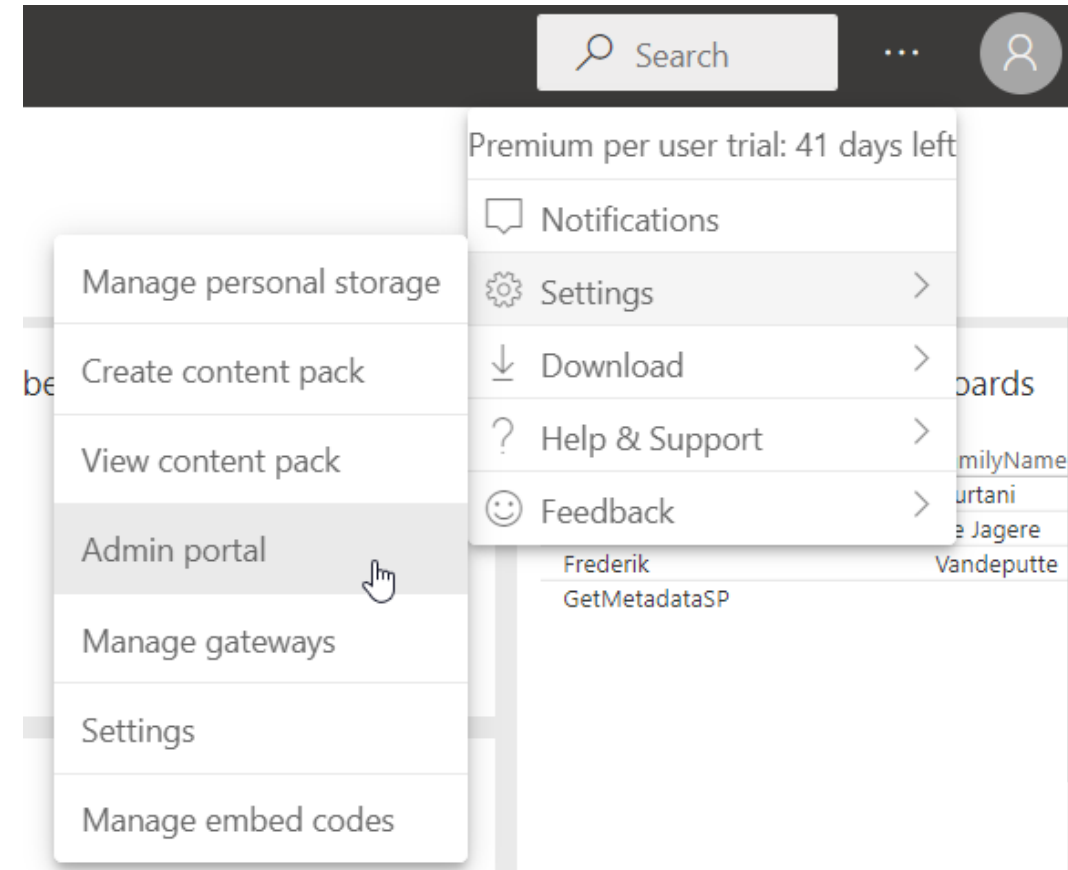
Admin Portal to control behaviour

Document settings

Changes are not easily captured

Activity Log

Cloud App Security Center



TENANT SETTINGS

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



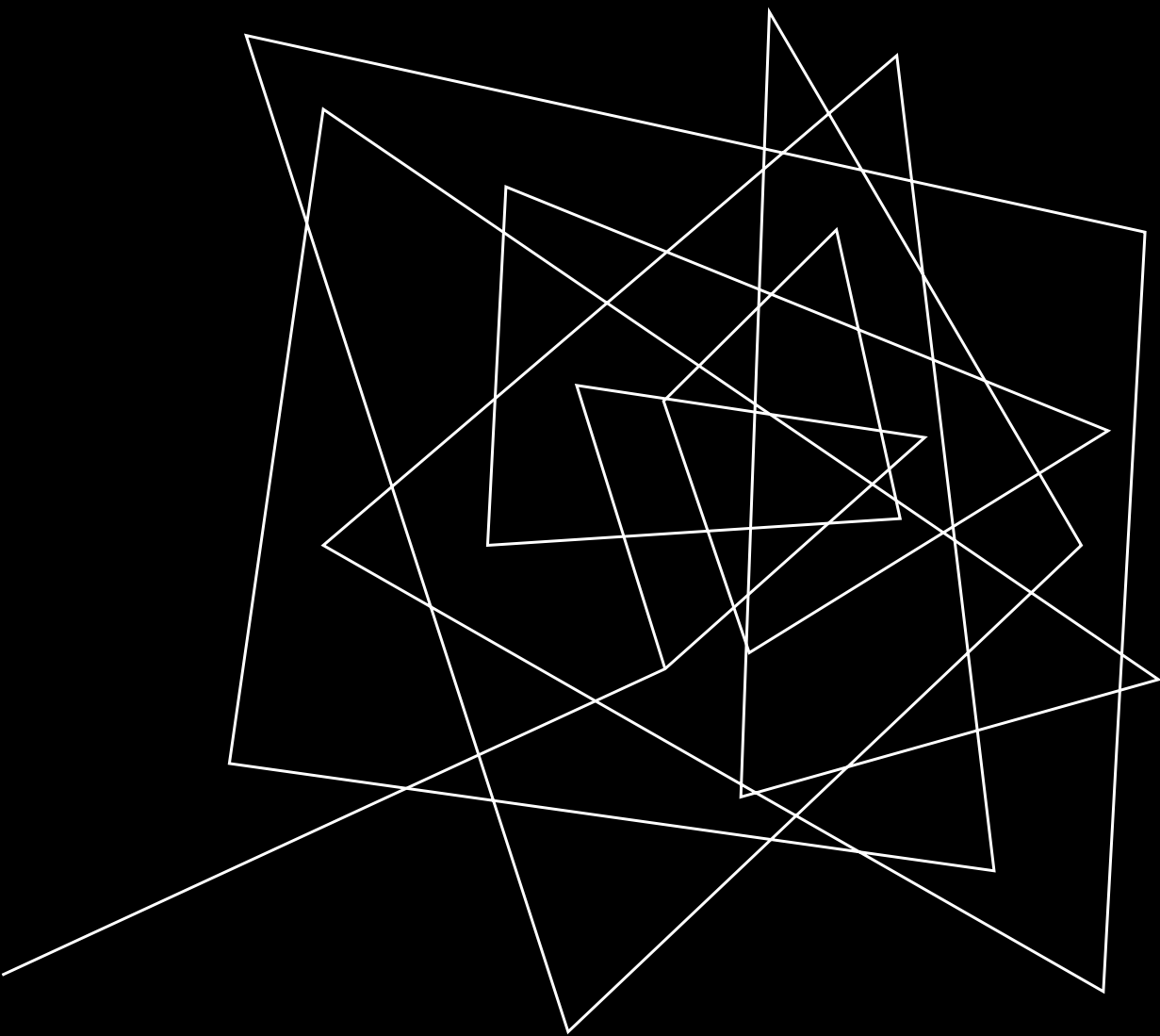
TENANT SETTINGS

Pay special attention to :

Workspace Settings

Export and Sharing Settings

Power BI Visuals



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](#)

☒ Enabled

Apply

Cancel

ORGANISATIONAL VISUALS

Add visuals you trust and approve

Organizational visuals

Add and manage Power BI visuals for your organization. [Learn more](#)

