



# Microsoft Fabric Post-Ignite Demo Festival

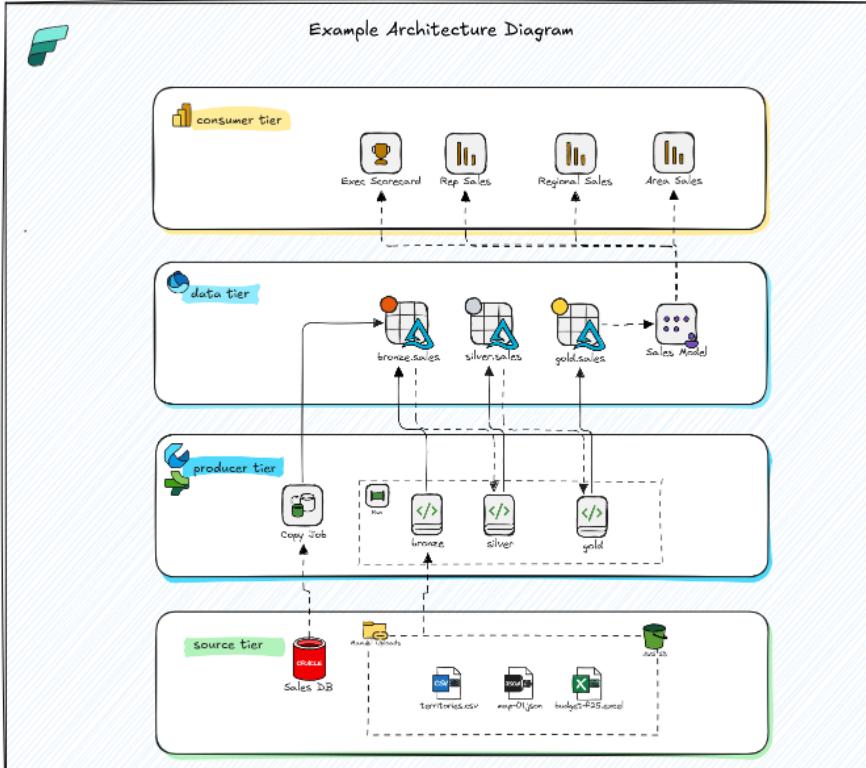
**Ula Cholewa**  
BI Evangelist, InfiniteDATA Services

**Paweł Potasiński**  
CTO, InfiniteDATA Services



Before we even start...

# Fabric icon library for Excalidraw



Developed for community  
by Miles Cole from Azure  
Data CAT team

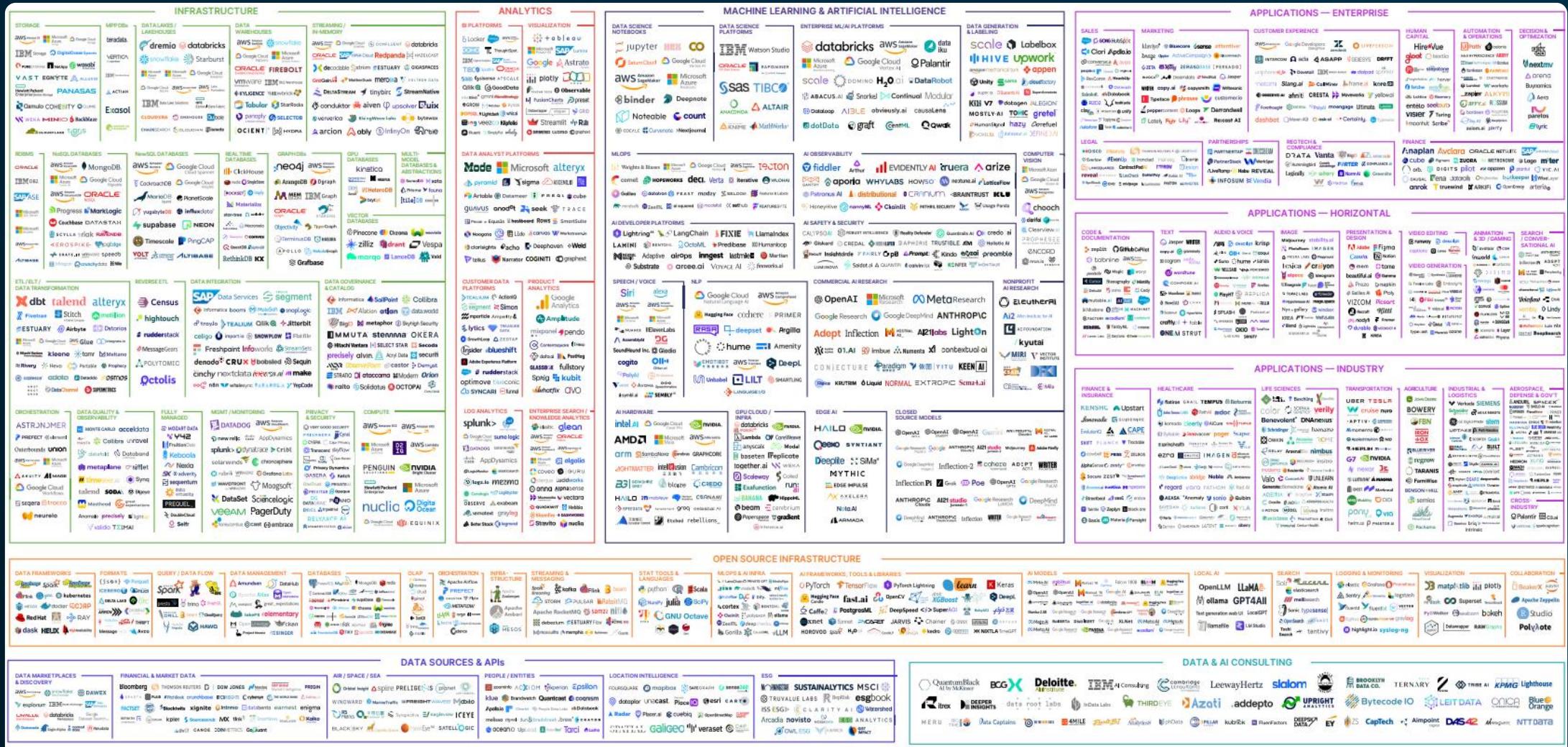
Contains icons for  
product, workloads, items  
and more

