

# Overcoming the fear

Exploring Microsoft Fabric from a Power BI Angle

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DATA SATURDAY OSLO  
2024



Cloudberries



# After this session

## Understanding of Fabric

Better understand the Microsoft Fabric ecosystem and its capabilities

## Build end-to-end solution

Be able to build an end-to-end solution in Fabric solely based on Power BI knowledge

## Identify learning potential

Identify the learning potential and possibilities the launch of Fabric offers you to gain new knowledge

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Data-Marc.com



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FAVORITE STUFF:



# What we cover today



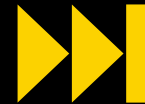
The fear of  
Fabric



Closer look at  
Fabric



End-to-end  
example



Next steps



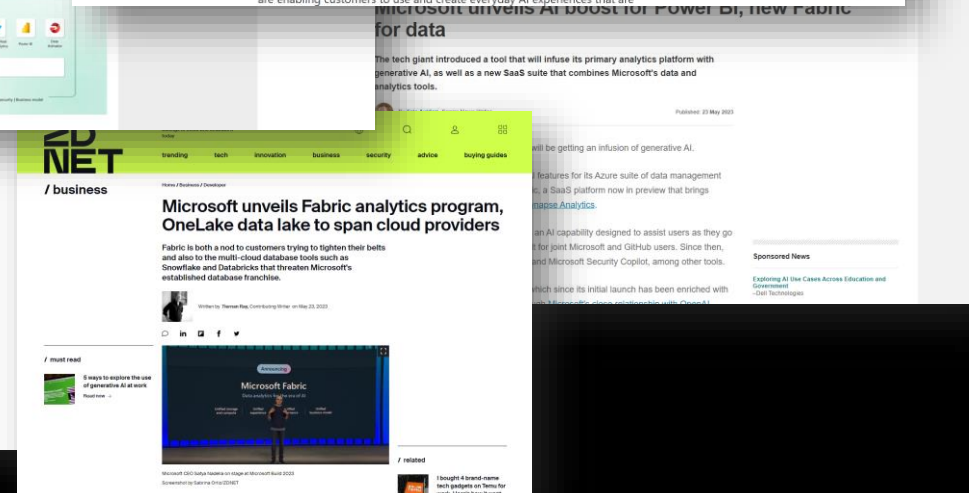
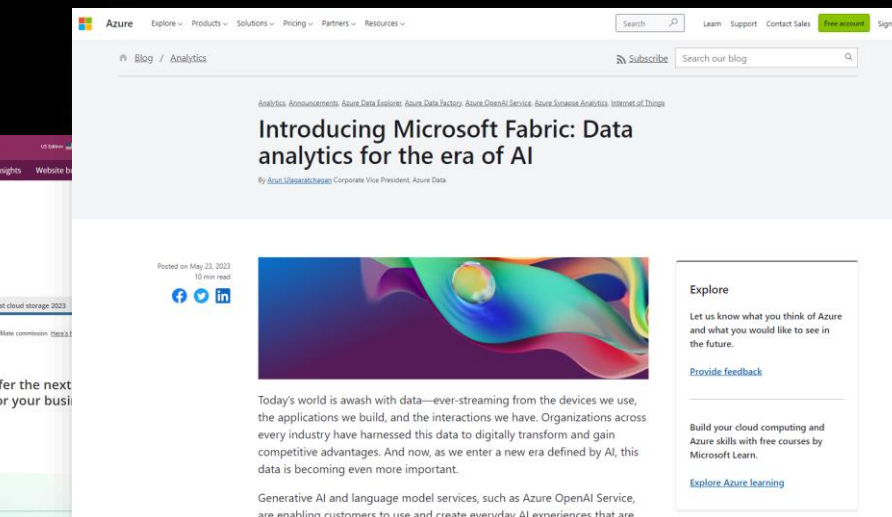
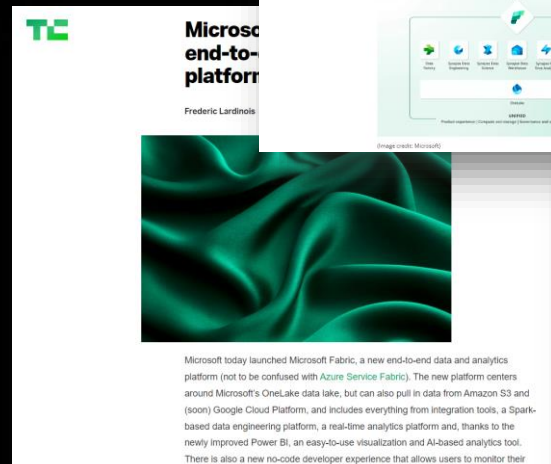
Learning  
potential



# **The Fear of Microsoft Fabric**



# Fabric – the new kid on the block



# Unified Data Analytics platform



## Data Integration

Data Factory



## Data Engineering

Synapse



## Data Warehouse

Synapse



## Data Science

Synapse



## Real Time ~~Analytics~~ Intelligence

Synapse



## Business Intelligence

Power BI



## Observability

Data Activator



## Unified Serverless Compute

T-SQL | Spark | KQL | Analysis Services



## Unified data foundation

OneLake | OneSecurity

## UNIFIED

SaaS product experience

Security and governance

Compute and storage

Business model



# Overwhelming!

All these new things, new capabilities and workloads in the Power BI Service (look-a-like) interface!

What now? Should I start learning all this new stuff?



# New terms that come along



KQL

Lakehouses

Notebooks

Warehouses

Spark

Kusto





What is all of this stuff?  
And should I know this?