+ Add visual ▾



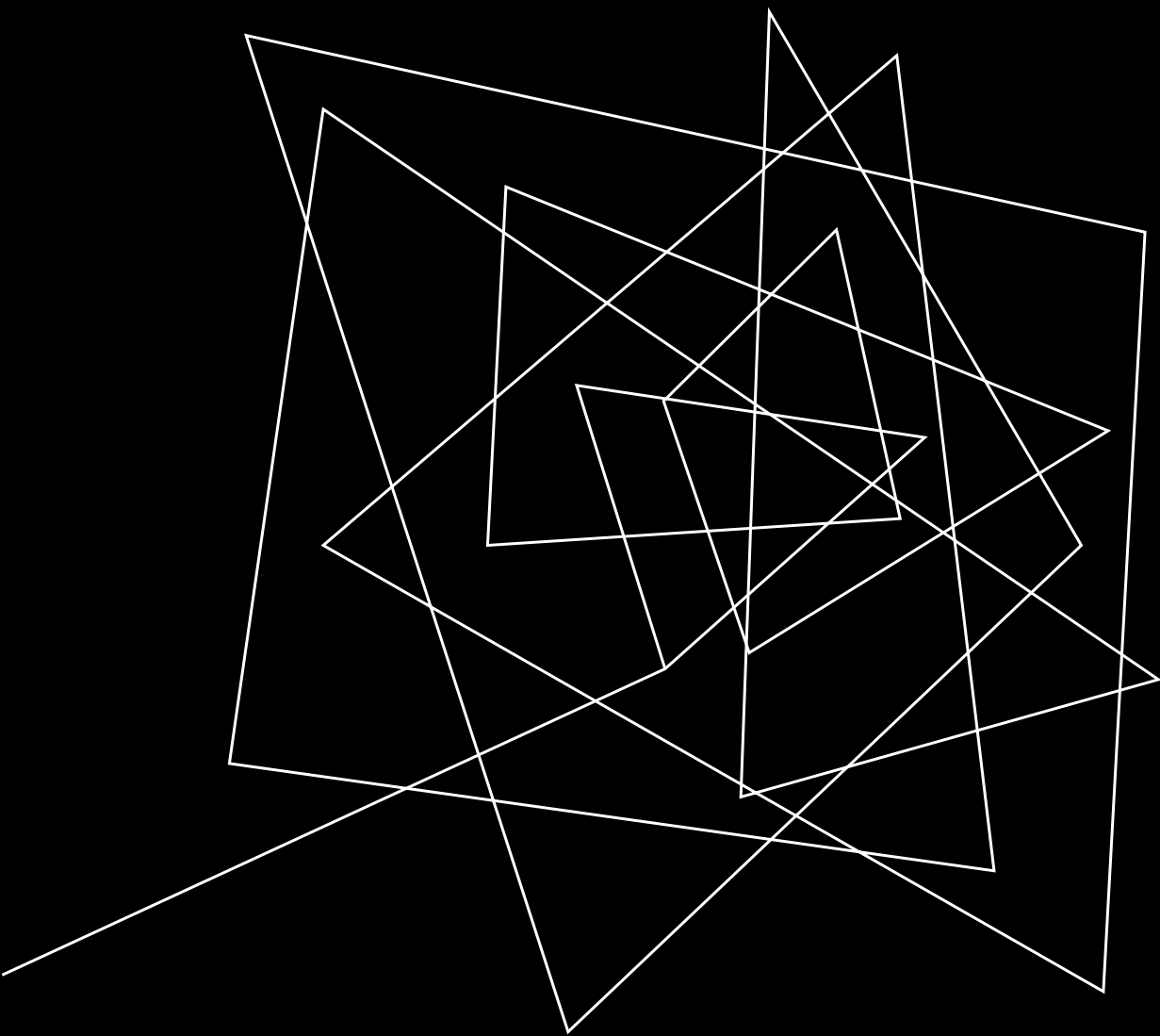
From a file