Available for free to use  
with Excalidraw

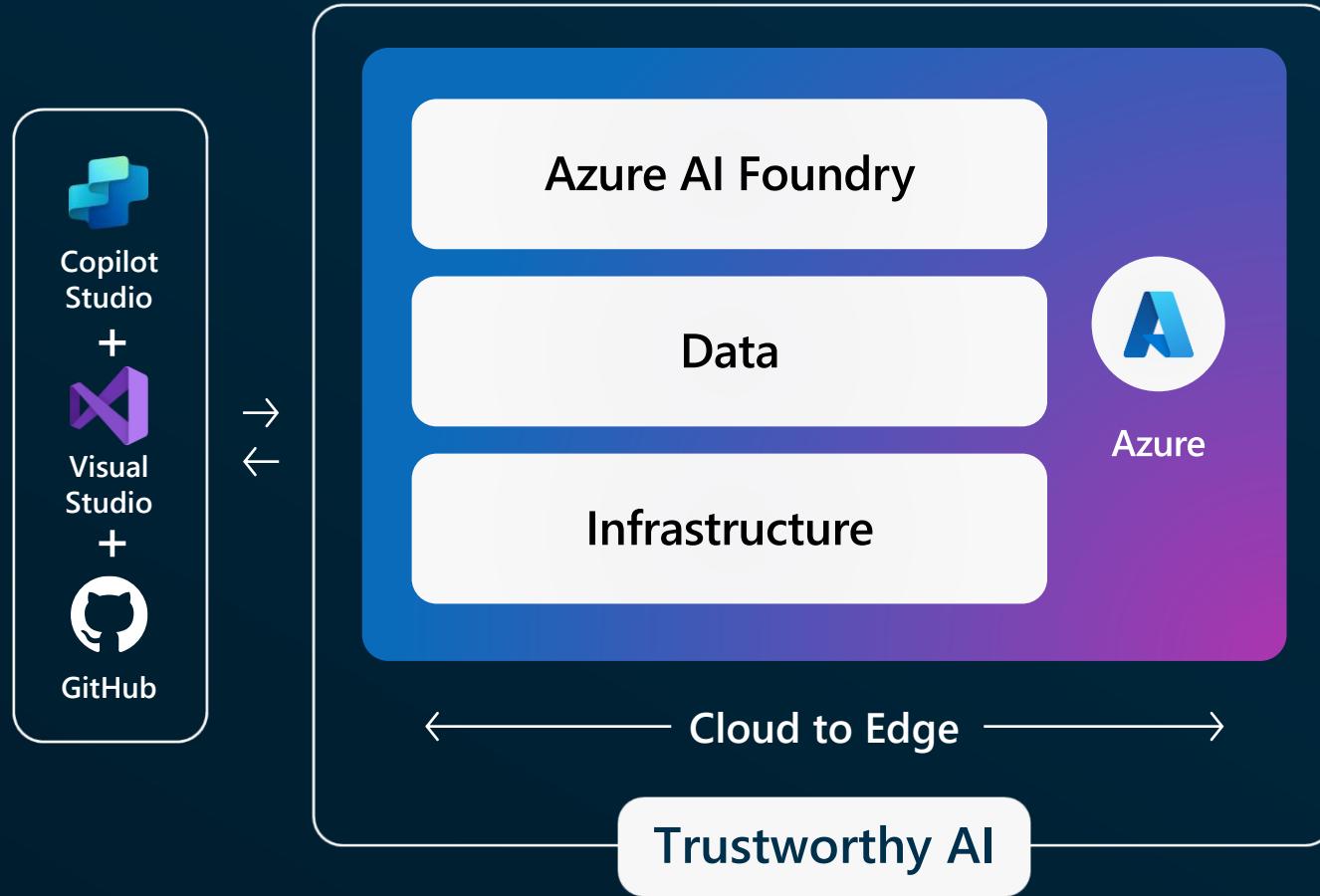
AI is transforming the world

Data is the fuel that powers AI

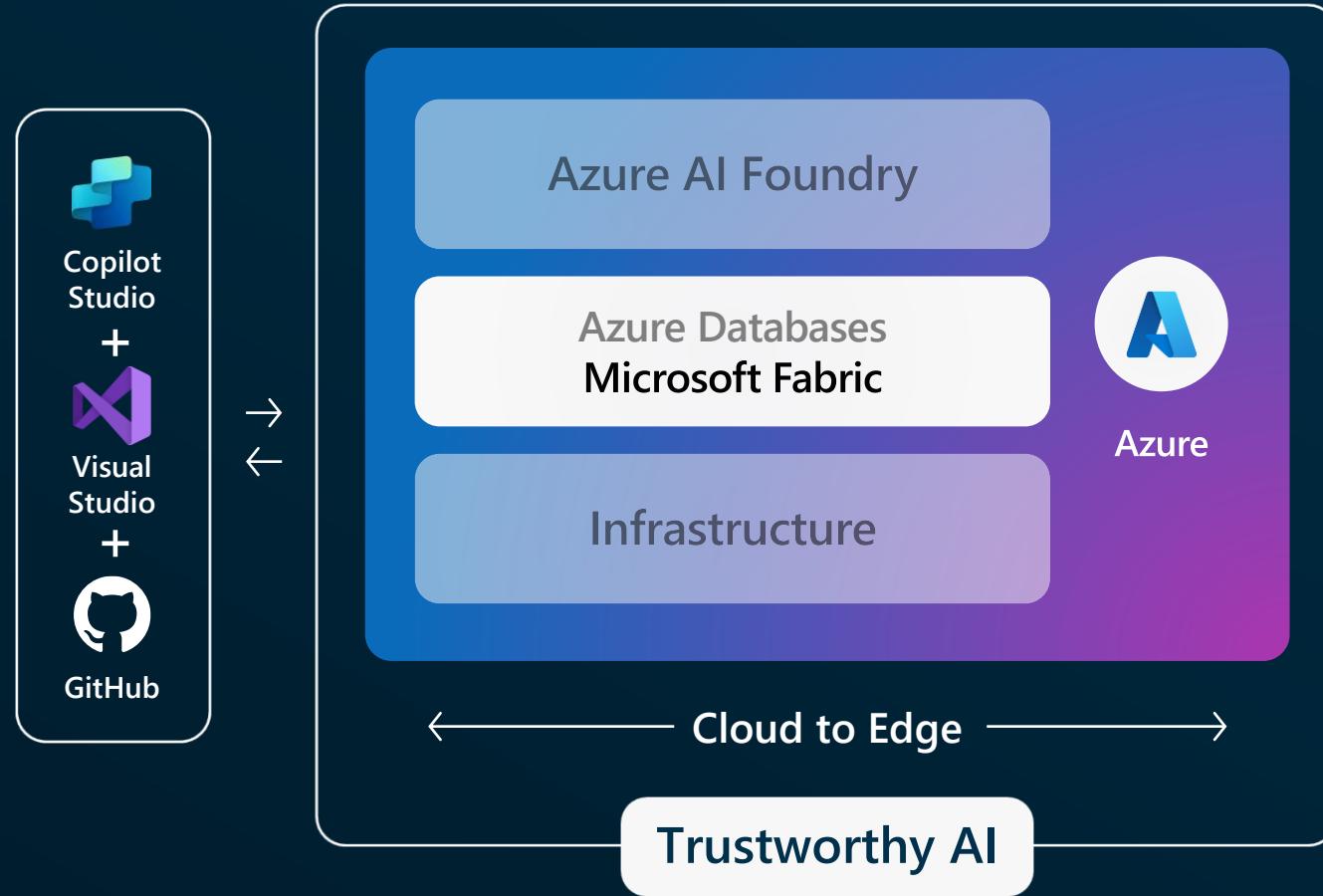
# The 2024 data and AI landscape



# Copilot & AI stack



# Copilot & AI stack





# Microsoft Fabric

## The unified data platform for AI transformation



Data  
Factory



Data  
Engineering



Data  
Warehouse



Data  
Science



Real-Time  
Intelligence



Power BI



AI



OneLake



Purview



# Microsoft Fabric

16,000+

Fabric customers

70%

Fortune 500

**375K+**

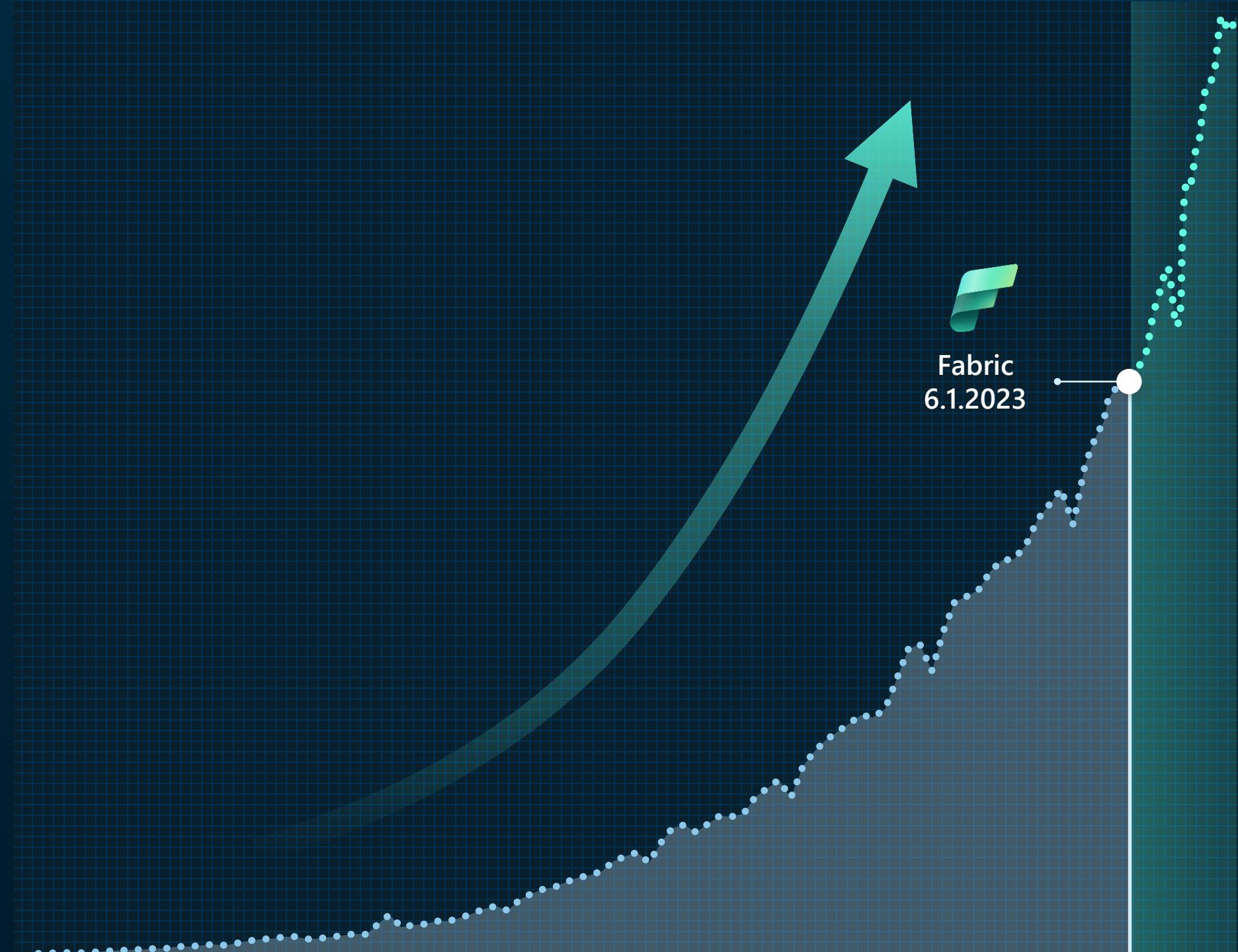
Power BI  
customers

**95%**

Fortune 500 companies  
use Power BI

**6.5M+**

Power BI  
developers





All have  
Fabric  
available one click away



# Weekly Fabric releases

## Rapid pace of innovation

**Microsoft | Fabric** Updates Community Support

### Microsoft Fabric Updates Blog

Updates > All > Microsoft Fabric August 2023 update

#### Microsoft Fabric August 2023 update

Announcements Apache Spark Core Data Activator Data Factory Data Science  
Data Warehouse Monthly Update Real-time Analytics Synapse

