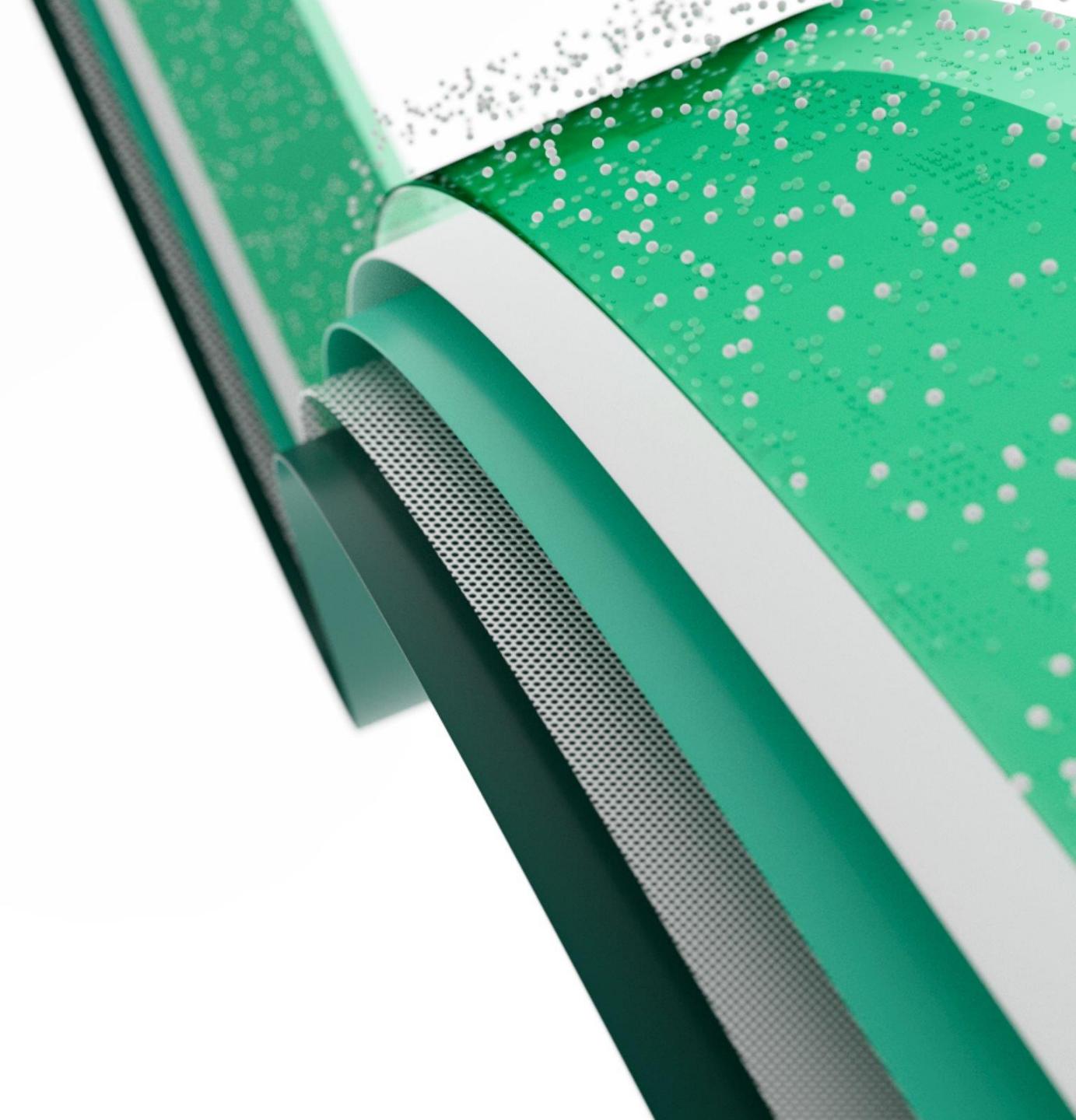




# Microsoft Fabric Fundamentals



# SESSION AGENDA

01

---

Product Overview

02

---

SaaS Architecture

03

---

OneLake in Details

04

---

Security Overview

05

---

Governance Overview

06

---

Licenses & Capacities

# Dates and Times

- **Sessions**

- **Day 1 ( 8/22 Thur )** - 9:00 AM to 3:00 PM CDT, lunch @ 11:00 to 12:00 PM
- **Day 2 ( 8/29 Thur )** - 9:00 AM to 3:00 PM CDT, lunch @ 11:00 to 12:00 PM
- **Day 3 ( 9/12 Thur )** - 9:00 AM to 3:00 PM CDT, lunch @ 11:00 to 12:00 PM