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

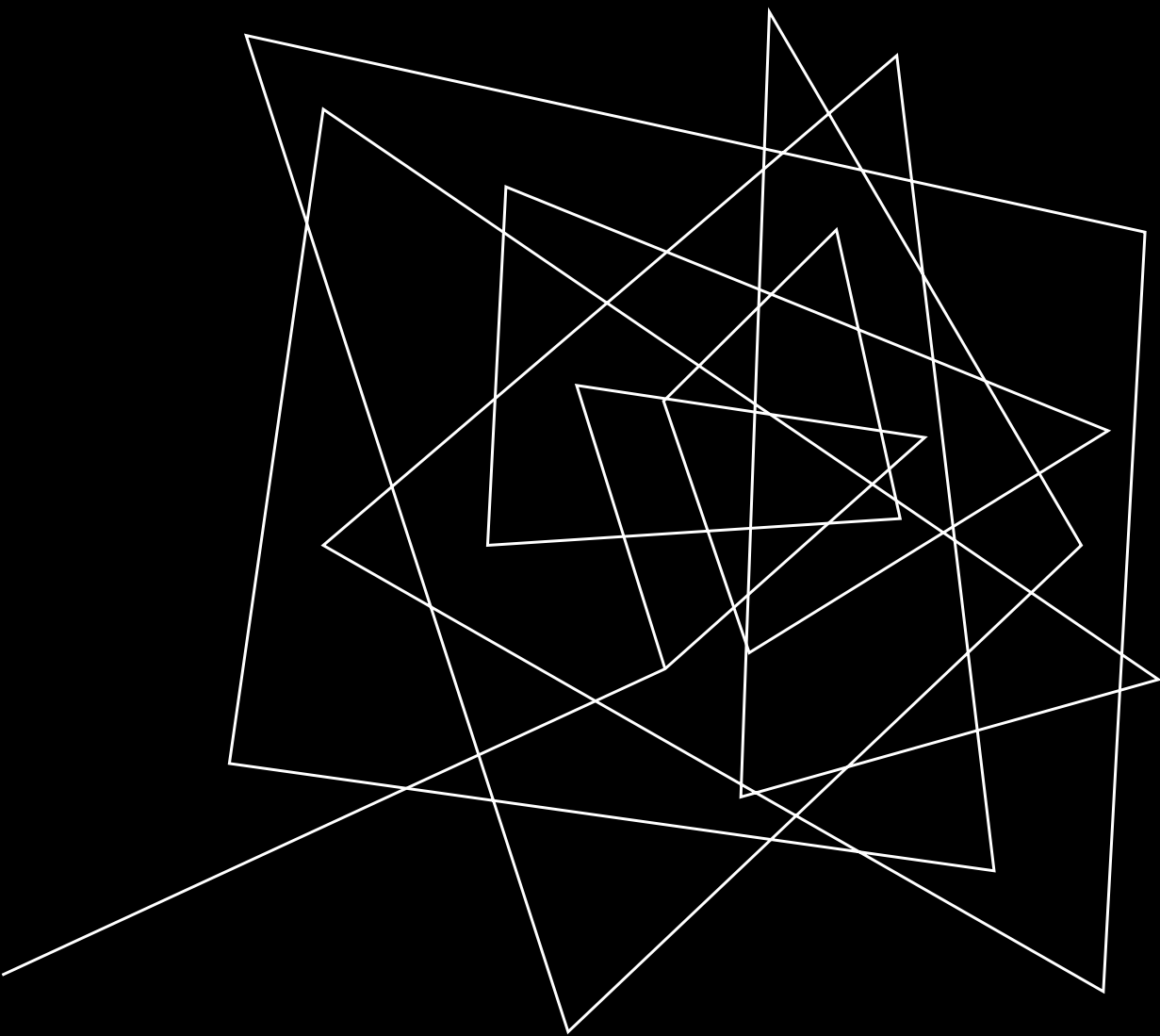
WHO CAN ACCESS YOUR DATA?

