

Unraveling the Microsoft Fabric for the Power BI User

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Fabric Customer Advisory Team (CAT)





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Agenda

Power BI Level-set

Microsoft Fabric Overview

Data Factory and OneLake

Power BI Direct Lake

Resources

Wrap up and Final Q&A





Dan English (he/him)

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Professional:

LinkedIn - [/in/denglishbi](https://www.linkedin.com/in/denglishbi)

Twitter (X) - [@denglishbi](https://twitter.com/denglishbi)

Author, Speaker, former Microsoft Data Platform MVP

Helped run following communities (# years)

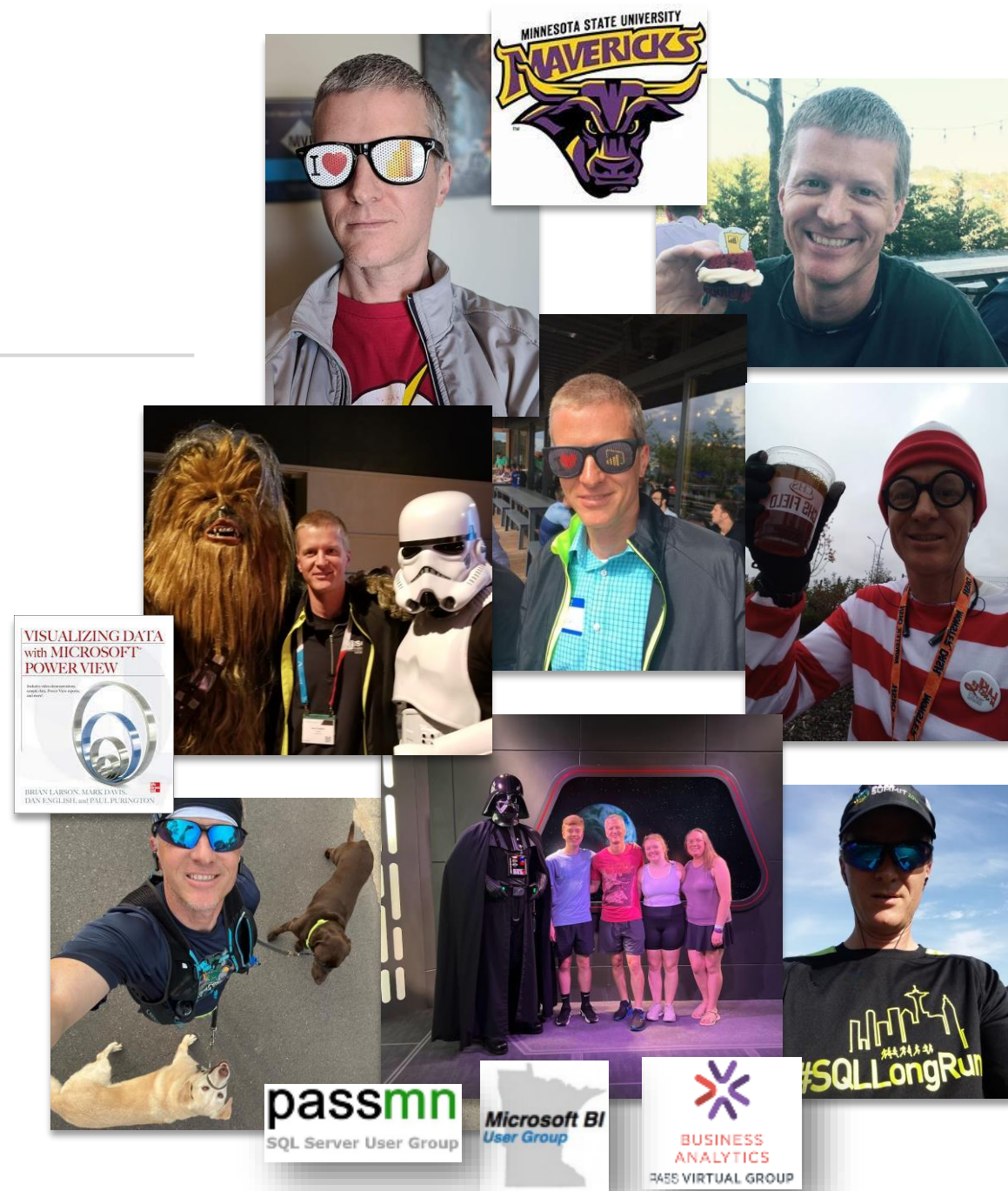
PASSMN (4),

MN Microsoft BI User Group (6),

PASS Business Analytics Virtual Group (5)

Personal:

Running 🏃, MN Vikings 🏈 MN Timberwolves 🏀,
Dogs 🐕, Movies 🎬, Beer 🍺





Power BI Level-set



Power BI Authoring



Power BI
Desktop



Power BI
Report Builder

Data exploration and
report authoring tools



Power BI service

Cloud-based modern
business analytics solution,
includes free mobile app



Power BI report



Dashboard



Metrics

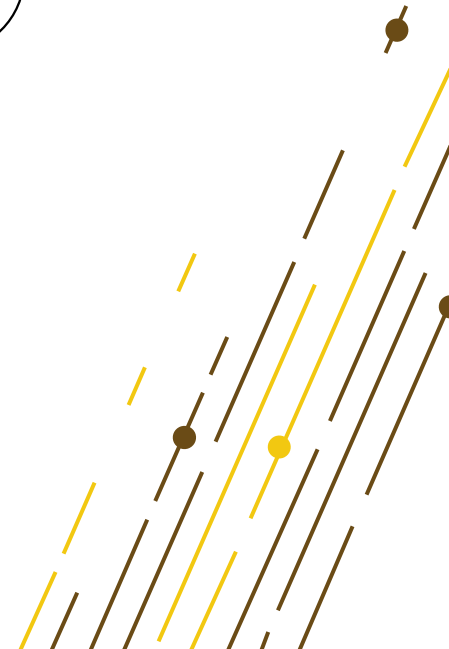


Paginated report



Apps

Shareable items to provide
insights and analytics



Power BI Data Components



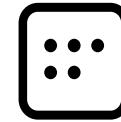
Power Query

Data transformation
and preparation tool



Model

Create relationships,
columns, tables, measures,
and hide, sort, format items



Semantic Model

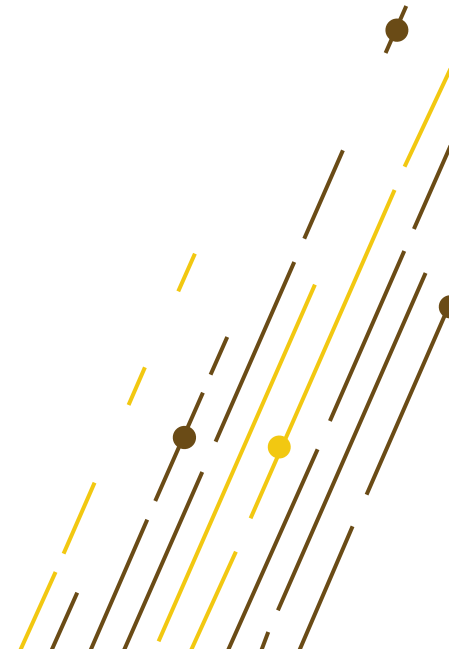


Dataflow (Gen1)