**Closer look at Fabric**



# Fabric Capabilities

Data  
Movement

Data Lakes

Data  
Engineering

Data  
Integration

Data  
Science

Real-Time  
Analytics

Business  
Intelligence

Automated  
Actions

# One unified platform



## Data Integration

Data Factory



## Data Engineering

Synapse



## Data Warehouse

Synapse



## Data Science

Synapse



## Real Time Intelligence

Synapse



## Business Intelligence

Power BI



## Observability

Data Activator



## Unified Serverless Compute

T-SQL | Spark | KQL | Analysis Services



## Unified data foundation

OneLake | OneSecurity

## UNIFIED

SaaS product experience

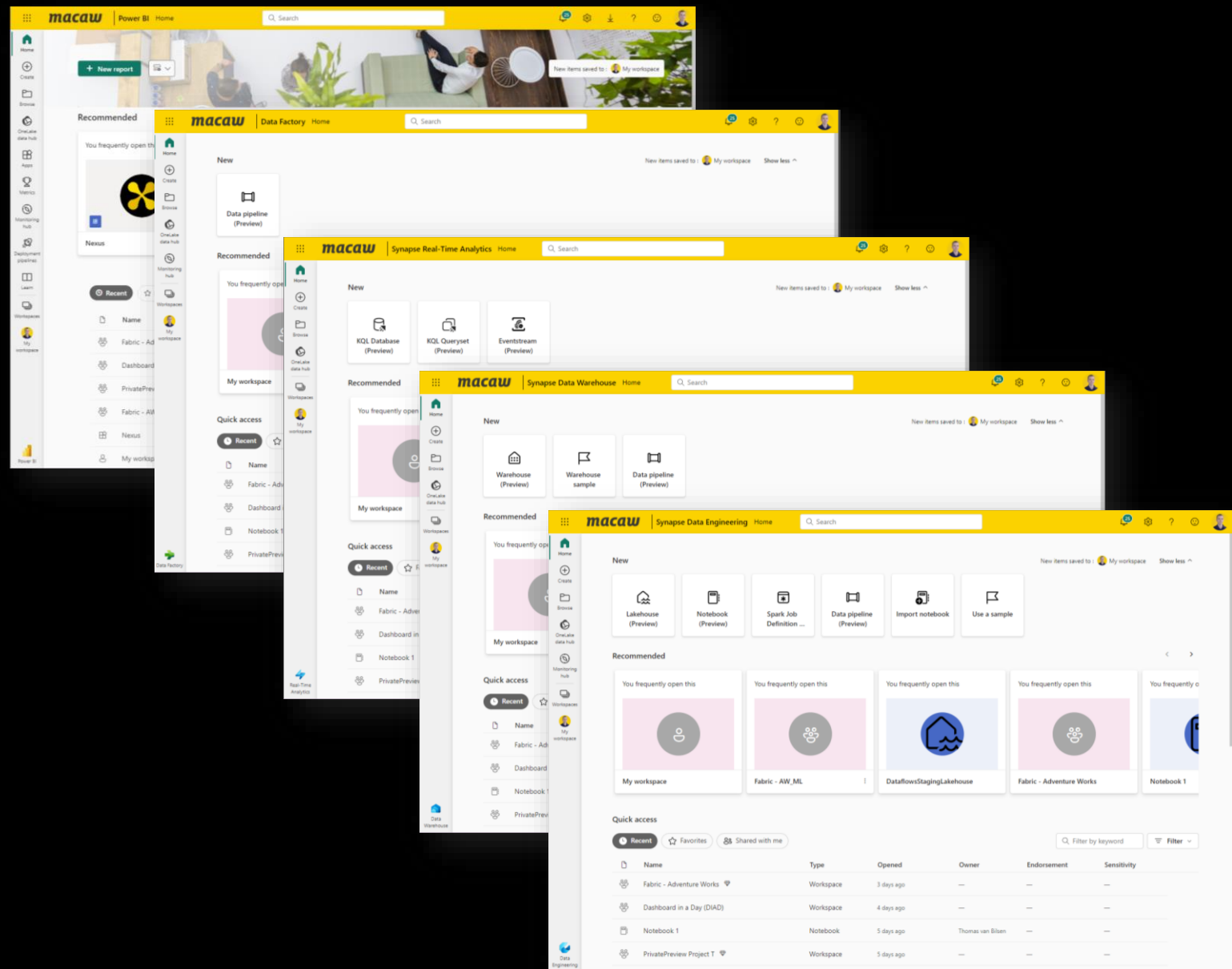
Security and governance

Compute and storage

Business model