September 5, 2023 by Ryan Majidimehr 118,679 Views [in Share](#) [Tweet](#) [Like](#)

Welcome to the August 2023 update. We have lots of features this month including the new layout switcher for Power BI, SSD caching in Synapse Data Warehouse, in-line Python support for KQL in Synapse Real-time Analytics, lookup activity for Data Factory Dataflows, and much more. Continue reading for more details on our new features!

FABRIC MONTHLY UPDATE August 2023  
Watch on YouTube

Aug 2023

**Microsoft | Fabric** Updates Community Support

### Microsoft Fabric Updates Blog

Updates > All > Microsoft Fabric September 2023 Update

#### Microsoft Fabric September 2023 Update

Announcements Apache Spark Community Core Data Factory Data Science  
Data Warehouse Monthly Update OneLake Real-time Analytics Synapse

September 29, 2023 by Ryan Majidimehr 187,856 Views [in Share](#) [Tweet](#) [Like](#)

Welcome to the September 2023 update.

We have lots of features this month including updates to the monitoring hub, Fabric Metrics app, VS code integration for Data Engineering, Real-time data sharing and many more. Continue reading for more details on our new features!

Contents

- Core
  - [Monitoring hub – column options](#)
  - [OneLake](#)
    - [OneLake file explorer \(v1.0.10\) – Menu Option to View Workspaces and Items Online](#)
- Power BI
  - General
    - [Upgrade Power BI Desktop .NET Framework to 4.7.2 or newer](#)
- Reporting
  - [Mobile layout interactive canvas](#)
  - [Smart Narrative improvements](#)
  - [Modeling](#)

Sep 2023

**Microsoft | Fabric** Updates Community Support

### Microsoft Fabric Updates Blog

Updates > All > Microsoft Fabric October 2023 update

#### Microsoft Fabric October 2023 update

Announcements Apache Spark Core Data Activator Data Factory Data Science  
Data Warehouse Monthly Update Real-time Analytics Synapse

October 27, 2023 by Ryan Majidimehr 129,932 Views [in Share](#) [Tweet](#) [Like](#)

Welcome to the October 2023 update.

We have a lot of features this month including updates to the Item type icons, Keyword-Based Filtering of Tenant Settings, On-object Interaction updates, Eventstream Kafka Endpoints and many more. Continue reading for more details on our new and updated features!

Contents

- Core
  - [Item type icons](#)
- Admin
  - [Keyword-Based Filtering of Tenant Settings](#)
- Power BI
  - Reporting
    - [Power BI Desktop OneDrive and SharePoint integration](#)
    - [On-object Interaction Updates \(preview\)](#)
    - [New! Date Hierarchy on data flavor](#)
    - [New! Placeholder text](#)

Oct 2023

**Microsoft | Fabric** Updates Community

### Microsoft Fabric Updates Blog

Updates > All > Microsoft Fabric November 2023 update

#### Microsoft Fabric November 2023 update

Announcements Core Data Factory Data Science  
Monthly Update Real-time Analytics Synapse

November 15, 2023 by Ryan Majidimehr [in Share](#) [Tweet](#) [Like](#)

Welcome to the November 2023 update.

We have lots of features this month including Narratives for Data Factory, the general availability of Semantic RLS and many more. Continue reading for more details on our new features!

Contents

- Core
  - [Microsoft Fabric User API](#)
- Power BI
  - Reporting
    - [Button slicer \(Preview\)](#)
    - [Reference Labels \(Preview\)](#)
  - [Enhance your Q&A visual with suggested synonyms](#)
  - [On-object Interaction Updates](#)
  - [Azure Maps visual \(Preview\)](#)