Datamart
(Public Preview)

Consumable data items to create
reports and perform analysis





Microsoft Fabric Overview

Announcing

Public Preview – Build May 2023

Generally Available – Ignite Nov 2023



Microsoft Fabric

The data platform for the era of AI

//

Biggest release of a Microsoft data product since the launch of SQL Server



Satya Nadella
May 2023

Microsoft SQL Server

System software :

Microsoft SQL Server is a proprietary relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving ... [Wikipedia](#)

Initial release date: April 24, 1989



Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake centric and open

OneLake

One Copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data



Microsoft Fabric

The unified data platform for the era of AI



Data
Factory



Data
Engineering



Data
Warehouse



Data
Science



Real-Time
Intelligence



Power BI



AI

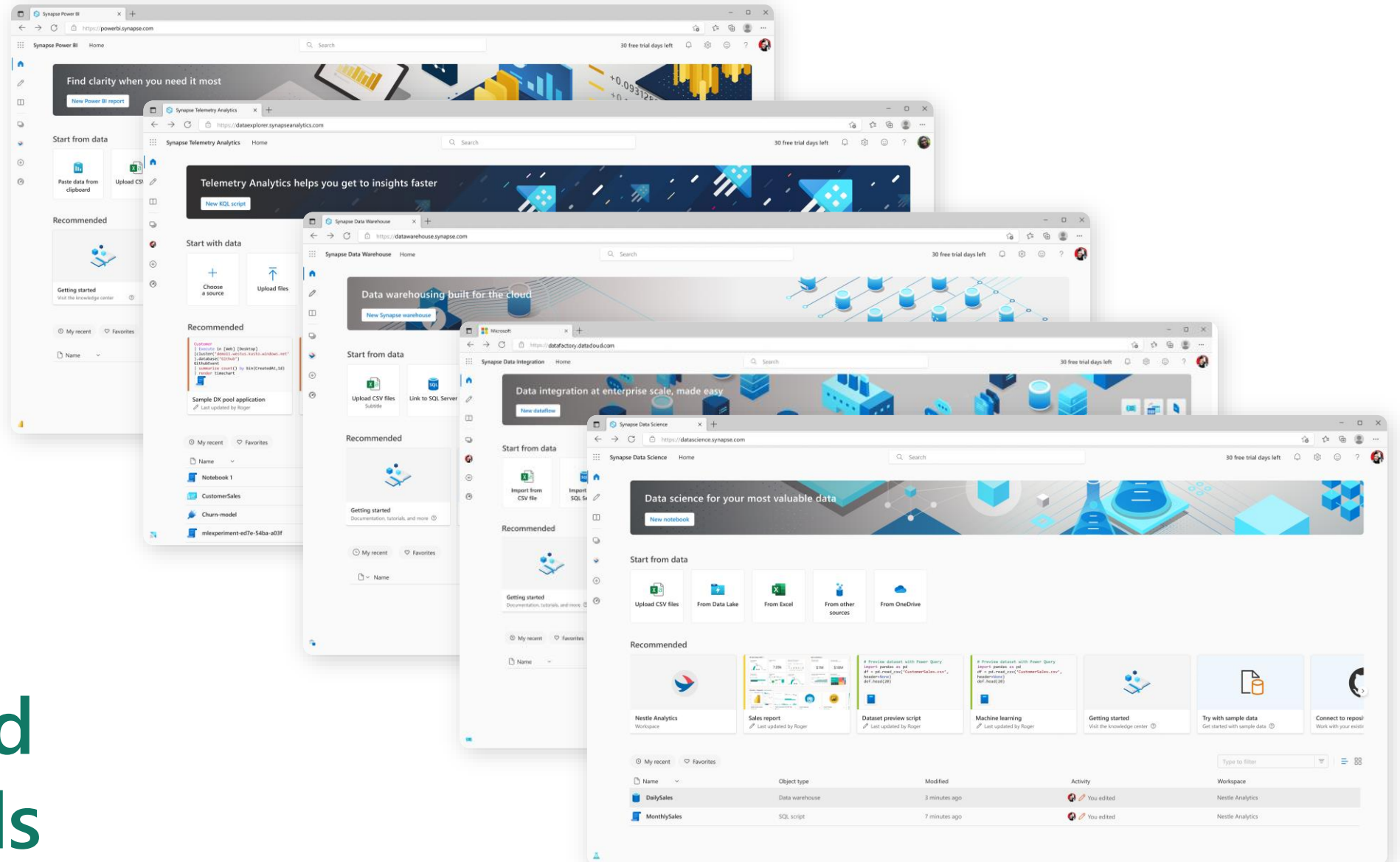


OneLake



Purview

Persona optimized workloads





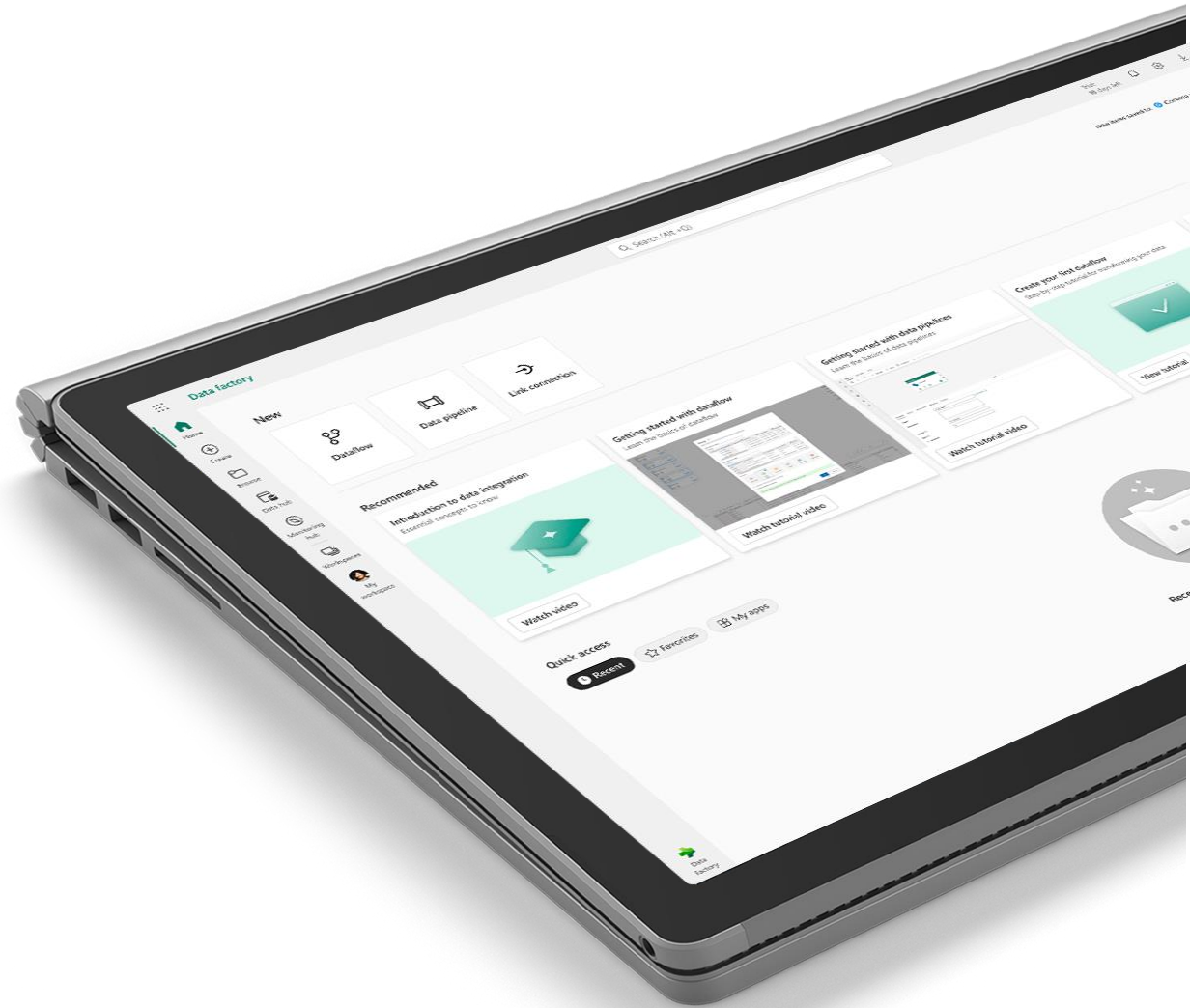
Data Factory

Data Factory

in Microsoft Fabric

Bringing the best of **Power Query** and **Azure Data Factory** together

From **self-service data preparation** by citizen data analysts to **enterprise data integration** for professional developers



Dataflow Gen2

Next generation of Power BI Dataflows

Low-code ETL & ELT

Rich library of transformations

Scalable data flows

Output data destinations

Write output of dataflows to Azure SQL database,
Data warehouse, Lakehouse and more

The screenshot displays the Power BI Dataflow Gen2 interface. The top navigation bar includes 'Home', 'Transform', 'Add Column', 'View', and 'Help'. The main workspace shows a data flow diagram with the following steps:

- Customers - Staged** (Source)
- Customers** (Promoted headers, Changed columns, Filter rows, Add step)
- Orders** (Source)
- Merge** (Add step)

The bottom pane shows a data table with the following columns and rows:

123 SalesOrderID	123 RevisionNu...	OrderDate	DueDate	ShipDate	123 Status	ABC OnlineOrde...	ABC SalesOrder...	ABC PurchaseOr...	ABC AccountNu...	ABC Compa	
1	71774	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71774	PO348186287	10-4020-000609	Good Toys
2	71776	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71776	PO19952192051	10-4020-000106	West Sode
3	71780	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71780	PO19604173239	10-4020-000340	Nearby Cy
4	71782	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71782	PO19372114749	10-4020-000582	Professor
5	71783	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71783	PO19343113609	10-4020-000024	Eestsode C
6	71784	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71784	PO19285135919	10-4020-000448	ectoon Box
7	71796	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71796	PO17052159664	10-4020-000420	Extreme Rc
8	71797	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71797	PO16501134889	10-4020-000142	Rodong Cy
9	71815	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71815	PO13021155785	10-4020-000276	Throftly Per
10	71816	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71816	PO12992180445	10-4020-000295	Engineere
11	71831	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71831	PO10295111084	10-4020-000322	Techomete
12	71832	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71833	PO10353140756	10-4020-000088	Closest Bo
13	71845	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71834	PO2697119362	10-4020-000187	Treolblezo
14	71846	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71835	PO2378131604	10-4020-000635	Sports Stor
15	71856	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71836	PO16530177647	10-4020-000601	Transpor
16	71858	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71837	PO16153112278	10-4020-000186	Throfflong
17	71863	2	6/1/2008, 12:00:00 AM	6/13/2008, 12:00:00 AM	6/8/2008, 12:00:00 AM	S	FALSE	SO71838	PO16124166561	10-4020-000649	Sports Pro