- **Agenda**

## Introductions

- Microsoft introductions
  - Marcos Yzquierdo (cloud solution architect) -  
<https://www.linkedin.com/in/myzquierdo/>
  - Bruce Pham (cloud solution architect) -  
<https://www.linkedin.com/in/brucepham/>

## Microsoft Fabric Foundation (presentations and labs)

- Lab 01 – Lakehouse
- Lab 02 – Data Warehouse
- Lab 03 – Data Science
- Lab 04 – Realtime Analytics

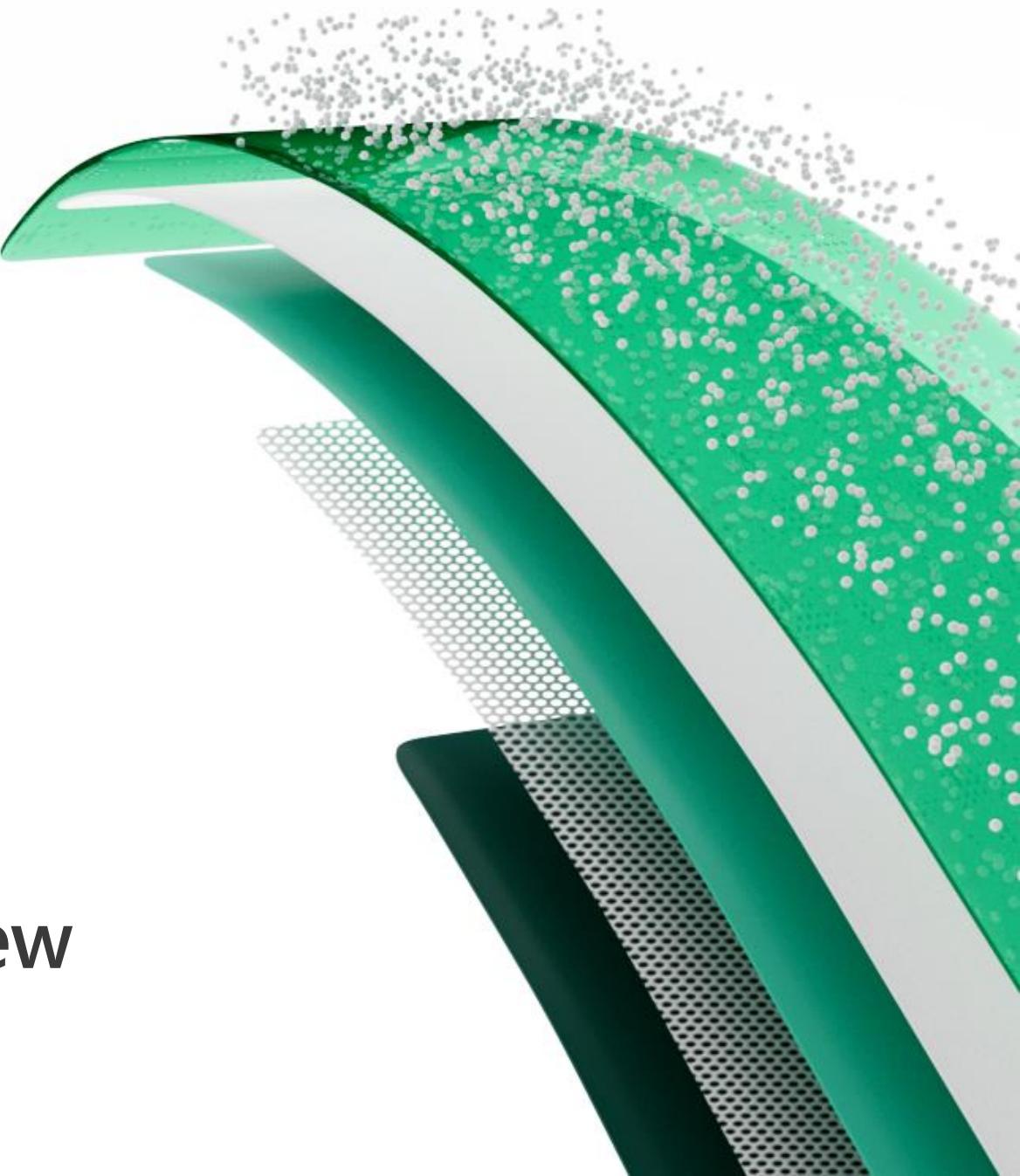
Github link to labs <https://github.com/triathlete18/Journey-into-Fabric>