Nov 2023



# Microsoft Fabric

## The unified data platform for AI transformation



Data  
Factory



Data  
Engineering



Data  
Warehouse



Data  
Science



Real-Time  
Intelligence



Power BI



AI



OneLake

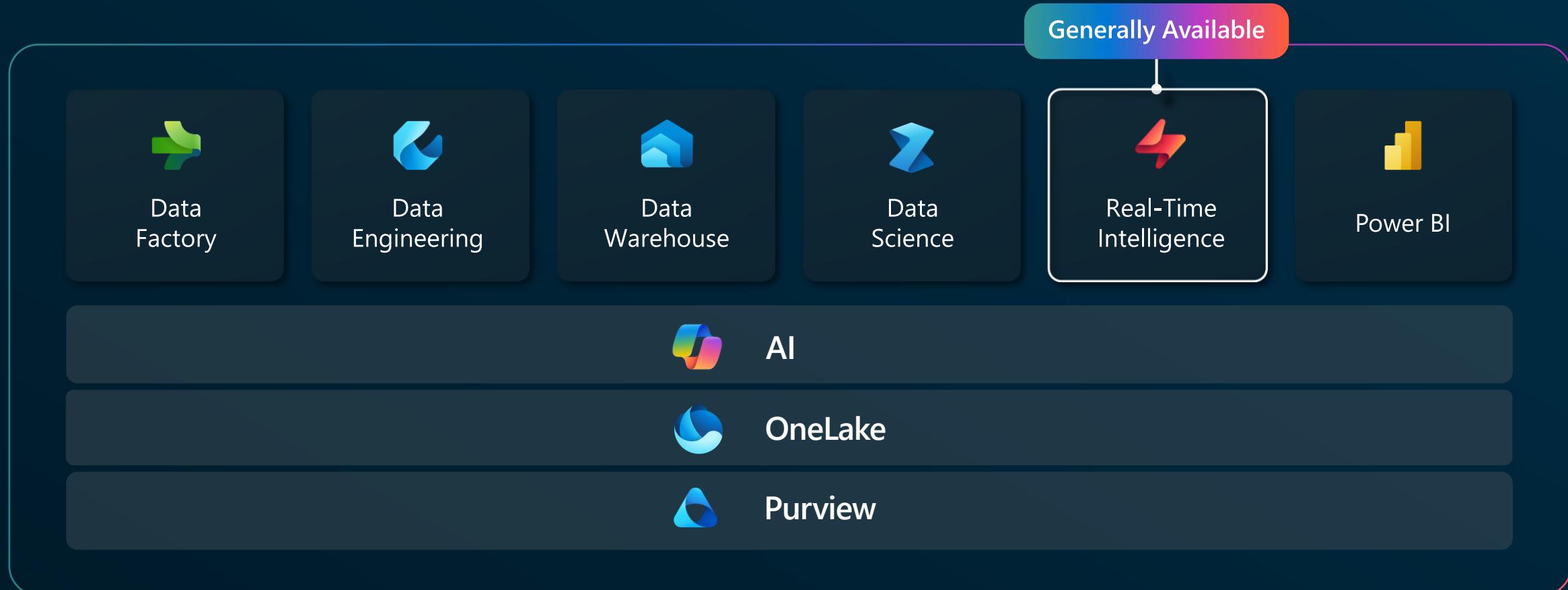


Purview



# Microsoft Fabric

## The unified data platform for AI transformation





# Microsoft Fabric

## The unified data platform for AI transformation



Data  
Factory



Data  
Engineering



Data  
Warehouse



Data  
Science



Real-Time  
Intelligence



Power BI



AI



OneLake



Purview



# Microsoft Fabric

## The unified data platform for AI transformation

Public Preview



Data  
Factory



Analytics



Databases



Real-Time  
Intelligence



Power BI



AI



OneLake



Purview



# Microsoft Fabric

## The unified data platform for AI transformation



Data  
Factory



Analytics



Databases



Real-Time  
Intelligence



Power BI



AI



OneLake

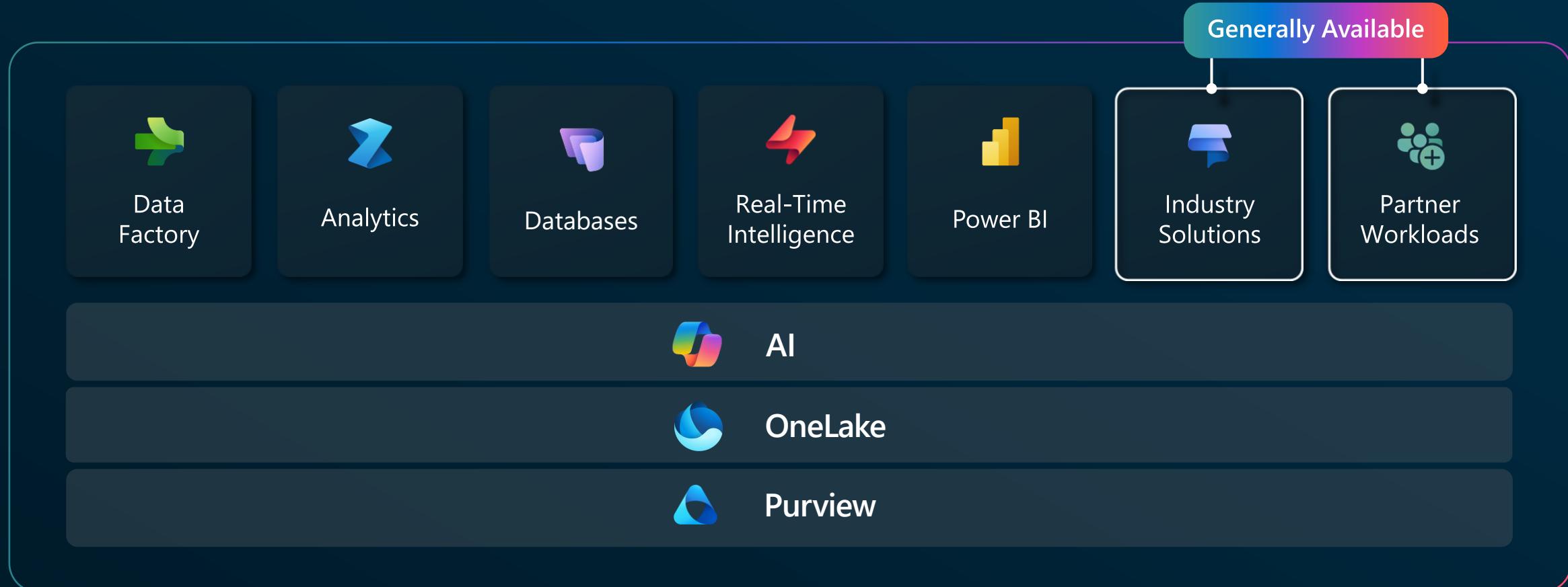


Purview



# Microsoft Fabric

## The unified data platform for AI transformation





# Industry Solutions



## Sustainability

ESG analysis, compliance

Build ESG data estate to meet requirements of regulations, analytics, reduction measures.

Generally Available



## Healthcare

Analytics to improve outcomes

Compare interventions and effects on outcomes; optimize targeted patient outreach.

Generally Available



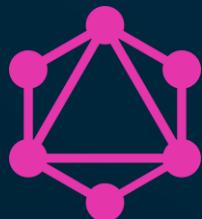
## Retail

Insights and shopping experience

Understand 'bought together' insights, enable AI shopping assistant; Sitecore integration.

Preview

Generally Available



# API for Graph QL in Fabric

Single intelligent endpoint  
for multiple data sources

Efficient data fetching  
and query flexibility

Fabric native:  
CI/CD, security, governance,  
& capacity consumption



# Microsoft Fabric

## The unified data platform for AI transformation

AI Powered Data Platform

Open and AI-Ready Data Lake

AI Enabled Insights



# Microsoft Fabric

## The unified data platform for AI transformation

### AI Powered Data Platform

Complete data platform

Unified, SaaS-ified

Secured and governed

### Open and AI-Ready Data Lake

OneLake

Multi-cloud

Open at every tier

### AI Enabled Insights

For every business user

Built into Microsoft 365

M365 Copilot Integrated



# New workloads

Demo



# SQL databases in Fabric

Generally Available

# Microsoft Fabric Workload Development kit

Seamless user  
experience

Discover and visualize  
insights in real-time

Automatically drive  
action from data

# Developer momentum

Microsoft Fabric Workload Development Kit

Public Preview



And many more!

Demo



# Custom workloads in Fabric



Platform, administration  
and governance

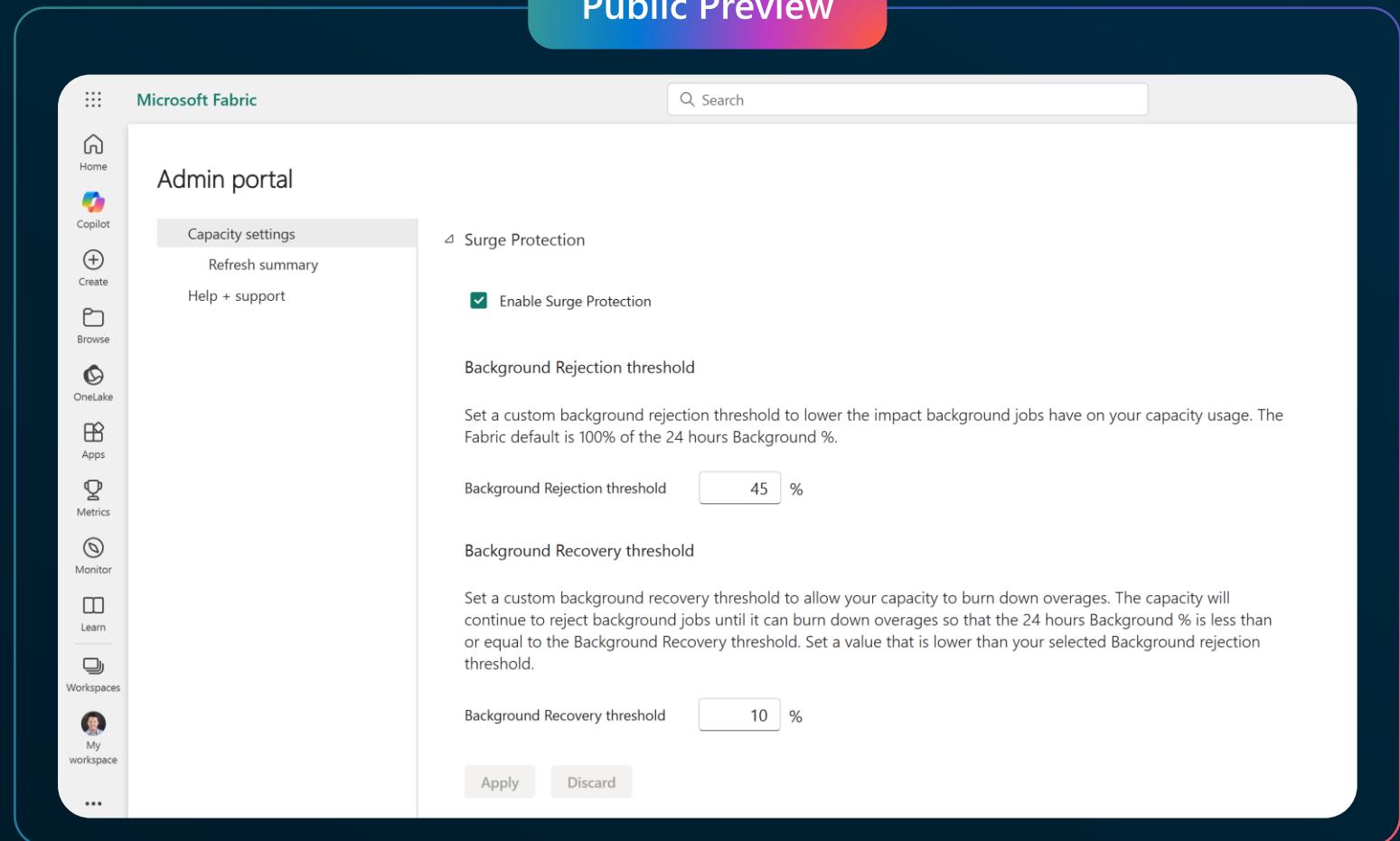
Demo



# Tenant settings

# Surge Protection

Public Preview



The screenshot shows the Microsoft Fabric Admin portal interface. On the left is a sidebar with various navigation options: Home, Copilot, Create, Browse, OneLake, Apps, Metrics, Monitor, Learn, Workspaces, and My workspace. The main area is titled "Admin portal" and has a "Capacity settings" menu with "Surge Protection" selected. Under "Surge Protection", there is a checked checkbox for "Enable Surge Protection". Below it is a section for "Background Rejection threshold" with a slider set at 45%. A note states: "Set a custom background rejection threshold to lower the impact background jobs have on your capacity usage. The Fabric default is 100% of the 24 hours Background %.". Another section for "Background Recovery threshold" has a slider set at 10%, with a note: "Set a custom background recovery threshold to allow your capacity to burn down overages. The capacity will continue to reject background jobs until it can burn down overages so that the 24 hours Background % is less than or equal to the Background Recovery threshold. Set a value that is lower than your selected Background rejection threshold.". At the bottom are "Apply" and "Discard" buttons.