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

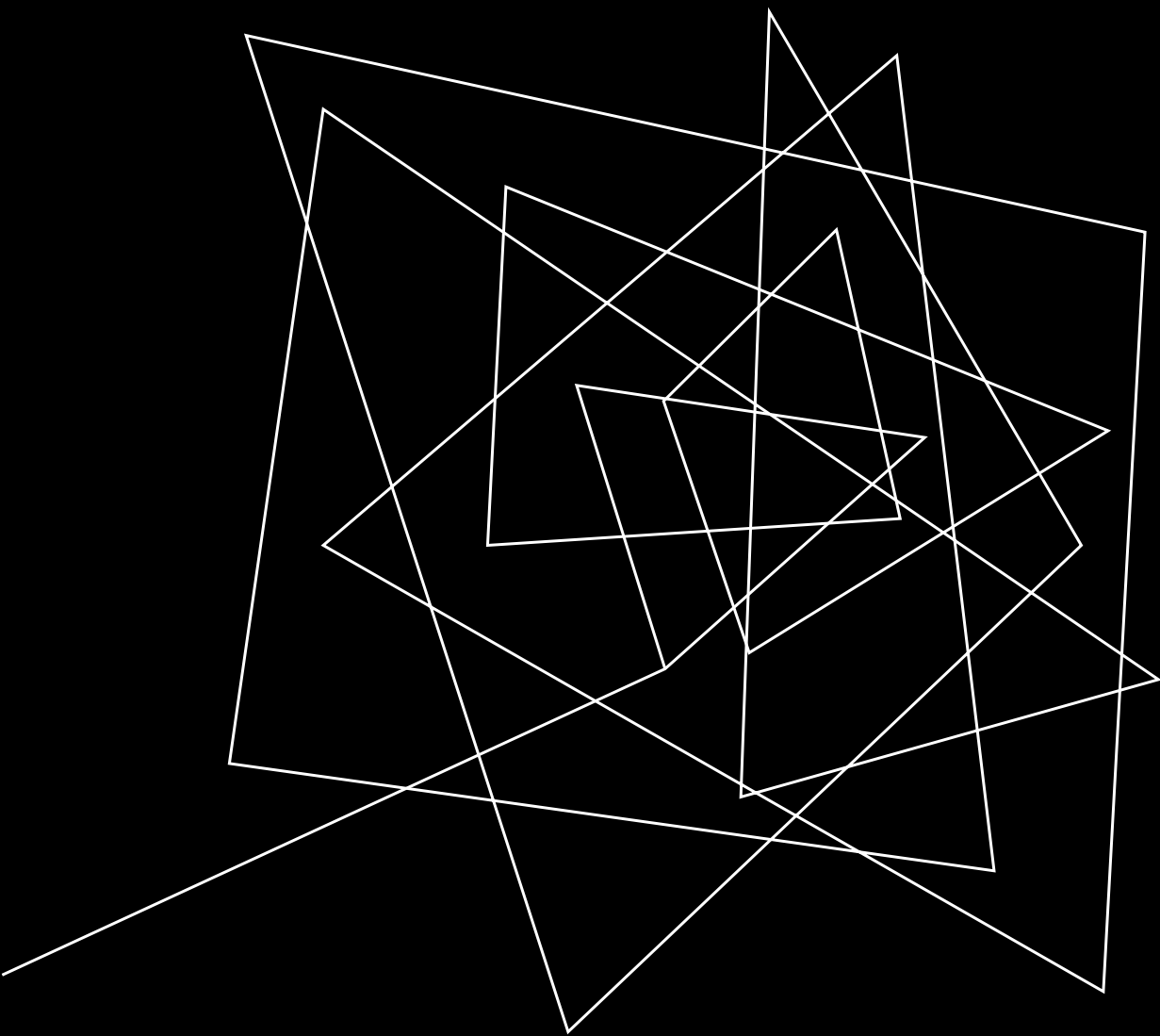
Be aware of the resources your gateway machines need

Query Folding (or lack thereof) has a large impact

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

[Chris Webb – Speed up Power BI Refresh by increasing memory on the on-premises gateway machine](#)

[Fourmoo – Enable StreamBeforeRequestCompletes](#)