The bottom status bar indicates: Completed (0.86 s) Columns: 7 Rows: 9+

Data Pipelines

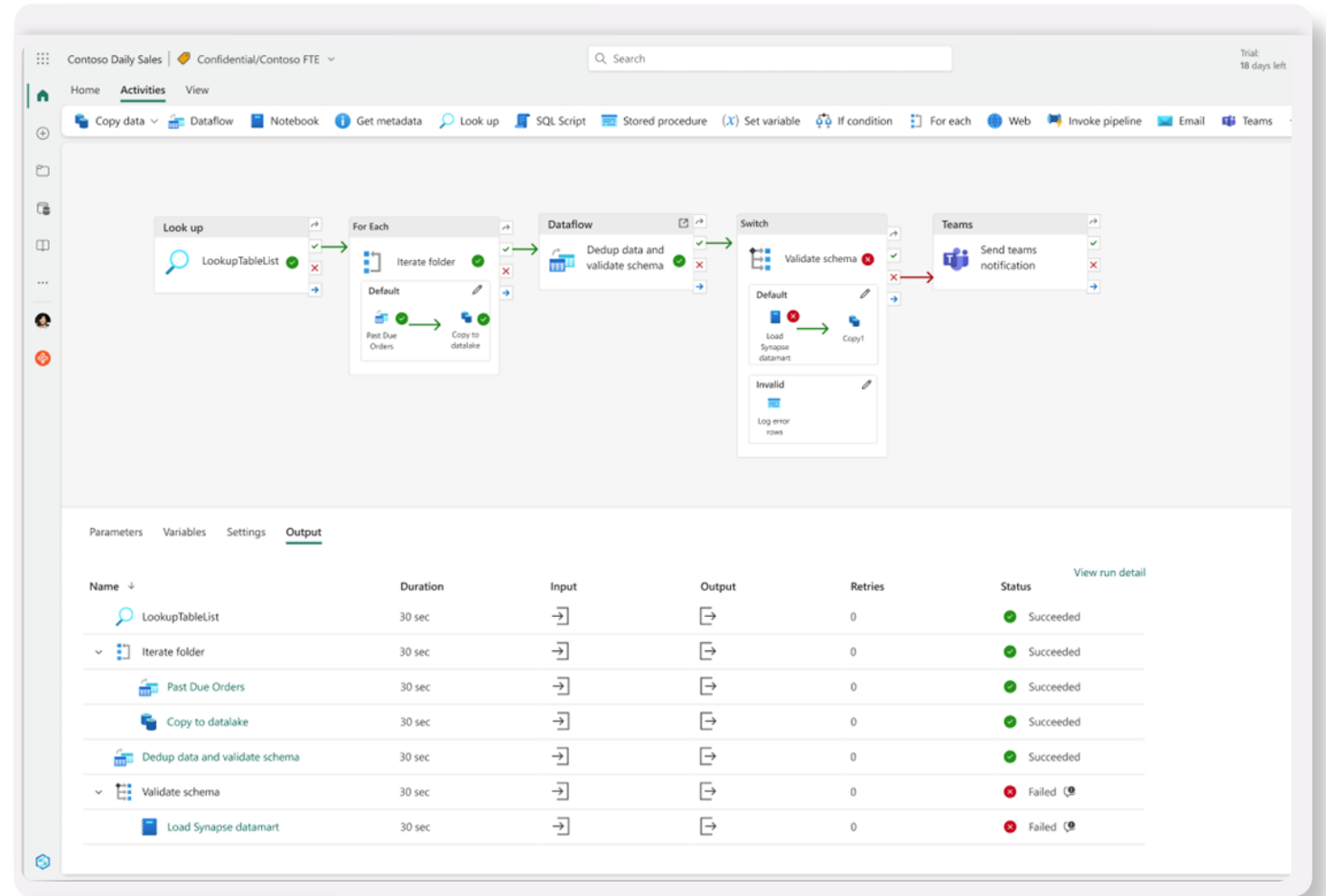
Low-code Data orchestration

Evolution of **Azure Data Factory** pipelines

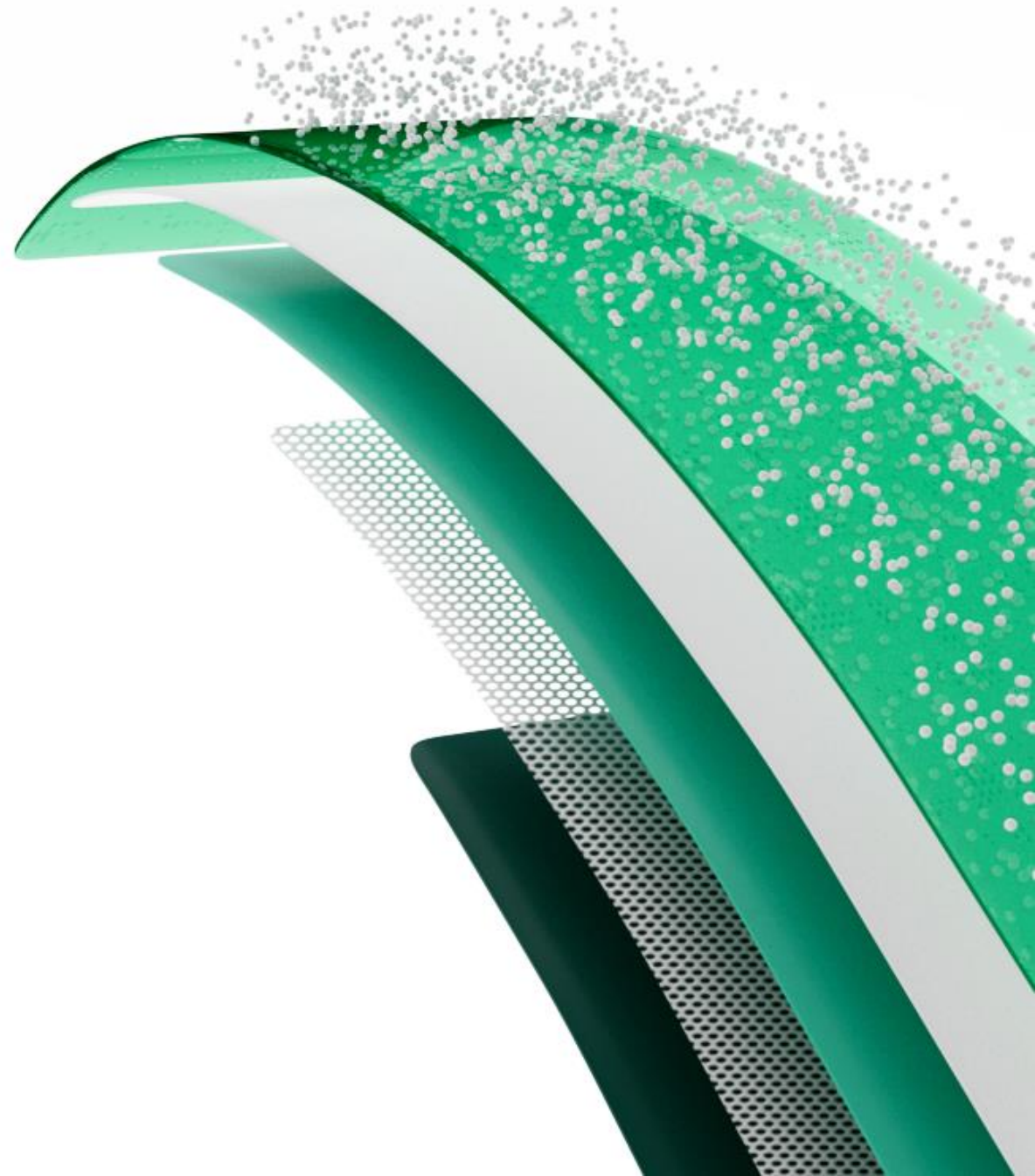
Rich library of **activities**

Fast copy

Jumpstart with **Copy Assistant**



DEMO: Data Factory

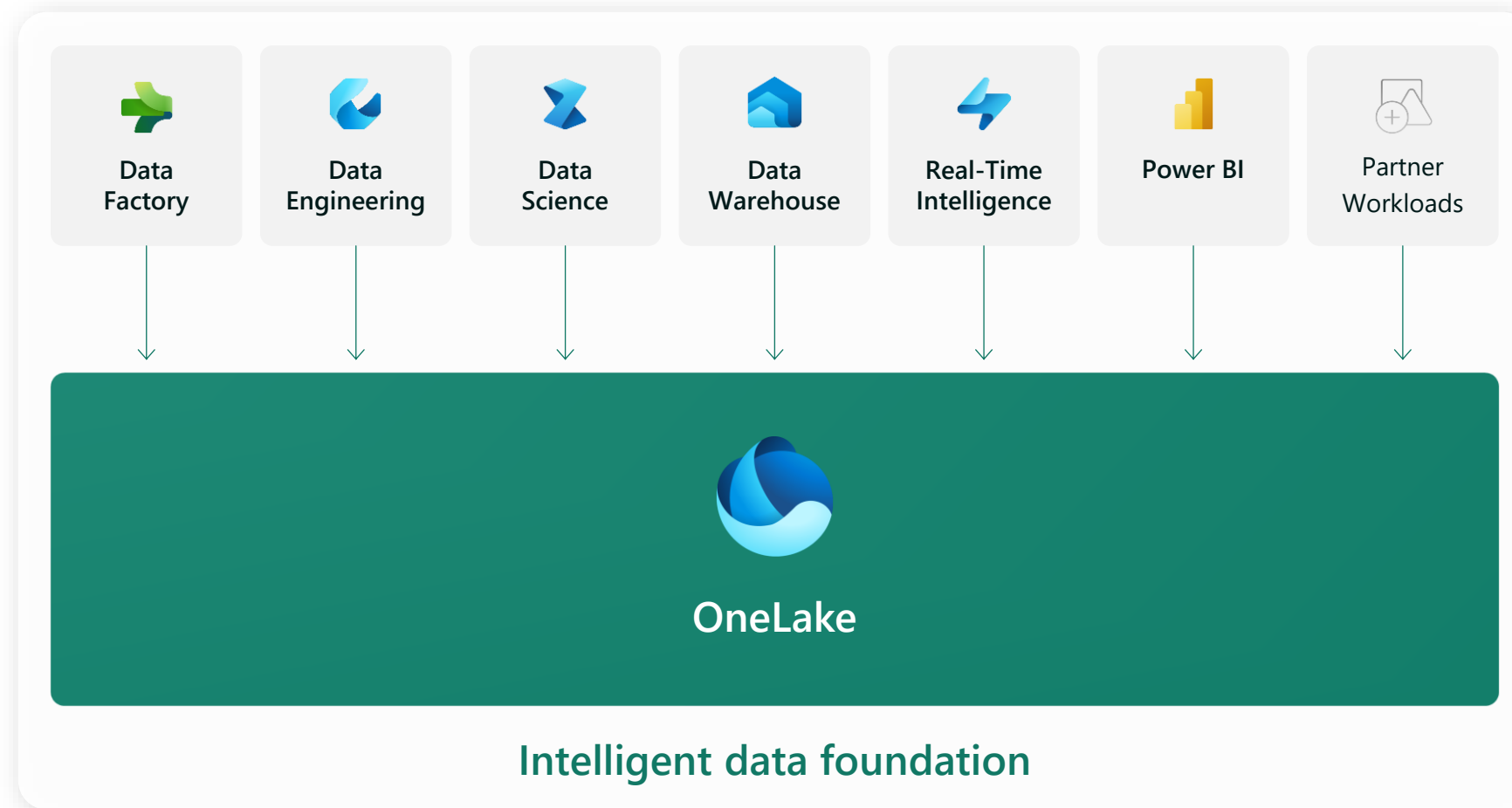




OneLake

OneLake for all Data