Protect your capacities from **unexpected surges** in background workload consumption

Set limits on background activity consumption to **prevent background jobs running** when limit is reached

**Configure separate limits** for each capacity in your organization for added flexibility

# Workspace monitoring

Fabric trial ends in 1 day

Workspace Monitor

New folder

## Workspace settings

Search

- General
- License info
- Azure connections
- System storage
- Git integration
- OneLake
- Workspace identity
- Network security
- Monitoring**
- Power BI

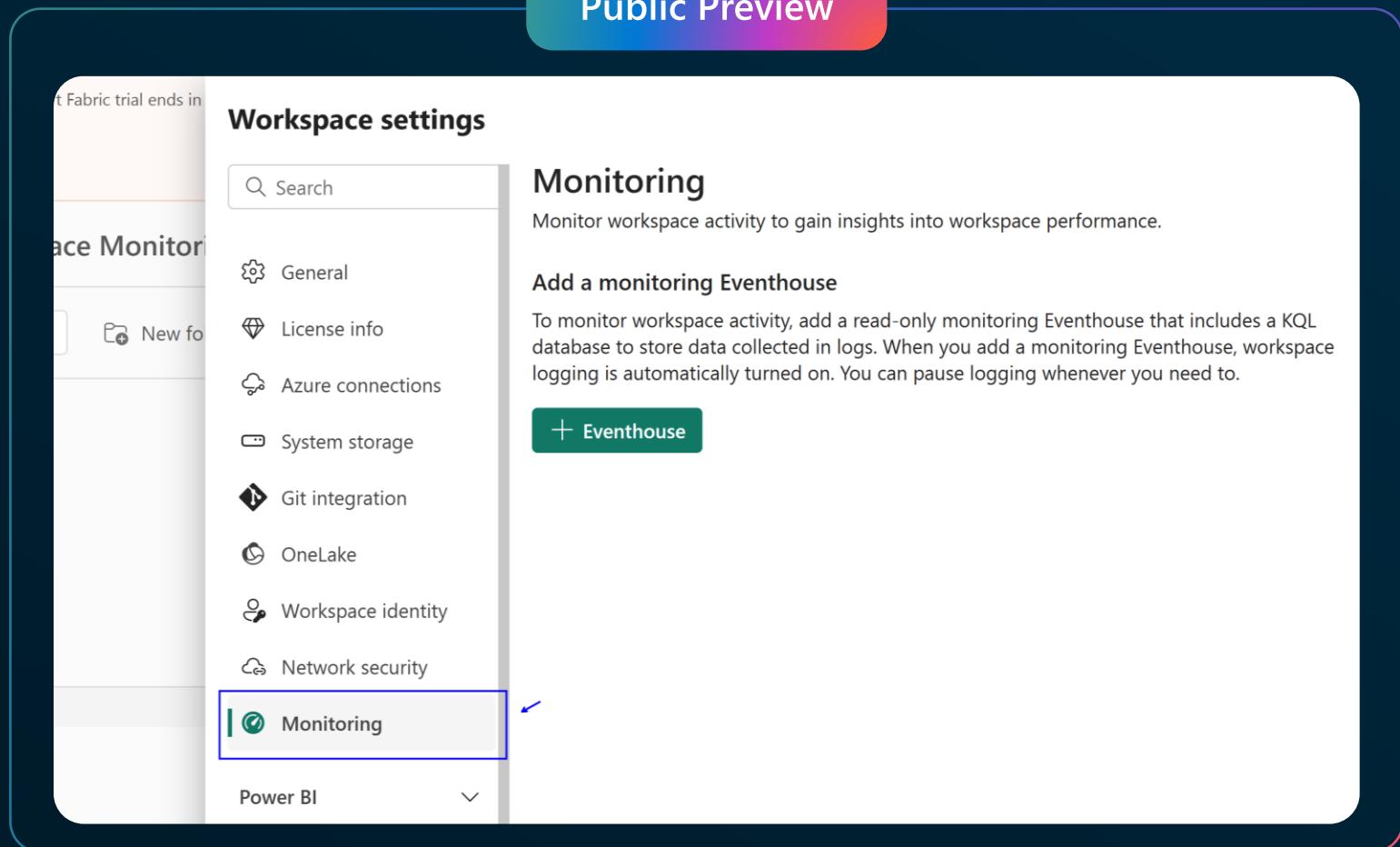
**Monitoring**

Monitor workspace activity to gain insights into workspace performance.

**Add a monitoring Eventhouse**

To monitor workspace activity, add a read-only monitoring Eventhouse that includes a KQL database to store data collected in logs. When you add a monitoring Eventhouse, workspace logging is automatically turned on. You can pause logging whenever you need to.