MONITORING

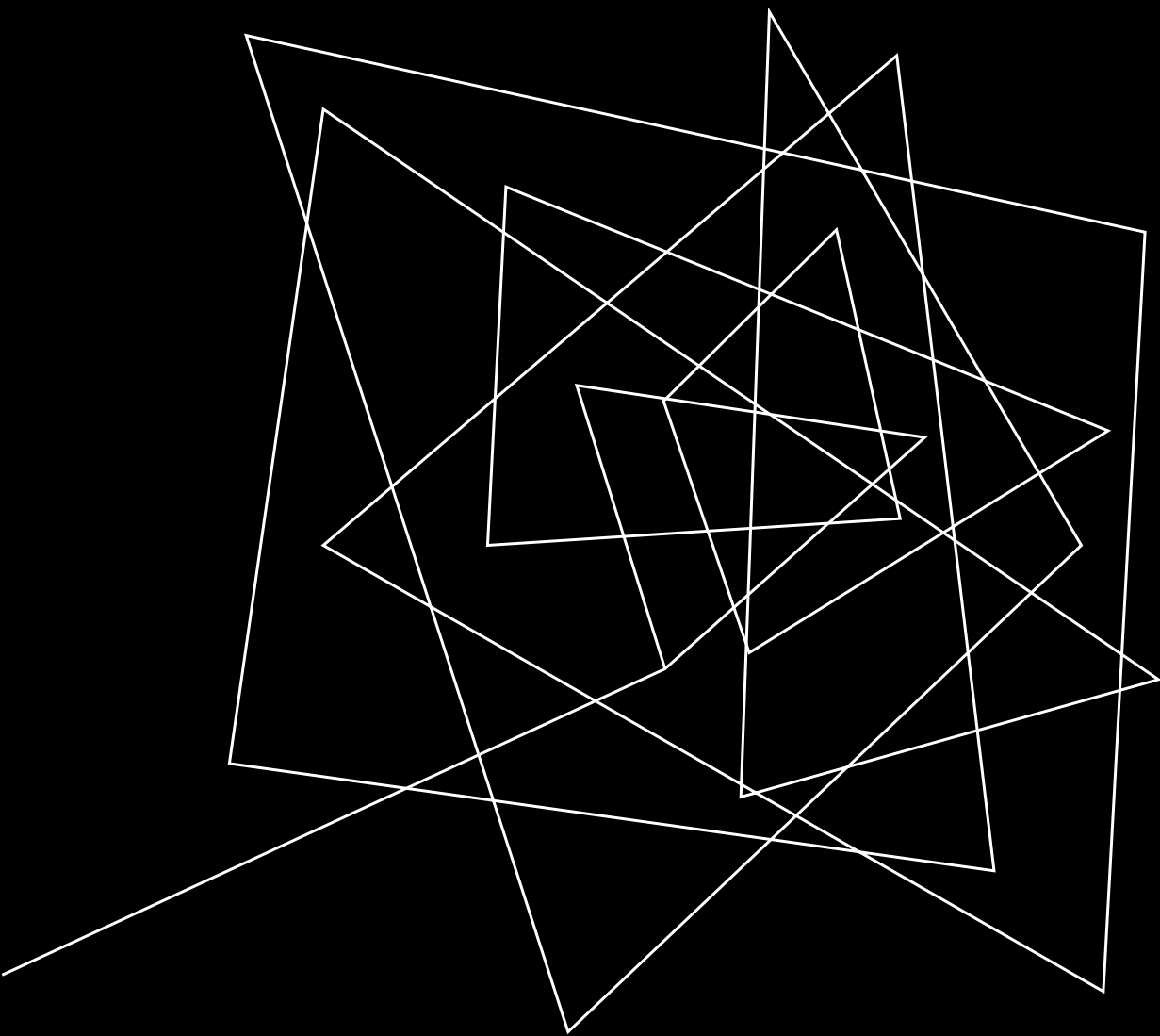
MONITORING

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



**