# One platform One interface



# OneLake



**One data lake** for the entire organization at scale

**One copy of data** for use across multiple analytical engines

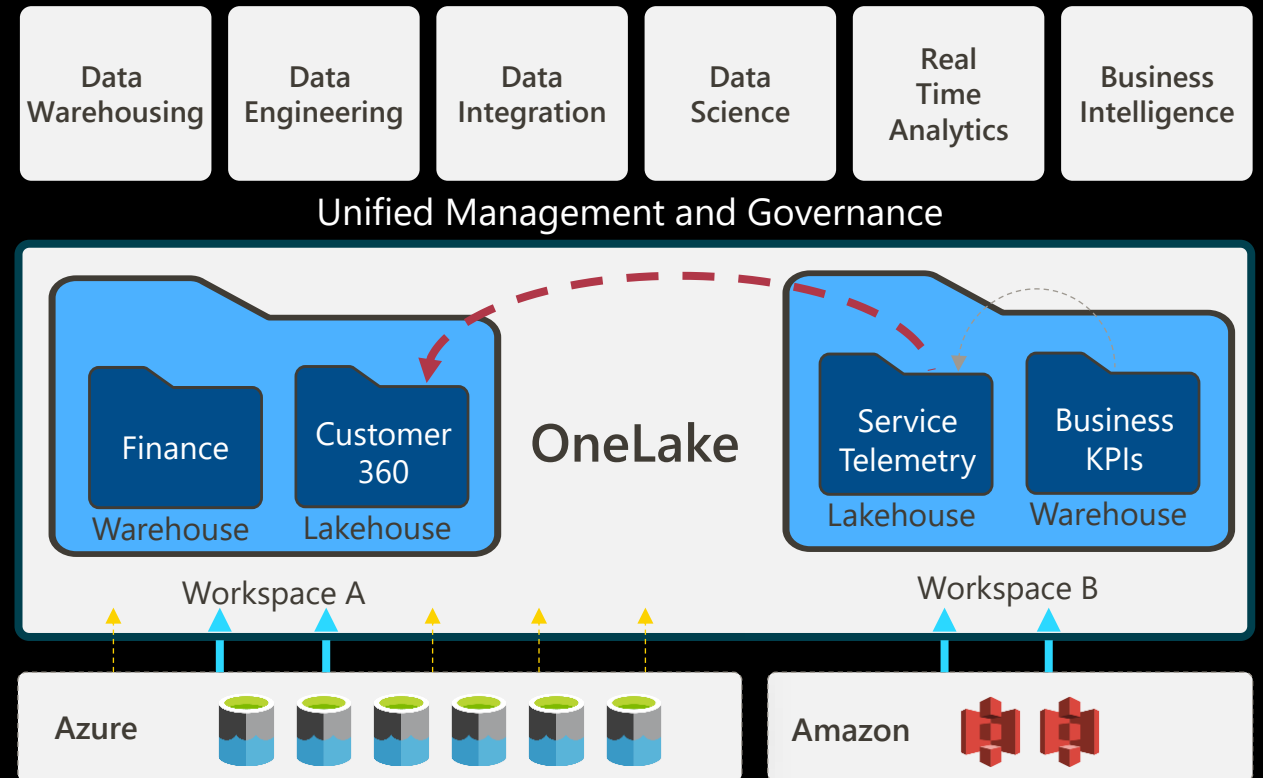
**One security model** living natively with the data in the lake (coming soon)

A **centralized** OneLake data hub for data discovery and management

# Shortcuts to other clouds

Bring data from other storage accounts or even other clouds easily to Fabric without physical data movement.

Fabric services can use this data directly if it is in the right format.



# Onedrive for data



OneDrive  
for documents



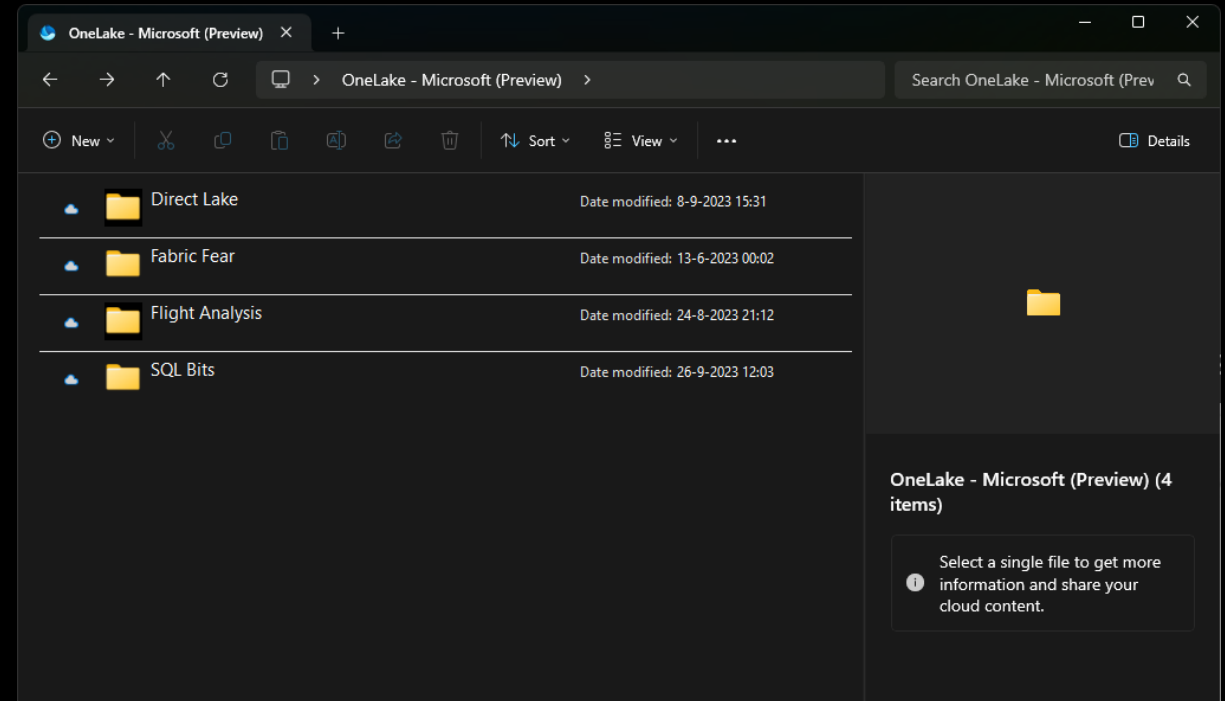
OneLake  
for data



# OneLake explorer

OneLake is accessible via **Windows Explorer**

(also, data that is stored in other cloud provider through shortcuts)