+ Eventhouse

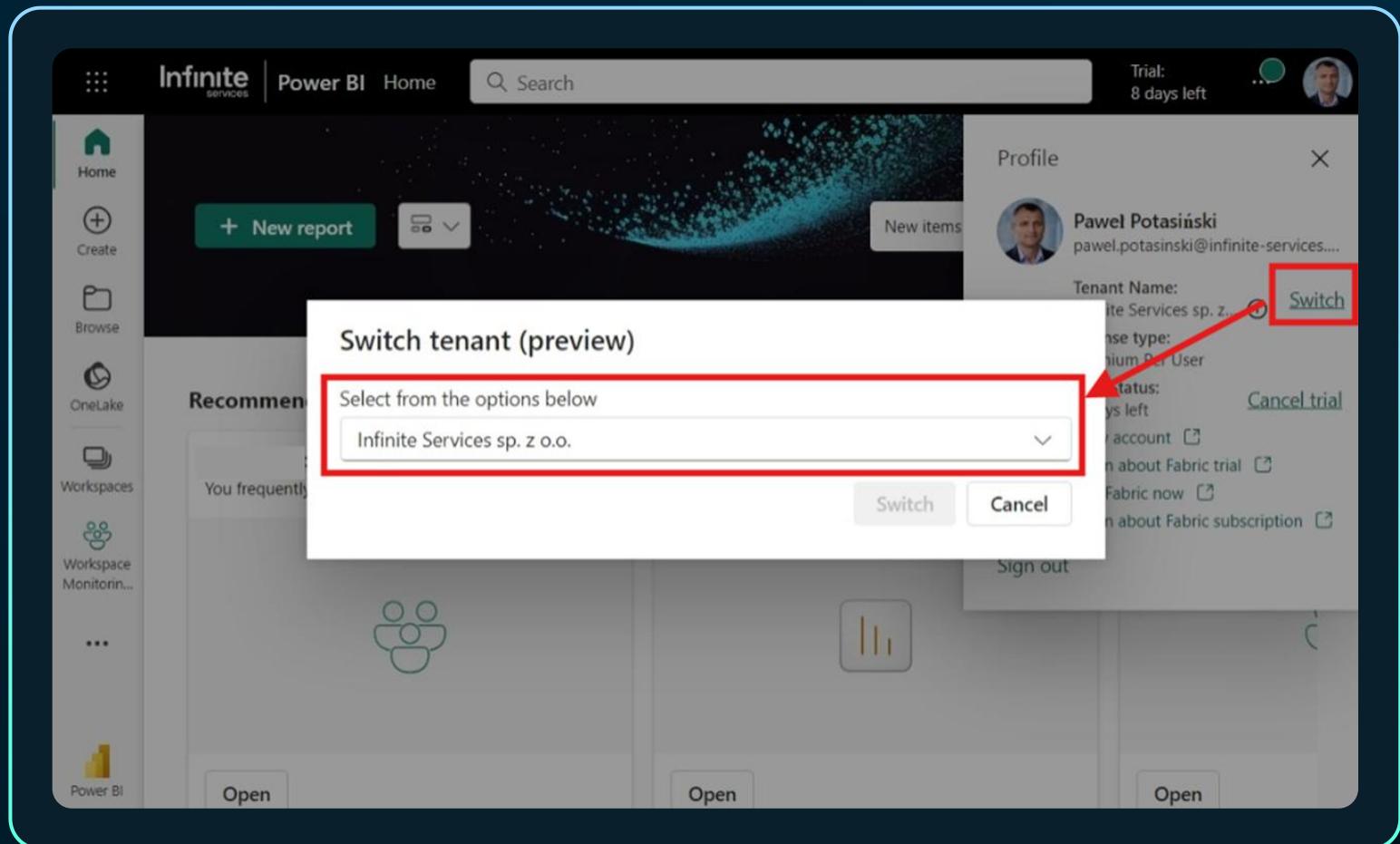


**Monitor workspace activity & view granular diagnostic logs** in a read-only Eventhouse w/ KQL DB

**Conduct root-cause analysis, troubleshoot operations, and track performance and data downtime**

**Query the database ad-hoc, analyze for patterns and anomalies, or save drafted queries as query sets**

# Tenant switcher



Tenant switcher control in Fabric UI

Easily access multiple tenants

No logging off required

Demo

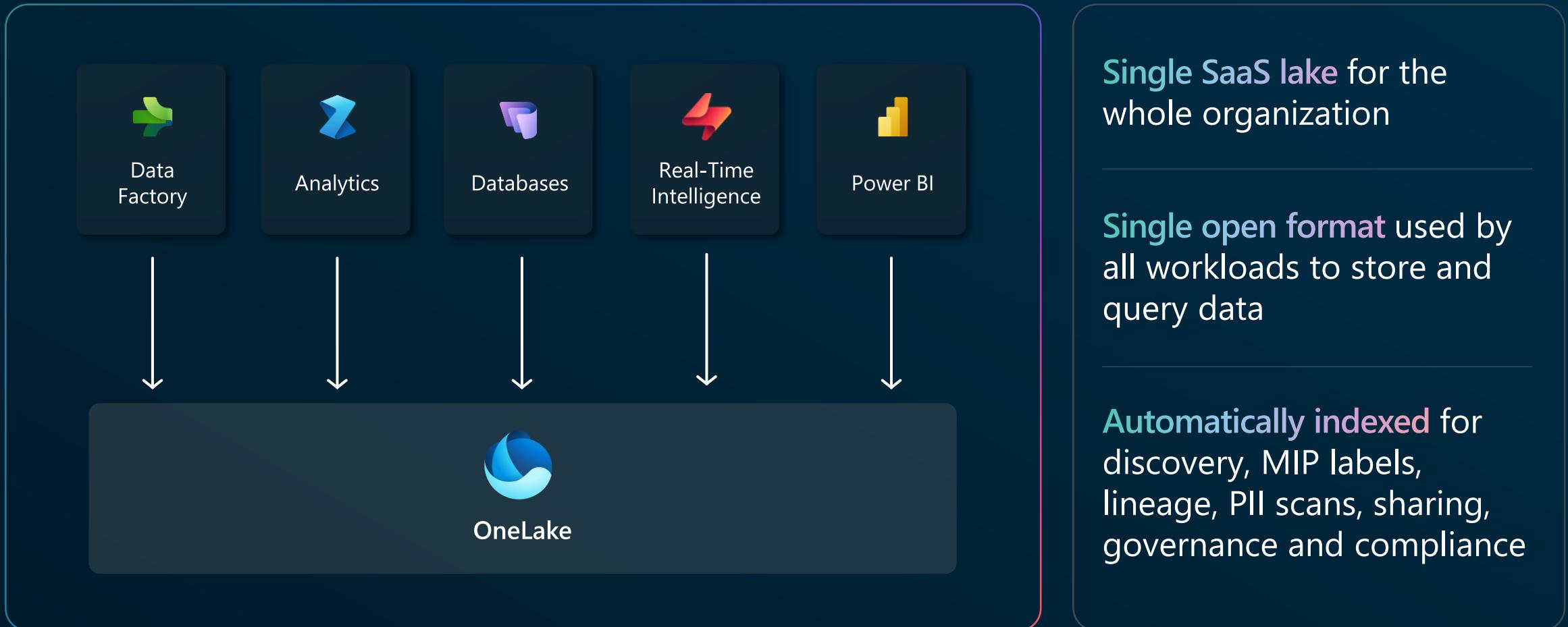


Switch branches  
in Fabric UI



OneLake

# OneLake is the OneDrive for data





# OneLake momentum

**21 Billion**

Interactions per day

**4 Million**

Active shortcuts

**>1 Million**

Azure storage accounts  
under management

**16 Weeks**

Doubling rate of  
storage volume



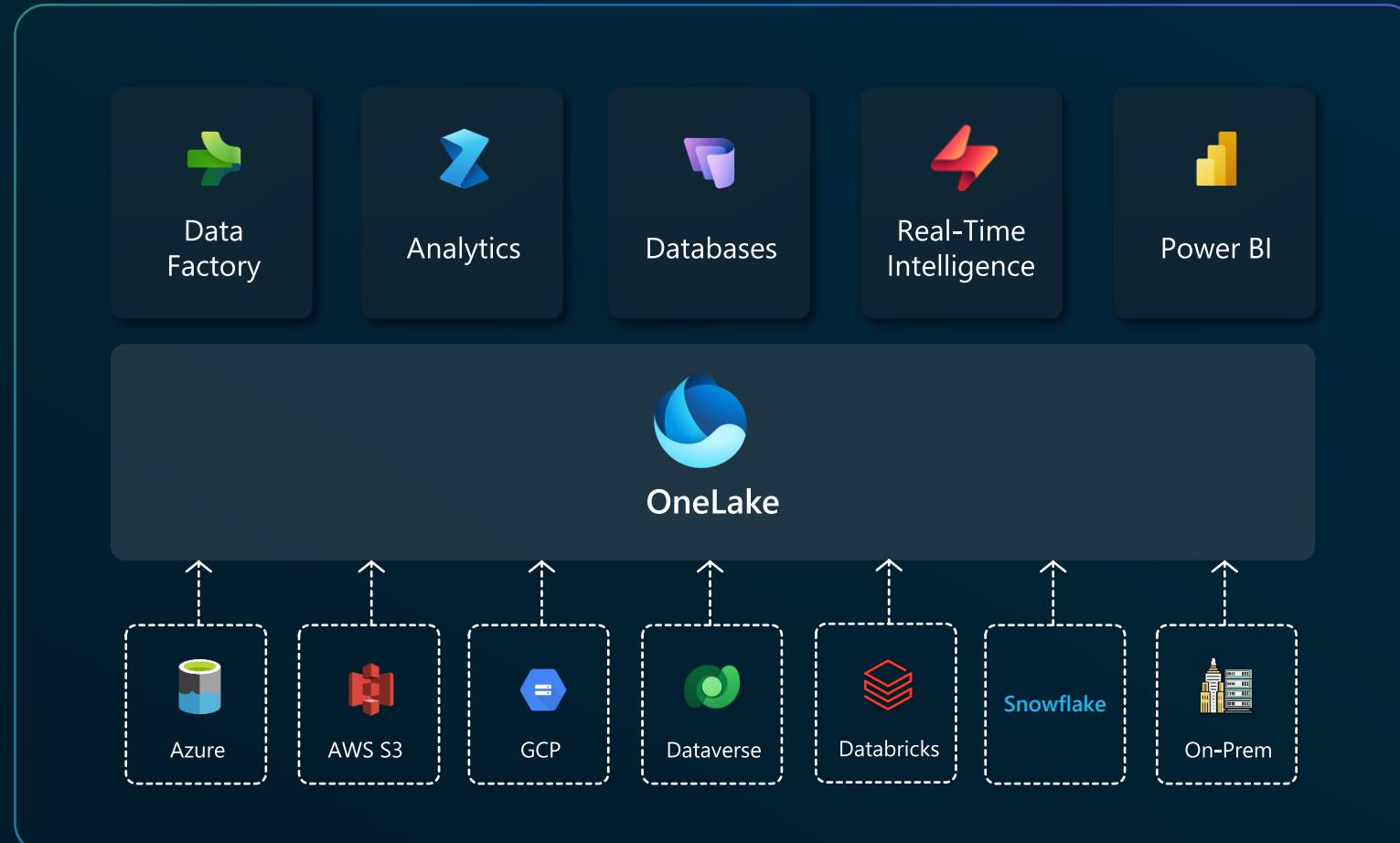
Demo



# OneLake catalog

# Unifying data in OneLake

Cross-cloud shortcuts & mirroring



First multi-cloud  
SaaS data lake

Shortcuts for existing  
data **cross clouds and  
on-premises**

Mirroring to add  
**whole databases** into  
the OneLake data estate

# Database Mirroring in Fabric

Automatically reflect data into OneLake

Generally Available

Snowflake

Mirroring for  
Snowflake



Mirroring for  
Azure SQL DB

Public Preview



Mirroring for  
Cosmos DB



Mirroring for  
Azure SQL MI



Mirrored Azure  
Databricks Catalog

# Database Mirroring in Fabric

Automatically reflect data into OneLake

## Snowflake

Mirroring for  
Snowflake



Mirroring for  
Azure SQL DB



Mirroring for  
Cosmos DB



Mirroring for  
Azure SQL MI



Mirrored Azure  
Databricks Catalog

Coming Soon



Mirroring for  
SQL Server



Mirroring for SQL  
Server 2025



Mirroring for  
Azure PostgreSQL



Mirroring for  
Oracle

# Open Mirroring in Fabric

Public Preview



## Mirrored Database Item



A new capability in Fabric to enable any applications to integrate data into OneLake via Mirroring