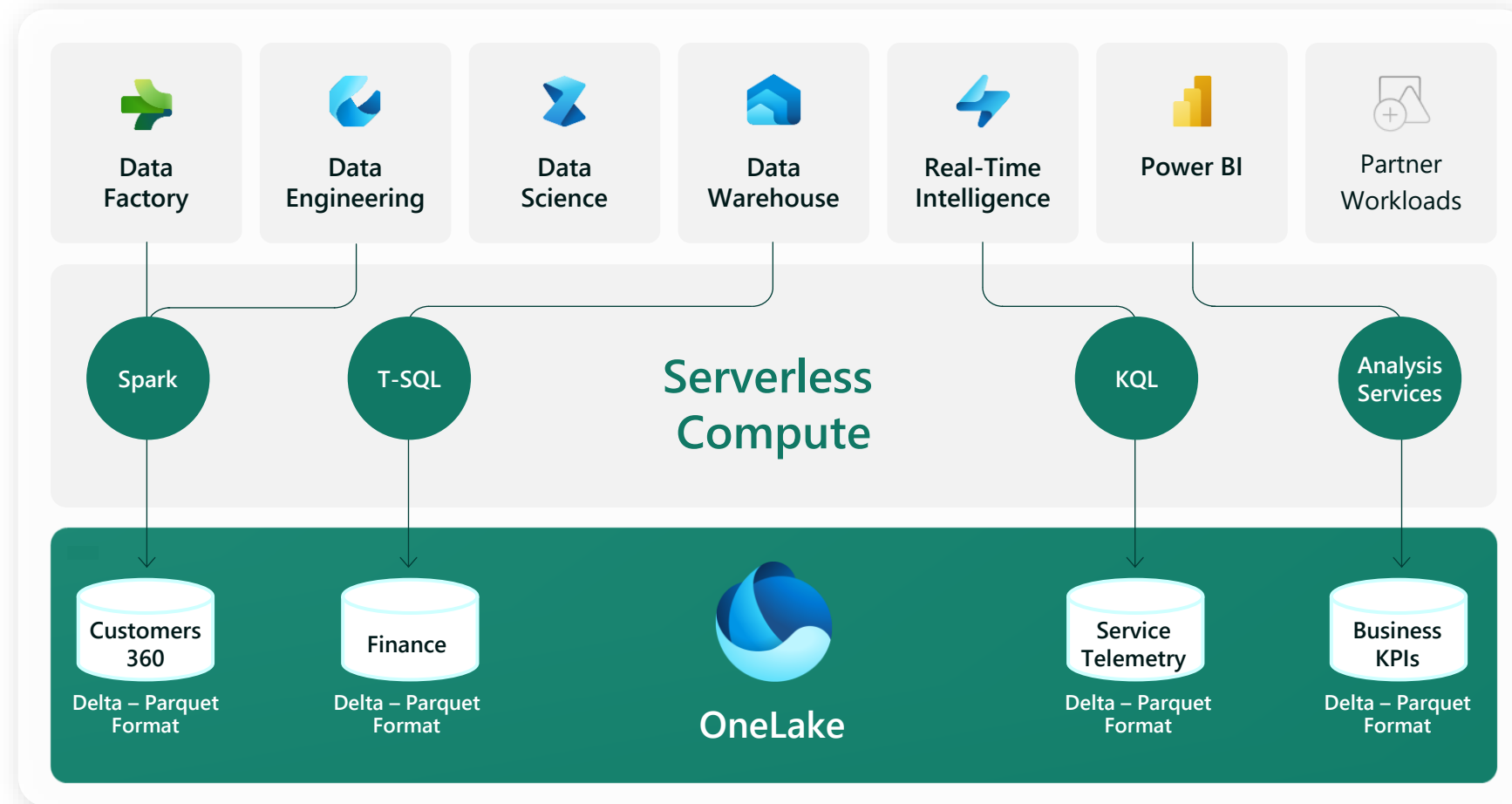
"The OneDrive for Data"



- A single SaaS lake for the whole organization
- Provisioned automatically with the tenant
- All workloads automatically store their data in the OneLake workspace folders
- All the data is organized in an intuitive hierarchical namespace
- The data in OneLake is automatically indexed for discovery, MIP labels, lineage, PII scans, sharing, governance and compliance