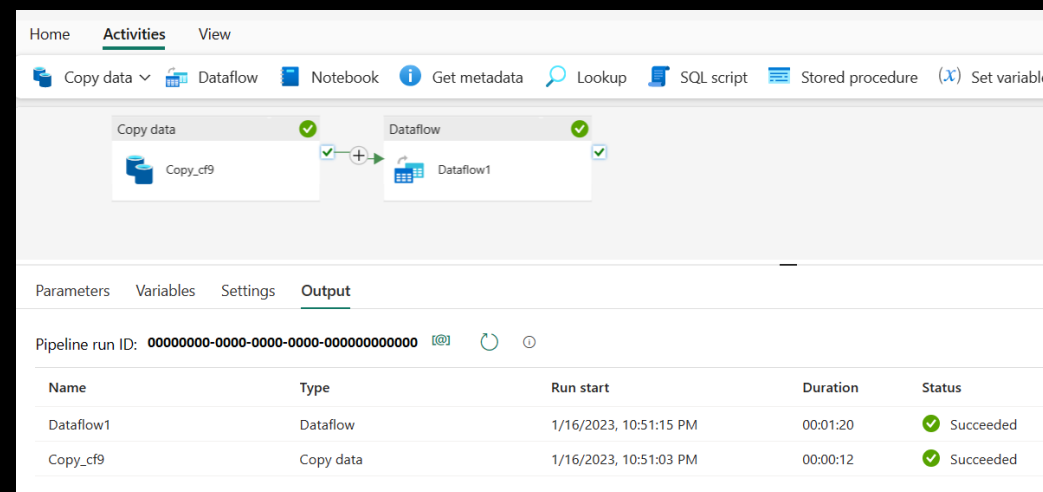
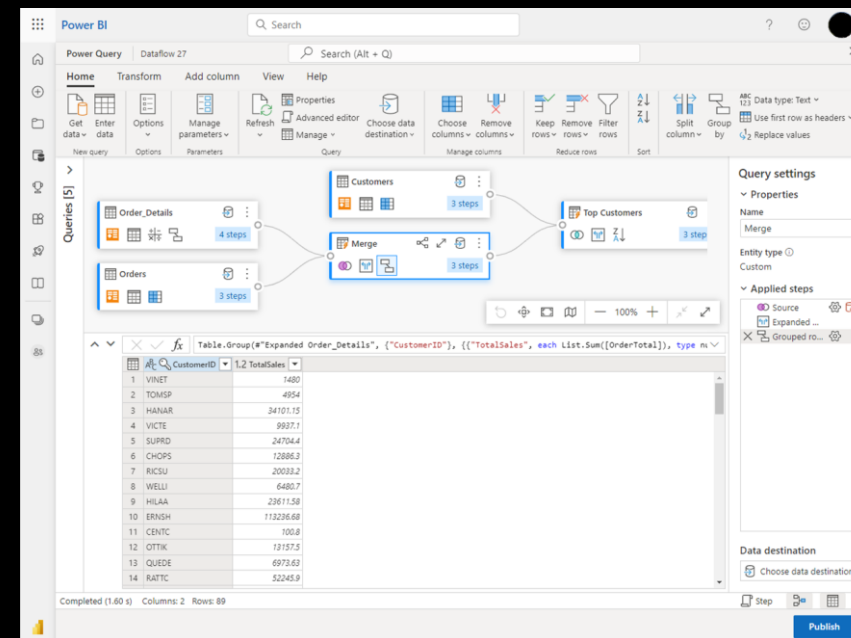


# Data Integration

Different options, easy to use.

Variety from

- Dataflow gen2
- Pipelines (ADF)
- Notebooks





# Data Engineering

Ability to create lakehouses, run spark jobs and notebooks to collect, store, process and analyze large volumes of data!



Lakehouse



Notebook



Spark Job  
Definition ...