Open Mirror enables landing data via API or manually via drag-and-drop in the UX

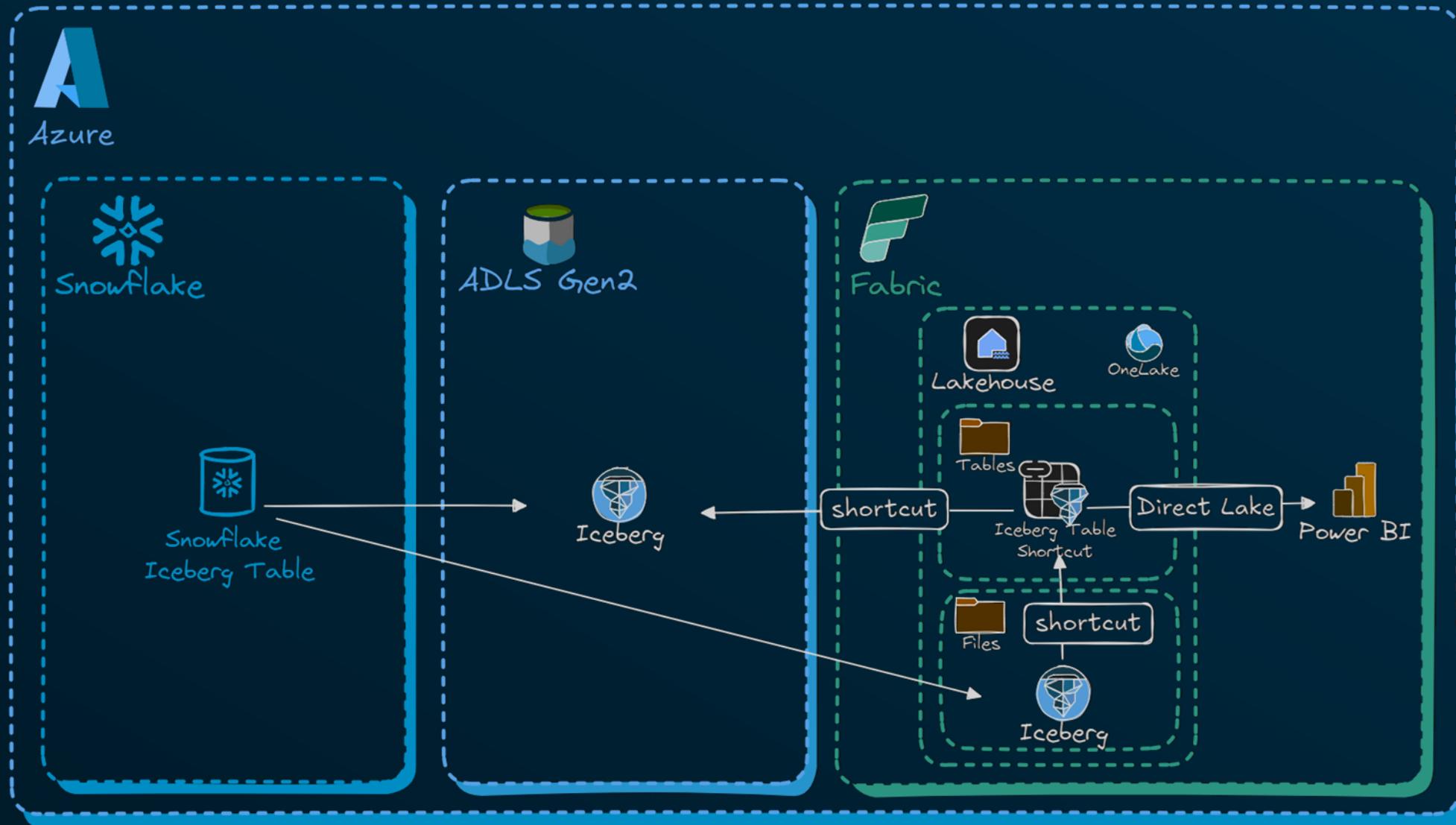
Simplifies building custom mirroring solutions and handling of complex data changes, ensuring that all mirrored data is continuously up-to-date and ready for analysis