One Copy for all computes

Real separation of compute and storage



All the compute engines store their data automatically in OneLake

The data is stored in a single common format

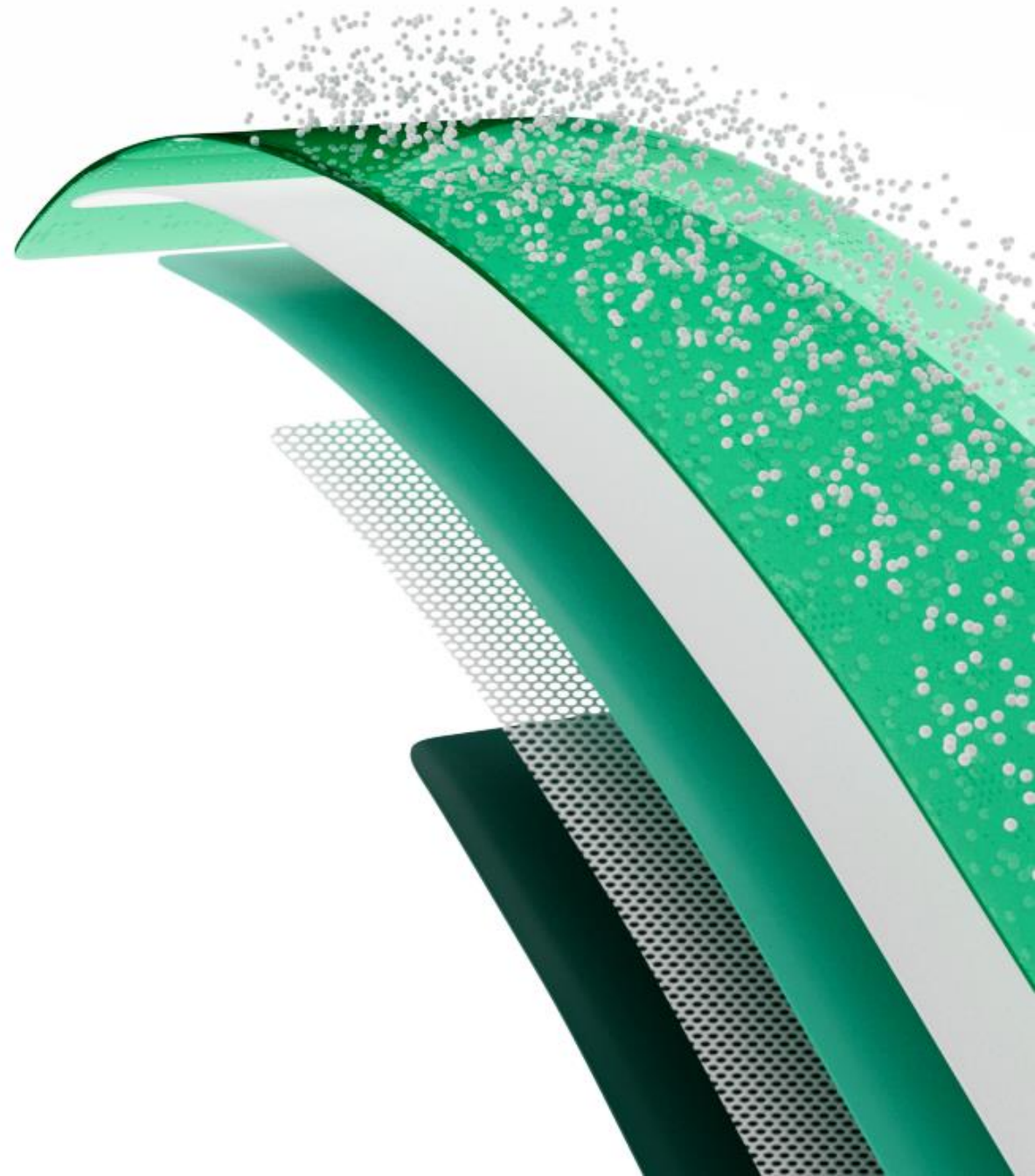
Delta - Parquet, an open standards format, is the storage format for all tabular data in Fabric

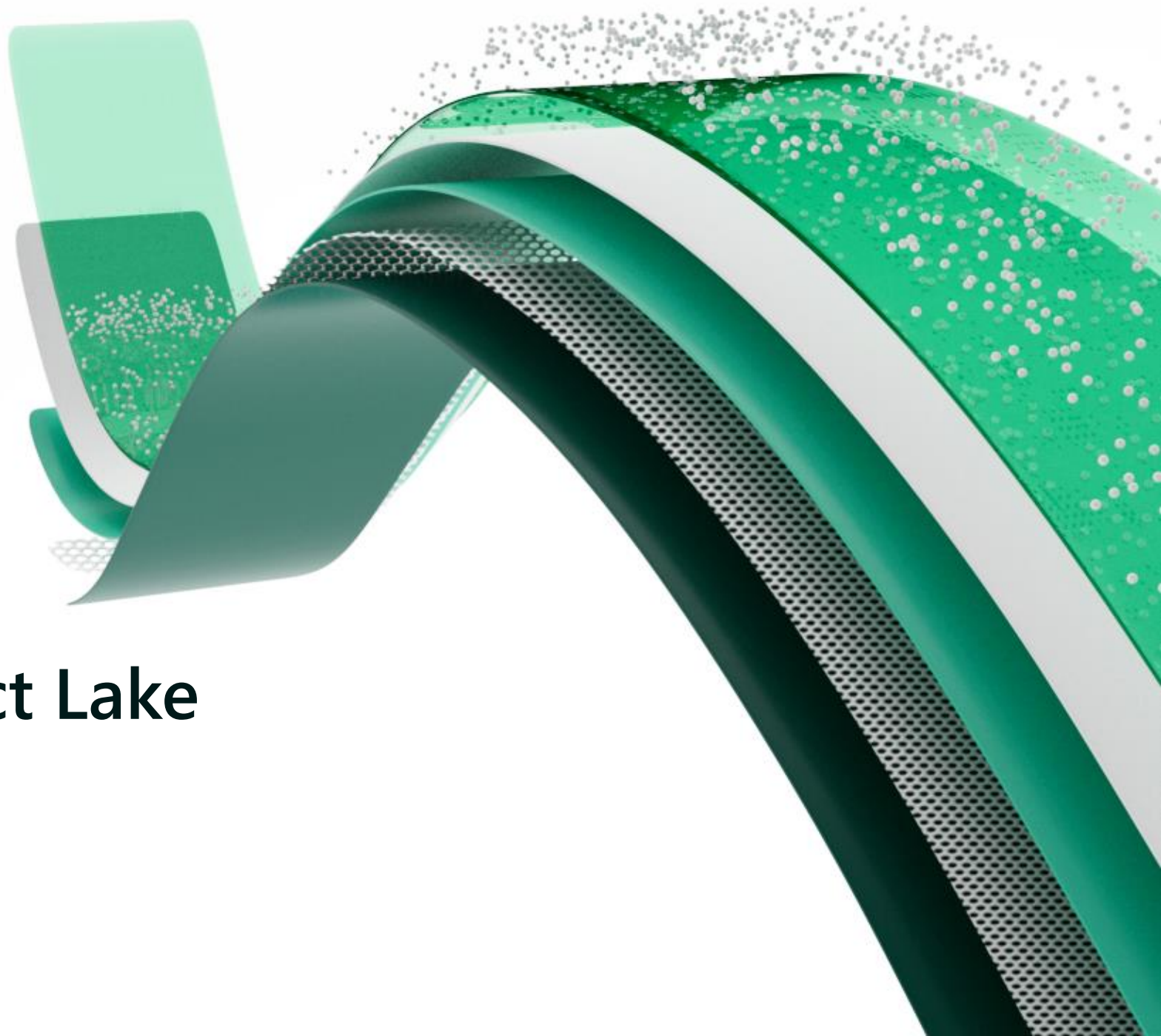
Once data is stored in the lake, it is directly accessible by all the engines without needing any import/export