Data pipeline



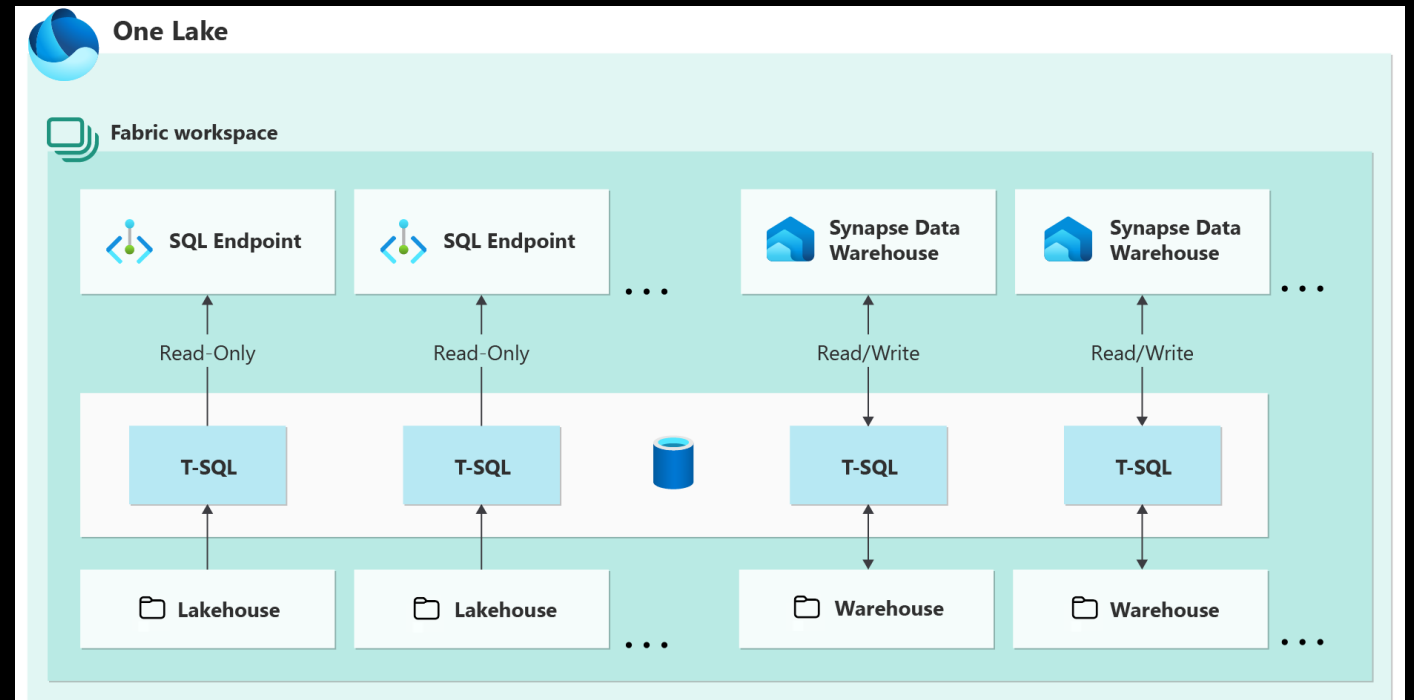
Import notebook

# SQL-Endpoint & Data Warehousing

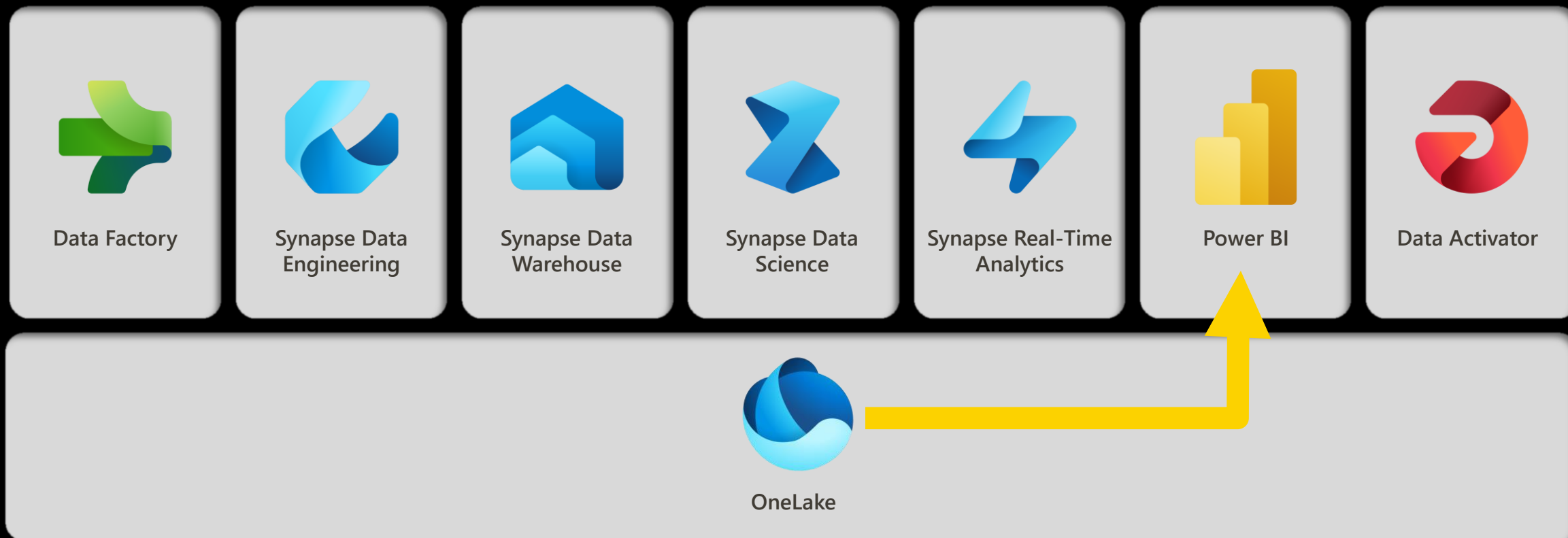
## Power BI Datamarts?

Work with data in a table format to build an enterprise grade distribution method to enable T-SQL interaction on top of delta files in OneLake.