Demo

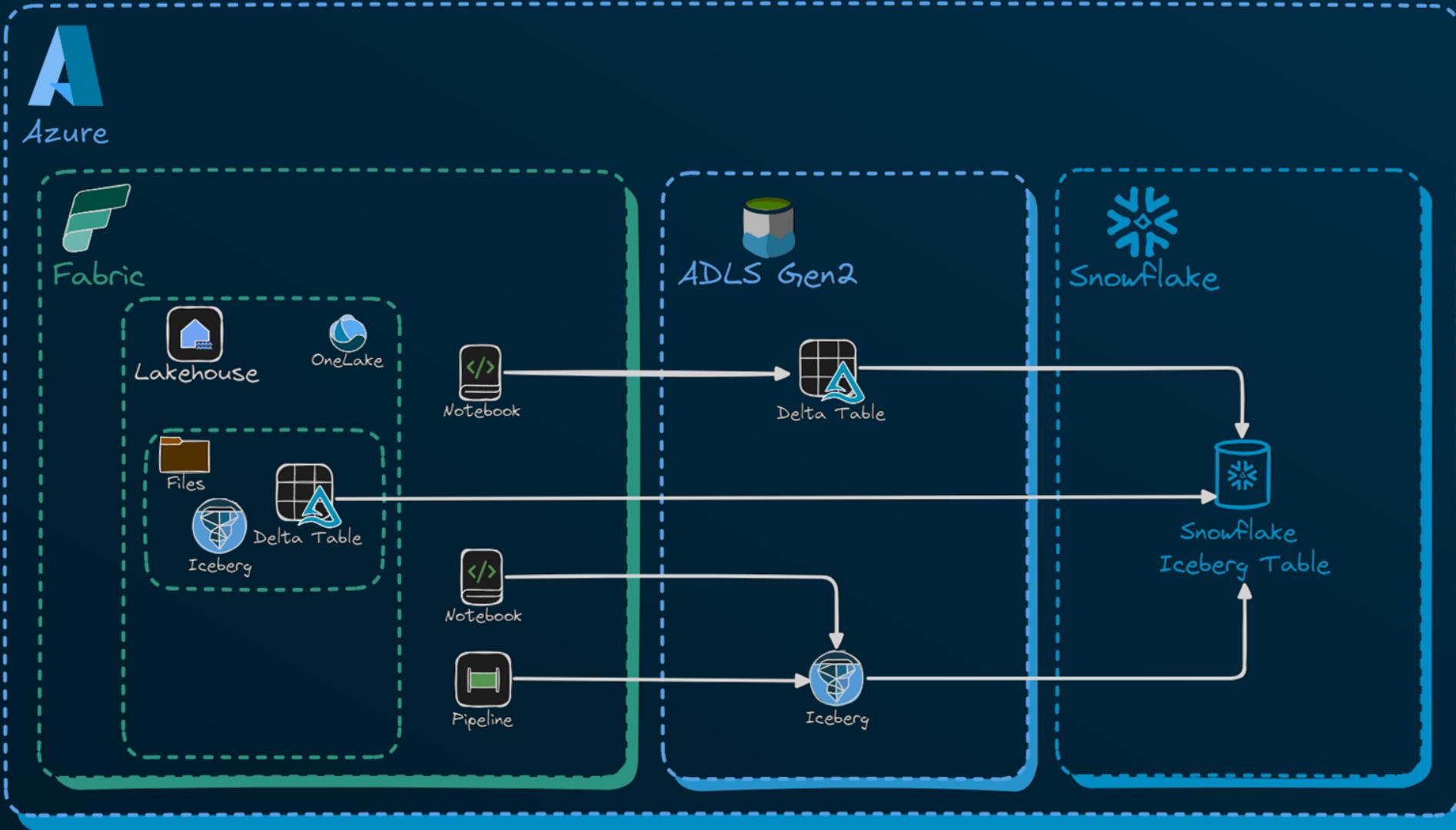


# Open Mirroring

# Iceberg integration – Snowflake to Fabric



# Iceberg integration – Fabric to Snowflake



Demo



# Iceberg integration



# Data Factory

Demo



# Writing data to Iceberg (+import/export pipeline)

Demo



# Copilot for data pipelines

Demo



# Updated Semantic Model Refresh activity



# Analytics

Demo



# Python notebooks

Demo



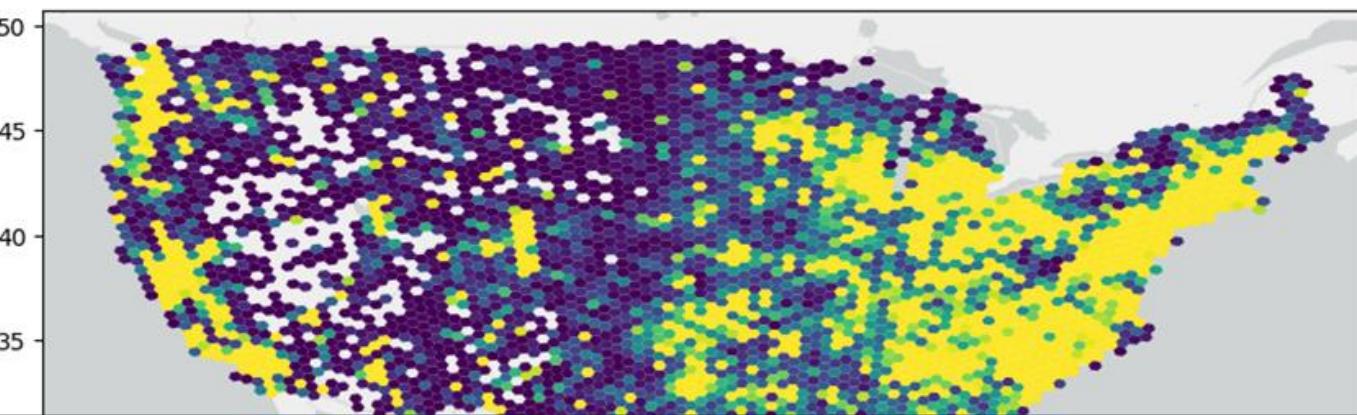
# Notebook chart update

# Integration with Esri ArcGIS in notebooks

```
1 # Uncover the pattern of our interest, for
2 # instance summarizing the total number of policies by hexagonal bins
3 df_points_agg.st.plot(basemap="light",
4     figsize=(10,10),
5     cmap_values="Count",
6     vmin=10,
7     vmax=500,
8     legend=True, legend_kwds={"location": "bottom", "pad": 0},
9     extent=(-127.83, 21.88561, -64.81539, 50.69));
```

✓ 12 sec - Command executed in 11 sec 807 ms by Arshad Ali on 3:30:11 PM, 8/15/24

> Spark jobs (2 of 2 succeeded) Resources



## GeoAnalytics functions in Fabric Spark

Integrate geospatial data, enrich data with location context, **visualize** spatial relationships

Available in Runtime 1.3

Demo



Low code AutoML

Demo



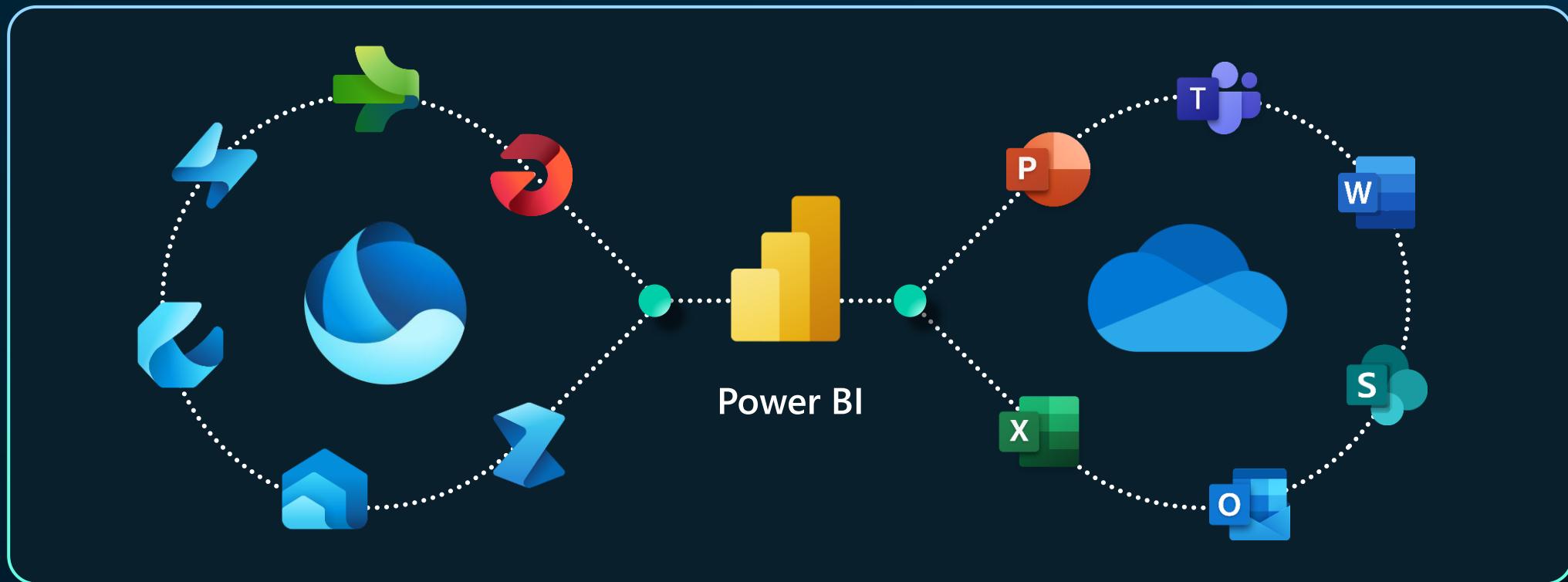
# Future of AI Skills





# Power BI

# Unified data culture



Demo



New visuals + Path layer  
for Azure Map visual

Demo



# Metric sets

Demo



Define new measure  
in DAX view

Demo



# TMDL in VSCode

Demo



Org apps



Real-Time Intelligence

# New Fabric events

Public preview

The screenshot shows the Infinite services Power BI interface. On the left, there's a sidebar with various navigation options like Home, Create, Browse, OneLake, Apps, Metrics, Monitor, Real-Time, Workspaces, and Workspace Monitoring. The main area displays 'OneLake events' with a description: 'Events produced by actions on files or folders in OneLake, such as file created, deleted, or renamed.' It includes a 'Set alert' button and a 'Stay on top of your OneLake events' section with a 'Preview' link and a 'Set alert' button. Below this, there's a table titled 'See what's using this category' with two rows:

Name	Type	Workspace	Source
LoadFilesActivator	Activator	Workspac...	DemoLak...
LoadFilesActivator	Activator	Workspac...	DemoLak...

To the right, a detailed configuration pane for a 'Fabric OneLake event' is shown. It has sections for 'Monitor', 'Source' (with a 'Select events' dropdown), 'Condition' (set to 'On each event'), 'Action' (with three options: 'Send me an email', 'Message me in Teams', and 'Run a Fabric item' which is selected), 'Workspace' (set to 'Workspace Monitoring Demo'), 'Item' (set to 'Load New Files'), and 'Fabric job' (set to 'Run Notebook'). There's also a 'Save location' section and a 'Workspace' dropdown at the bottom.

Fire actions on Fabric OneLake events

Run Fabric items as a reaction to events

Automate file loading and management

Demo



# Set alert with Activator

# The road ahead

Demo



# Copilot in Power BI for end users

Sneak Peek

Demo



# Translytical apps in Fabric (write-back)

Sneak Peek



# Microsoft Fabric

## The unified data platform for AI transformation



Data  
Factory



Analytics



Databases



Real-Time  
Intelligence



Power BI



Industry  
Solutions



Partner  
Workloads



AI



OneLake



Purview

# Resources

- [Microsoft Ignite 2024 Book of News](#)
- [Accelerate app innovation with an AI-powered data platform | Microsoft Fabric Blog](#)
- [Microsoft Fabric: what's new and what's next | BRK204](#)
- [Fabric November 2024 Feature Summary | Microsoft Fabric Blog | Microsoft Fabric](#)
- [Announcing SQL database in Microsoft Fabric Public Preview | Microsoft Fabric Blog](#)

# Fabric community resources

Learn more about Fabric and join the community

## Community Call to Action

- ✓ Try Microsoft Fabric for free: <https://aka.ms/try-fabric>
- ✓ Join the Fabric community: <https://aka.ms/fabriccommunity>
- ✓ Share and vote for ideas to improve Fabric: <https://aka.ms/fabricideas>
- ✓ Read and comment Fabric Updates blog: <https://aka.ms/fabricblog>

## Learn more about Microsoft Fabric

- Product website: <https://aka.ms/microsoft-fabric>
- Documentation: <https://aka.ms/fabric-docs>
- Microsoft Learn: <https://aka.ms/learn-fabric>
- End-to-end scenario tutorials: <https://aka.ms/fabric-tutorials>
- Fabric community on Reddit: <https://www.reddit.com/r/MicrosoftFabric>