All the compute engines have been fully optimized to work with Delta Parquet as their native format

DEMO: One Copy in Action

- Using the Lakehouse

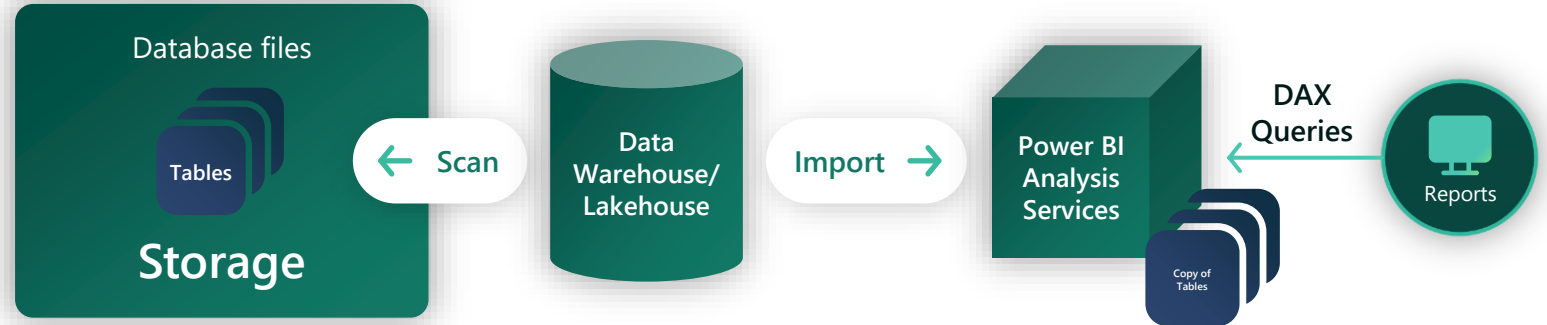




Power BI – Direct Lake

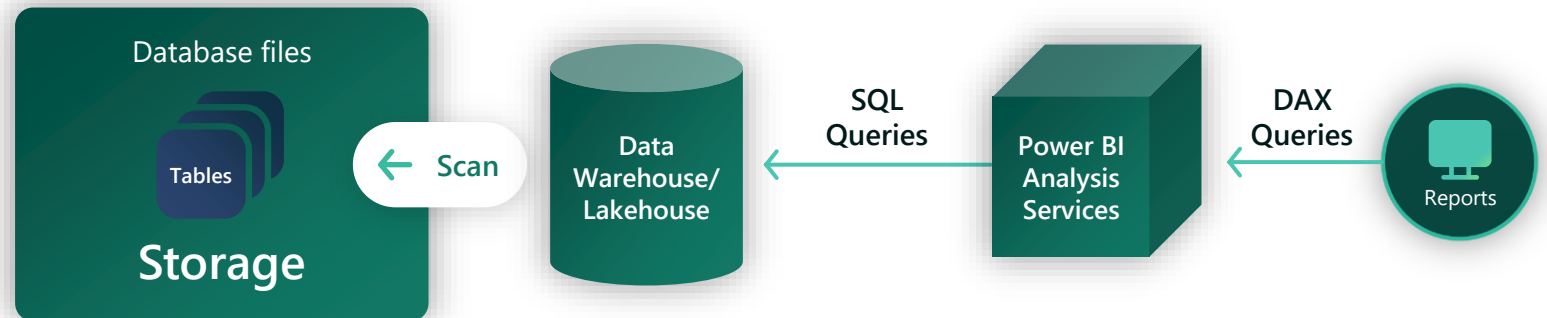
“Import Mode”

Latent & duplicative but fast



“Direct Query Mode”

Slow, but real time



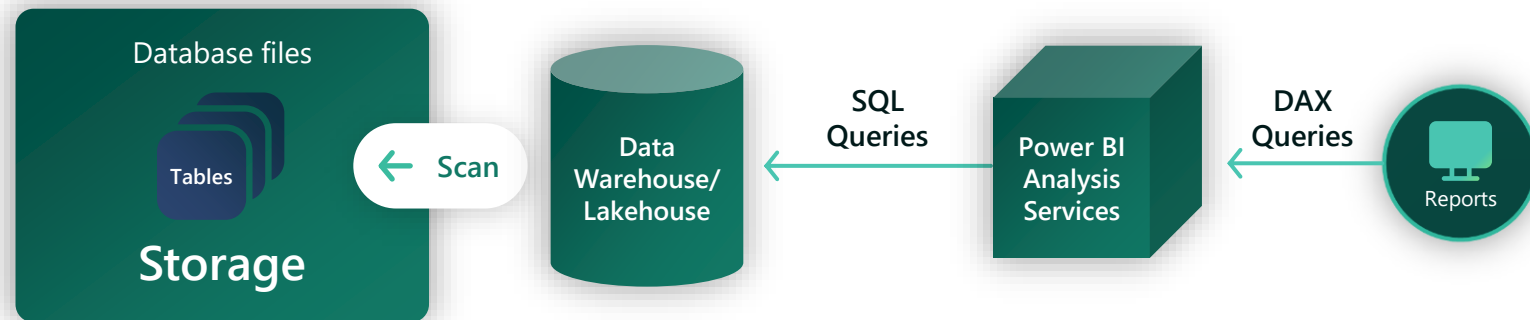
"Import Mode"

Latent & duplicative but fast



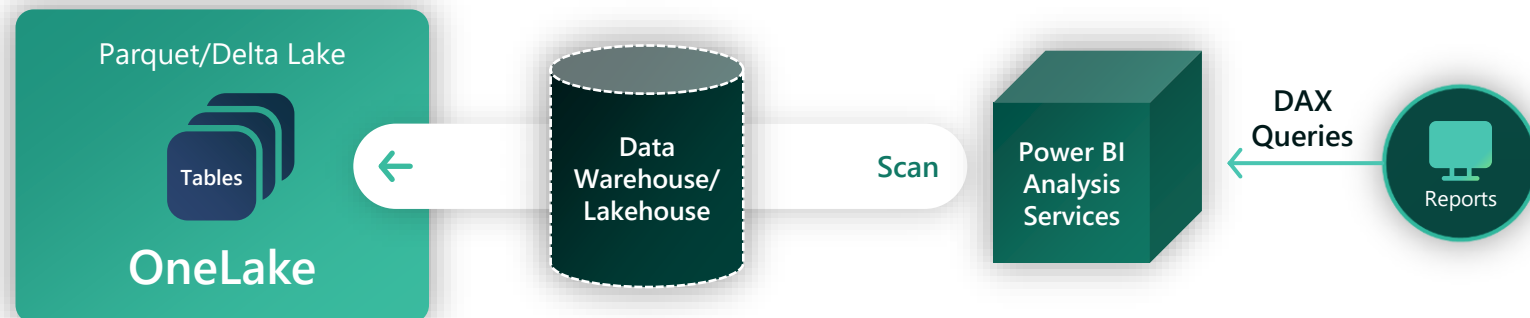
"Direct Query Mode"