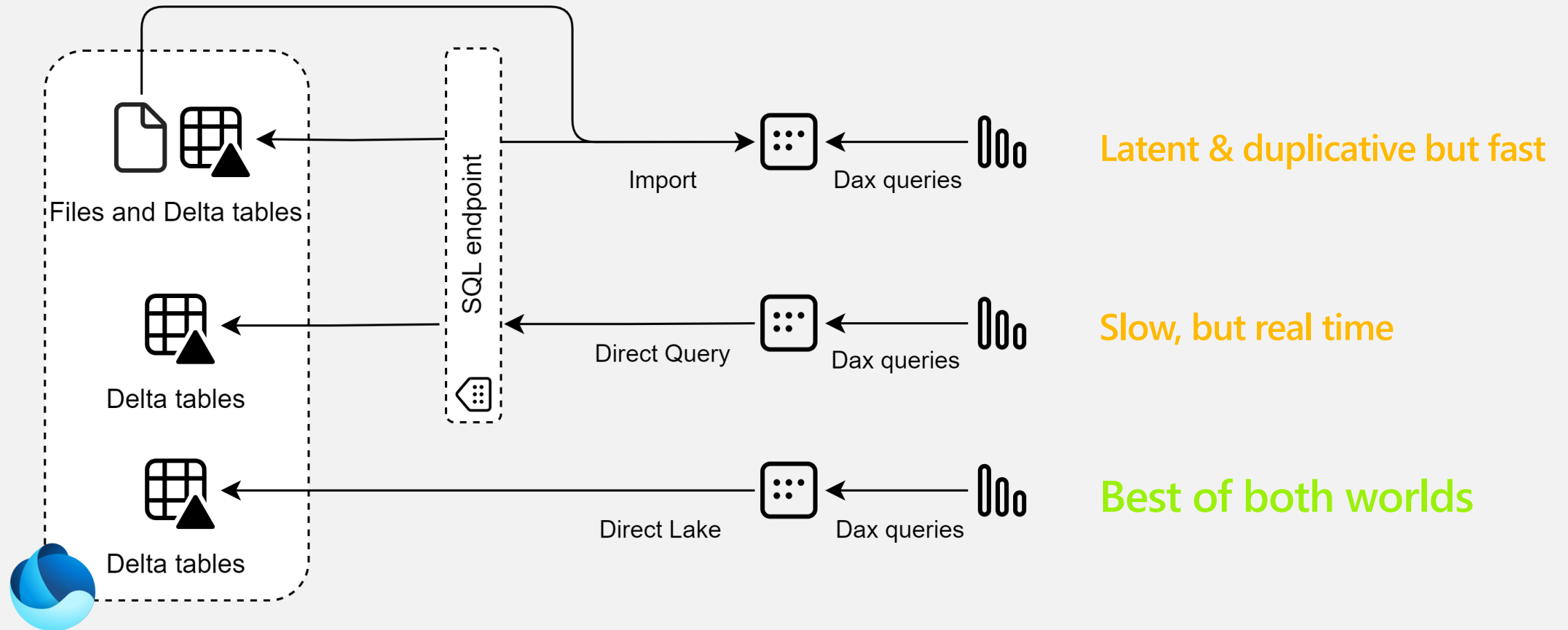
- Stored procedures
- Views



# Power BI & Direct Lake mode



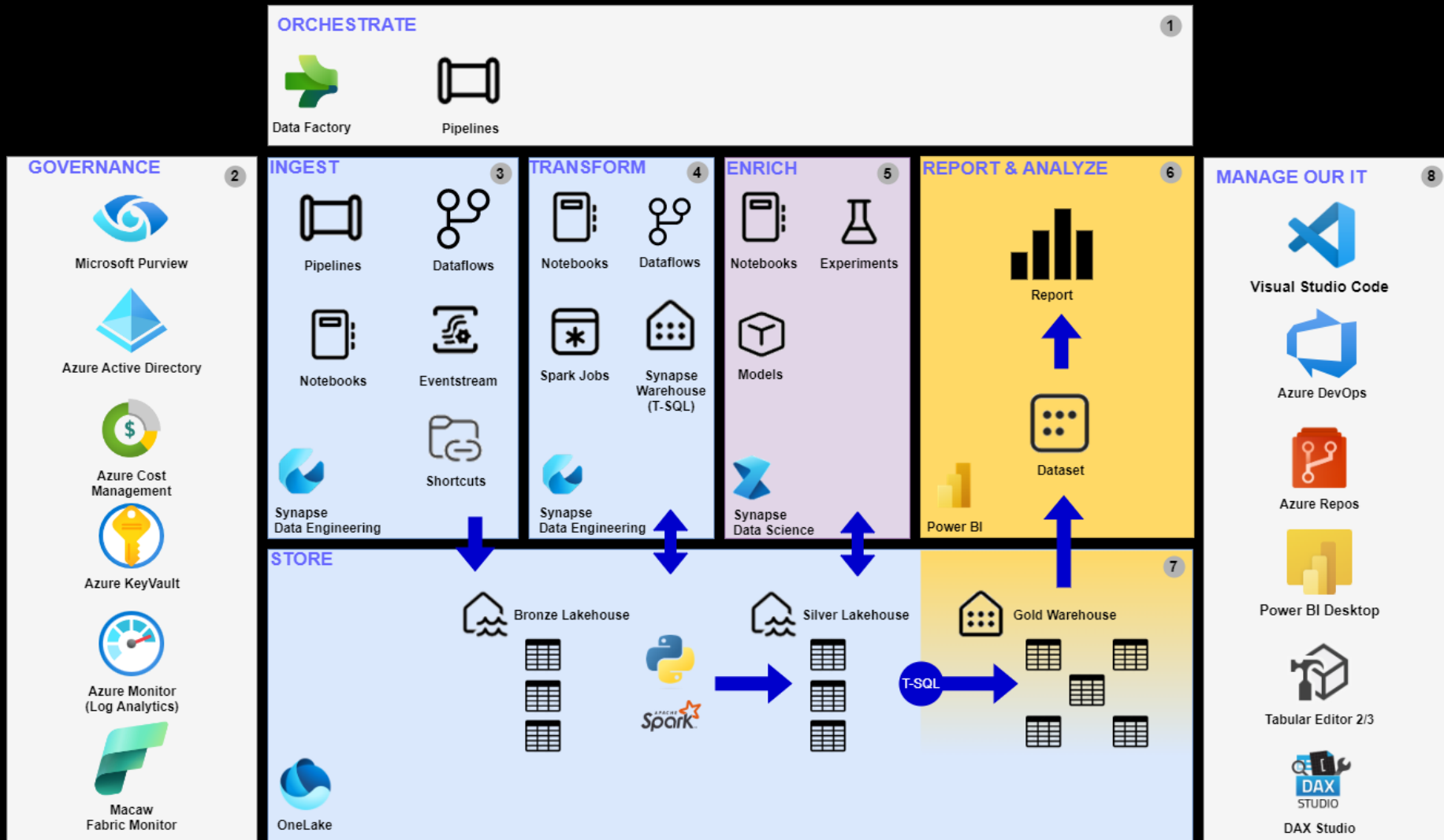
# Direct Lake





**Let's run some end-to-end examples**

# What fits in where?





# End to end flow

## Stages

Ingest	Transform	Model	Visualize
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## Areas ("Experience")