# Accessing Trial Tenant

- We will use a trial tenant throughout the duration of the workshop.
1. Launch Browser and then open an inprivate window
  2. Enter the following url: [Power BI Sign in](#)
  3. Enter your assigned username in the Email box
  4. Enter your password
  5. Click on ‘Sign in’

# 1

## Product Overview





# Microsoft Fabric

## Data analytics for the era of AI

Complete Analytics Platform



# Microsoft Fabric

## Data analytics for the era of AI

Complete  
Analytics  
Platform

Lake Centric  
and Open



# Microsoft Fabric

## Data analytics for the era of AI

Complete  
Analytics  
Platform

Lake Centric  
and Open

Empower Every  
Business User



# Microsoft Fabric

## Data analytics for the era of AI

Complete  
Analytics  
Platform

Lake Centric  
and Open

Empower Every  
Business User

AI  
Powered



# Microsoft Fabric

## Data analytics for the era of AI



Data  
Factory



Synapse Data  
Engineering



Synapse Data  
Science



Synapse Data  
Warehouse



Synapse Real  
Time Analytics



Power BI



Data  
Activator



OneLake



# Microsoft Fabric

## Data analytics 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

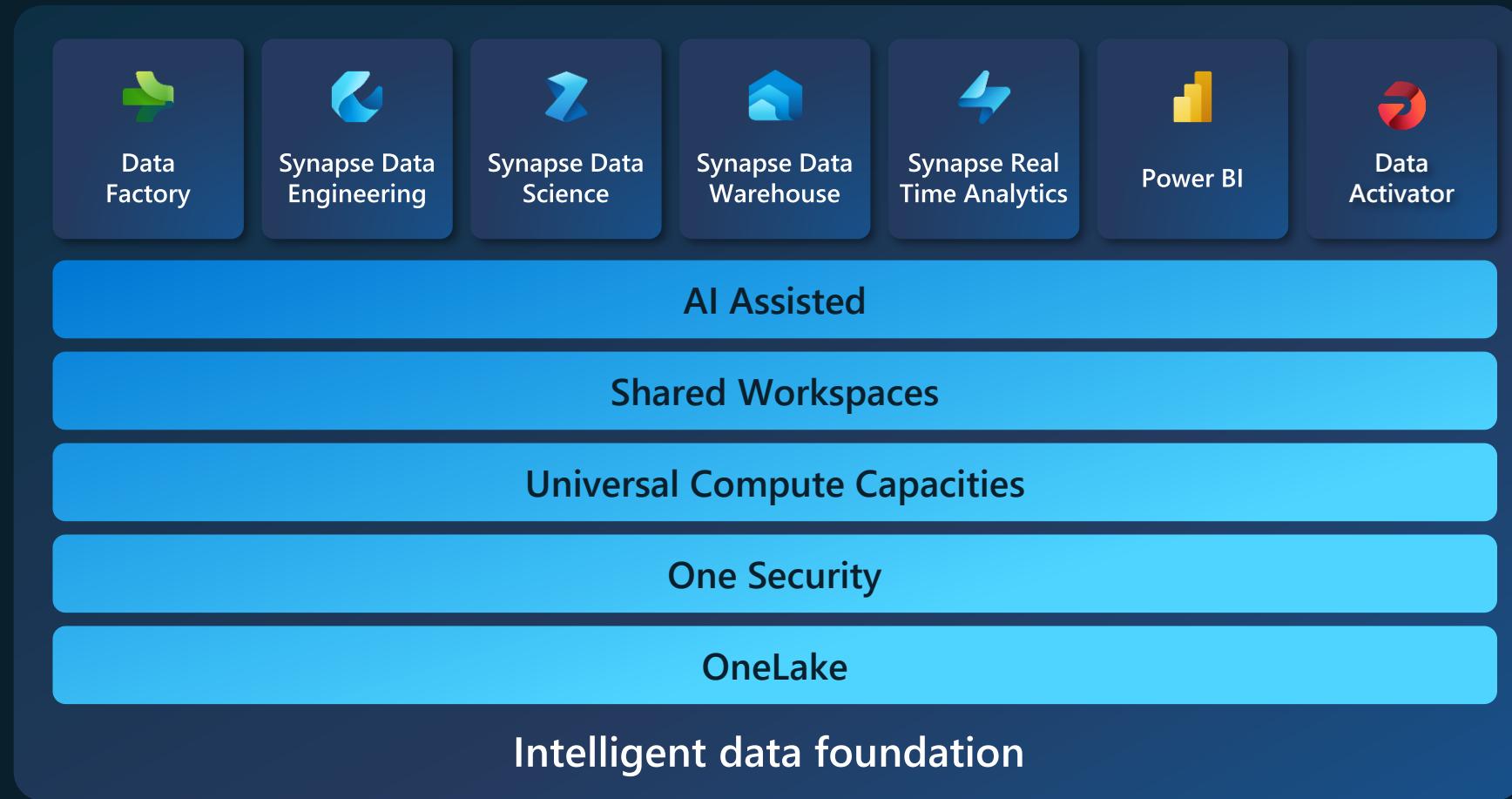
Copilot accelerated

GPT on your data

AI-driven insights



# Microsoft Fabric



## Single...

- Onboarding and trials
- Sign-on
- Navigation model
- UX model
- Workspace organization
- Collaboration experience
- Data Lake
- Storage format
- Data copy for all engines
- Security model
- CI/CD
- Monitoring hub
- Data Hub
- Governance & compliance

# **DEMO:**

## Getting started with MS Fabric



Good evening, Justyna

Find and share actionable insights to make data-driven decisions

+ New report



## Recommended

Priya Sathy opened this



FY23 Analytics (Trident) Technical Vi...

You frequently open this



Trident DE-DS Feature Usage Report

Chris Finlan opened this



Azure SQL CAB Registration

You frequently open this



Goals usage (synapse)