Slow, but real time

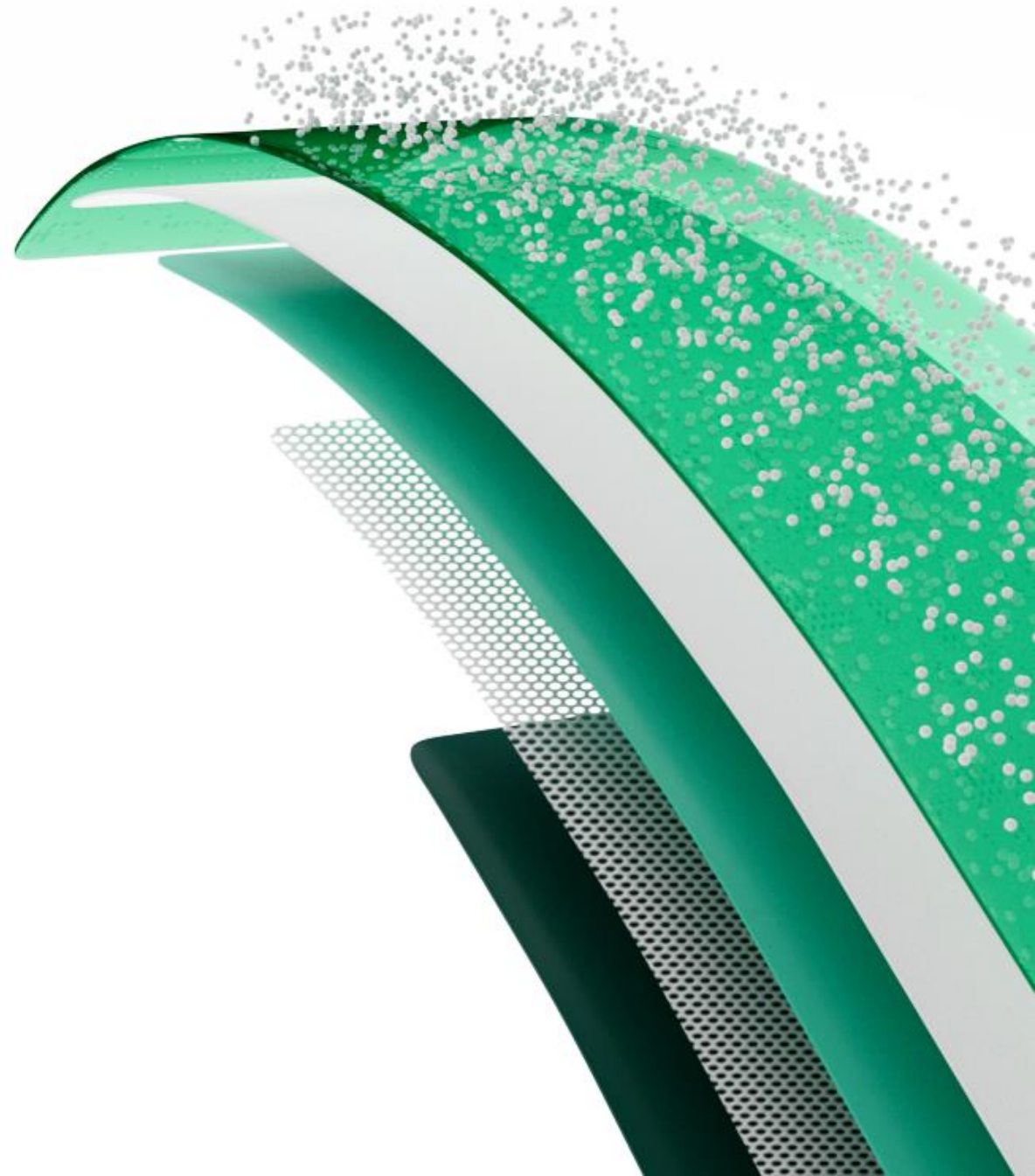


"Direct Lake Mode"

Perfect!



DEMO: Power BI Direct Lake





Microsoft Fabric Resources

Fabric Trials / M365 Developer Account

Users can try Microsoft Fabric paid features
Enabled for the entire organization

When users sign up for a Microsoft Fabric trial, they can try Fabric paid features for free for 60 days from the day they signed up. [Learn More](#)

☒ Enabled

Apply to:

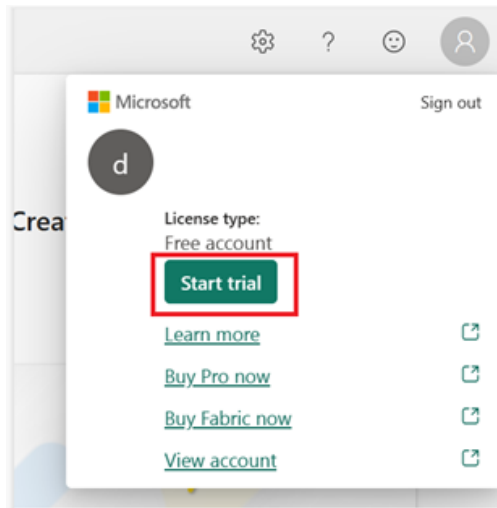
☒ The entire organization

☐ Specific security groups

☐ Except specific security groups

Apply

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[Learn Fabric for FREE with an M365 Developer License – data witches \(data-witches.com\)](#)

M365 sandbox for 25 users for development purposes for 90 days for FREE

- **Universal Fabric capacity is free to try for 60 days**
- **Trial provides a F64 (P1/A4) capacity**

How do you know what's coming?



Microsoft Fabric the public roadmap (see <https://aka.ms/fabricroadmap>)



Major updates every six months to match internal semester planning (Apr-Sep, Oct-Mar)



Some things get mentioned on [blog](#), [social media](#) or at [conferences](#) too...



Minor changes and updates all the time (weekly Fabric releases – monthly feature summary blogs)



There is a lot of functionality that never gets into the release notes

Some things are too secret to mention

Some things we can't commit to timelines for

Resources

Microsoft Learn (Fabric)	<u>https://aka.ms/fabriclearn</u>
Tutorials	<u>https://aka.ms/fabrice2etutorials</u>
Microsoft Docs (Fabric)	<u>https://aka.ms/fabric-docs</u>
Blog	<u>https://aka.ms/fabricblog</u>
Ideas	<u>https://aka.ms/fabricideas</u>
Community	<u>https://aka.ms/fabriccommunity</u>
Support	<u>https://aka.ms/fabricsupport</u>
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Webinars	<u>https://aka.ms/fabric-webinar-series</u>
Guided Tour	<u>https://aka.ms/Fabric-GuidedTour</u>
Free e-book	<u>https://aka.ms/fabric-get-started-ebook</u>

Questions?



Submit session feedback



Thank you!