Data Factory	Data Engineering	Warehouse SQL Endpoint	Power BI
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## Artifacts ("Workloads")

Lakehouse (Bronze / Silver / Gold)	Spark	Dataset	Report Paginated Report Metrics
Pipelines	SQL		
Notebooks	Python		
Dataflows (gen2)	Power Query	DAX	

**Demo time!**







**Next steps**



# As a Power BI Service Fabric Administrator

## Microsoft Fabric

### Users can create Fabric items

*Enabled for a subset of the organization*

Users can create Fabric items with new capabilities in Microsoft Fabric. This setting can be managed at both the tenant and the capacity levels. [Learn More](#)



Enabled

Apply to:



The entire organization



Specific security groups



AAD-PBI-Fabric



Enter security groups



Except specific security groups

Delegate setting to other admins



Capacity admins can enable/disable

Apply

Cancel

You're in control of the tenant settings, make sure you put together a security group that can start testing Fabric!

# As a ~~Power BI Service~~ Fabric Administrator

Identify (business) ownership for workspaces by categorizing them in Domains.

- Ownership
- Delegation

Domains also works without Fabric enabled.

Admin portal

Domains **New**

Capacity settings

Refresh summary

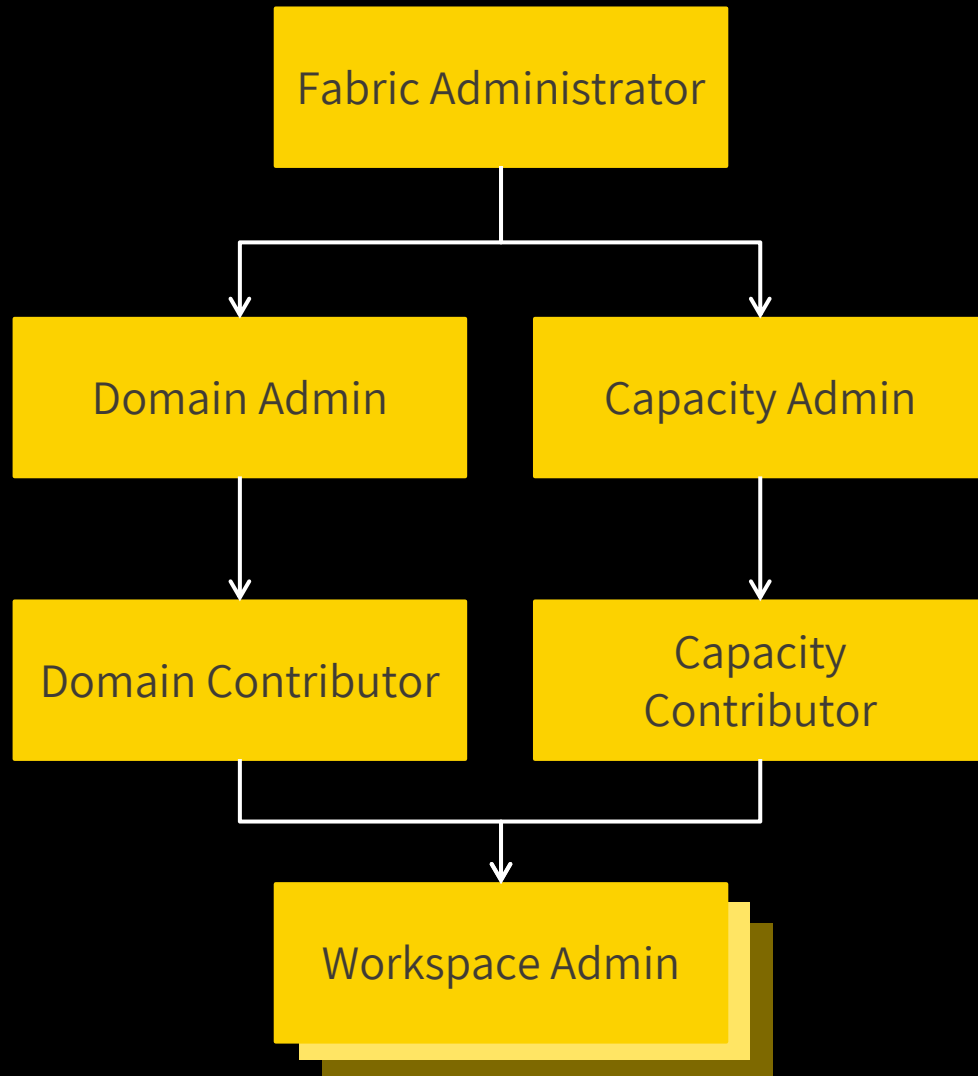
Domains > Marc's demos

**Marc's demos**

+ Assign workspaces New subdomain Domain settings

<input type="checkbox"/> Name	Admins
<input type="checkbox"/> Fabric	-
<input type="checkbox"/> Power BI	-
<input type="checkbox"/> Deploy Power BI as Code	-
<input type="checkbox"/> DEMO - Advanced data modeling	Demo User, PbiRefresh
<input type="checkbox"/> Datamarts	Demo User
<input type="checkbox"/> API Refresh	Demo User
<input type="checkbox"/> Hybrid Tables	Demo User
<input type="checkbox"/> Incremental Refresh	Demo User
<input type="checkbox"/> HR Chatbot	Demo User
<input type="checkbox"/> Recover Xmla Edited Dataset	Demo User

# More granular levels of controls



Defines tenant settings and global policies. May delegate certain settings to lower levels.