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

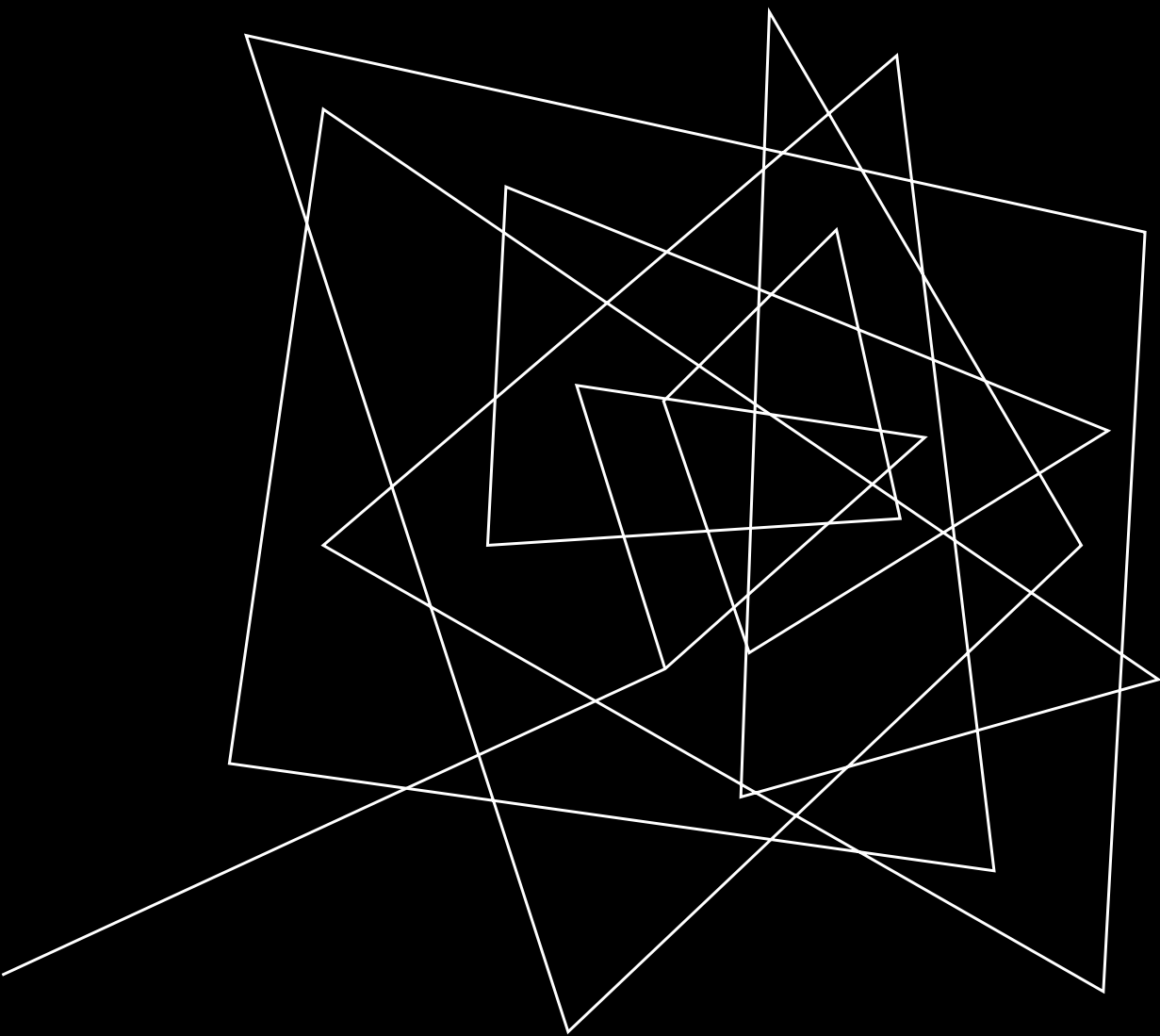
Identify usage by :

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](#)

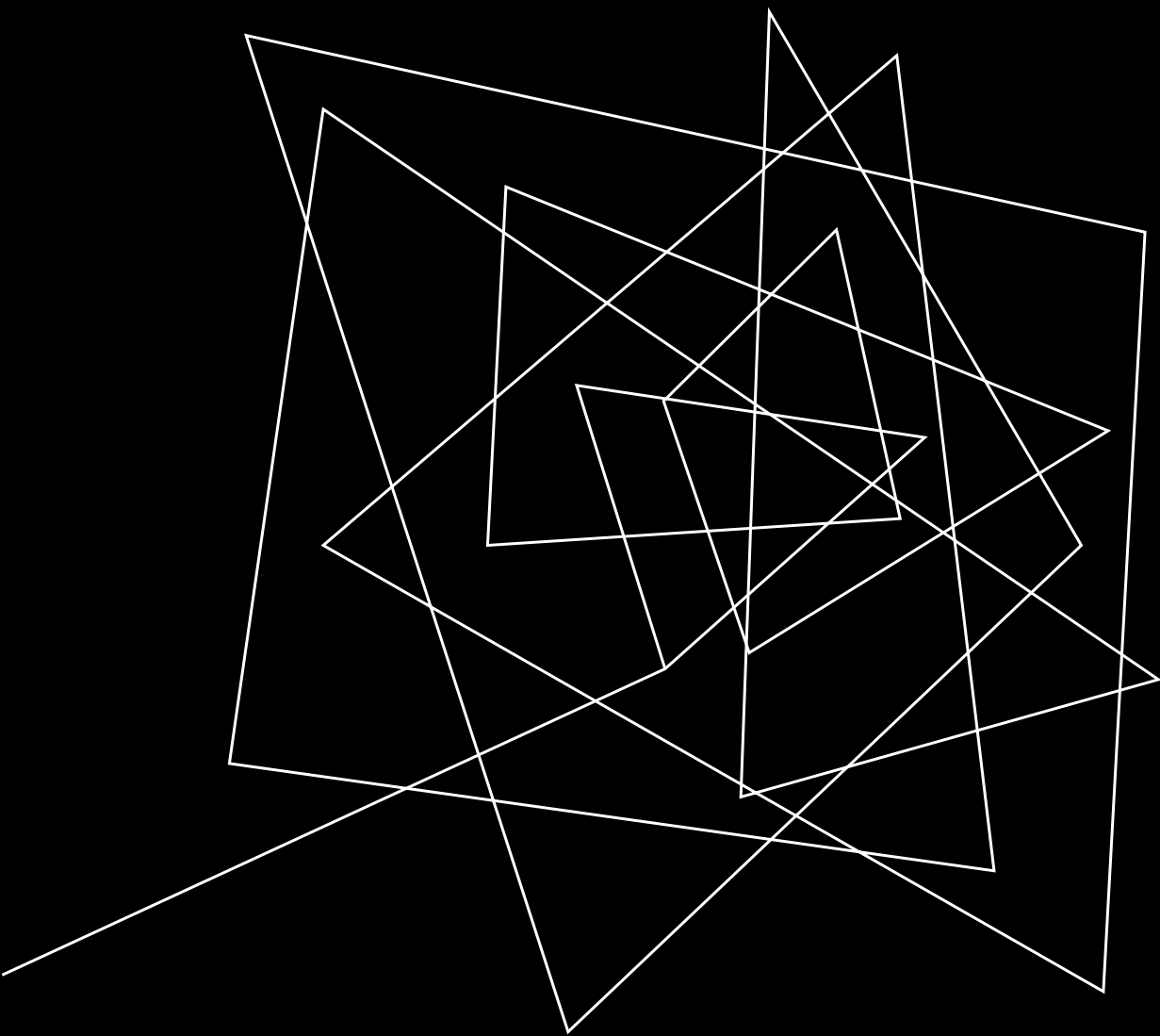
[Power BI Blog](#)

[Power Platform Release Waves](#)

Many community authors and initiatives

Maybe even [a training course](#)?

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



REFERENCES

REFERENCES

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-PowerBI>

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

REFERENCES

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>

REFERENCES

Power BI Log Analytics Starter Kit (Nassim Kasdali)

<https://github.com/kasdali/pbila>

Power BI Monitor (Rui Romano)

<https://github.com/RuiRomano/pbimonitor>

REFERENCES

Power BI Whitepapers, Roadmaps, Frameworks

<https://aka.ms/PBIEnterpriseDeploymentWP>

<https://docs.microsoft.com/en-us/power-bi/guidance/whitepaper-powerbi-premium-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>

REFERENCES

Gateways

<https://medium.com/microsoftazure/on-premises-data-gateway-monitoring-series-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>

WHO AM I



Power BI CAT

dataMinds.be Member



@BenniDeJagere



/bennidejagere

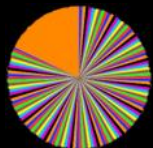


sessionize

/bennidejagere



/bennidejagere



#SayNoToPieCharts

A series of white, thin, overlapping geometric lines on a black background, forming a complex, abstract shape on the left side of the slide.

THANK YOU!