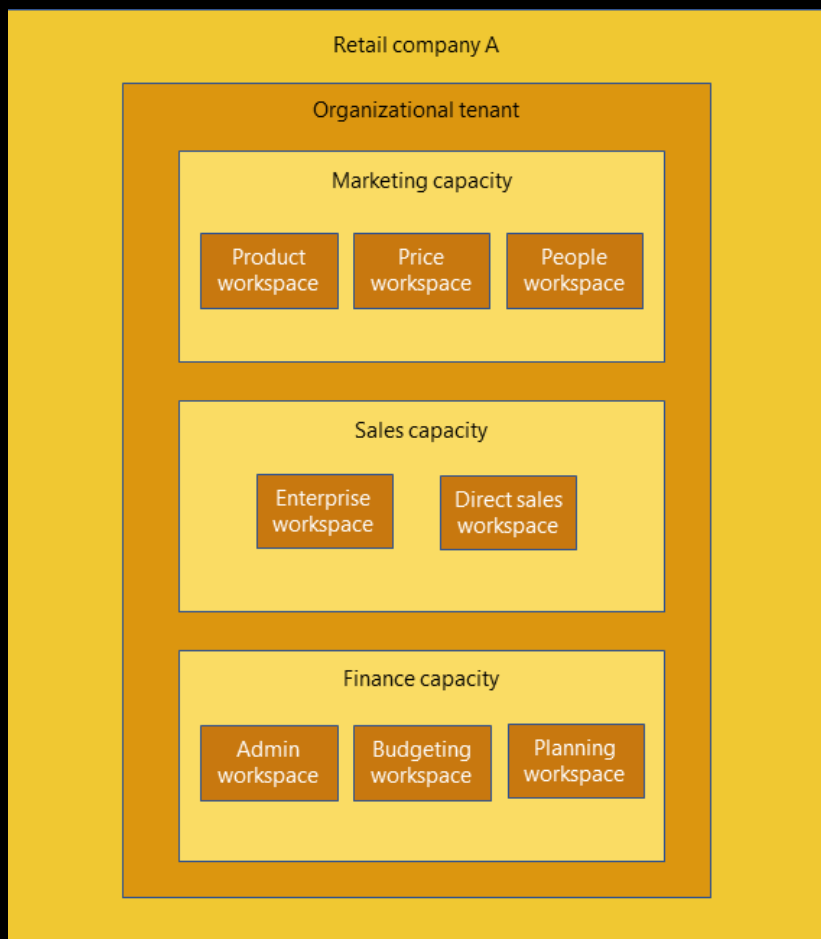
Defines specific delegated settings for domains / capacities. Assigns workspaces to domains and/or capacities.

Can assign a workspace to a domain or capacity.

Defines workspace permissions and settings on individual artifacts.



# Fabric capacities



SKU*	Capacity Units (CU)	Power BI SKU	Power BI v-cores
F2	2	-	0.25
F4	4	-	0.5
F8	8	EM/A1	1
F16	16	EM2/A2	2
F32	32	EM3/A3	4
<b>F64</b>	<b>64</b>	<b>P1/A4</b>	<b>8</b>
F128	128	P2/A5	16
F256	256	P3/A6	32
F512	512	P4/A7	64
F1024	1024	P5/A8	128
F2048	2048	-	256

\*SKUs that are smaller than F64 require a Pro license to consume Power BI content.



# Learning potential

# Fabric Guided Learning



## Get started with Microsoft Fabric

10 hr 1 min • Learning Path • 11 Modules

Beginner

Data Analyst

Data Engineer

Data Scientist

Microsoft Fabric

Explore the capabilities of Microsoft Fabric.

### Prerequisites

You should be familiar with basic data concepts and terminology.

Start >

⊕ Add

9600 XP

# Fabric Guided Learning (DP-600)




CERTIFICATIONS

**Microsoft Certified:**  
**Fabric Analytics**  
**Engineer Associate**



# Fabric in a Day

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Industry

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# Wrap up

LET'S  
RECAP...

Fabric brings many new **capabilities**

Many of these capabilities are **new for Power BI folks**

**Not necessarily**, you need to embrace all of this

With Fabric, you build end-to-end solutions with your **existing skill set**

It does open **new learning opportunities** in a familiar interface

# Resources

## **Read this story in a blog**

<https://data-marc.com/2023/05/24/overcoming-the-fear-exploring-microsoft-fabric-from-a-power-bi-angle/>

## **Fabric get started documentation**

<https://learn.microsoft.com/en-us/fabric/get-started/>

## **Explore Fabric end-to-end tutorials**

<https://learn.microsoft.com/en-us/fabric/get-started/end-to-end-tutorials>

## **Join the online Fabric community**

<https://community.fabric.microsoft.com/>

## **Find your nearest Fabric in a Day**

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# Thanks for attending!

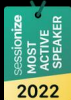


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Most Valuable  
Professional



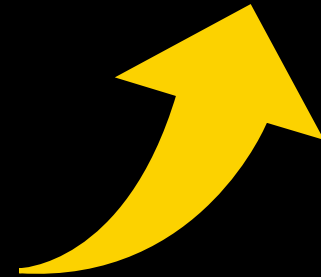
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*Evals*