Chris Finlan opened this



CAB Attendee Registration

Recent

Favorites

My apps

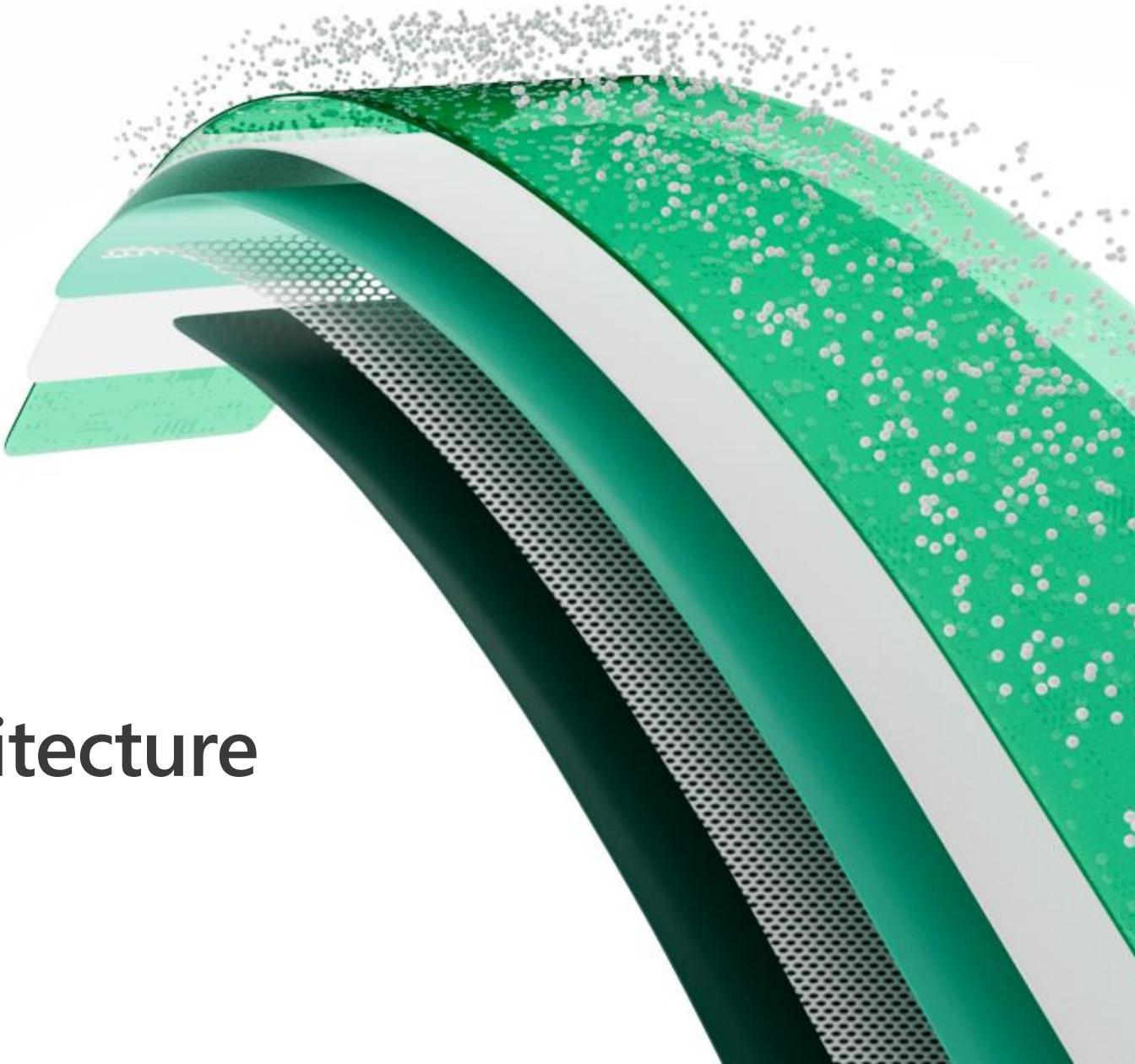
Filter by keyword

Filter

	Name	Type	Opened	Location	Endorsement	Sensitivity
	Priya_Demo_workspace	Workspace	now	Workspaces	—	—
	My workspace	Workspace	a minute ago	Workspaces	—	—
	CloudAcademy_Course_Survey	Report	an hour ago	My workspace	—	Confidential\Microsoft Extended
	FY23 Analytics (Trident) Technical Virtual Summit	Report	an hour ago	—	—	General
	Marketing_LH	Dataset (default)	2 days ago	MarketingProject	—	Confidential\Microsoft Extended
	Marketing	Report	2 days ago	MarketingWS	—	Confidential\Microsoft Extended
	customermarketing	Report	2 days ago	MarketingWS	—	Confidential\Microsoft Extended
	customermarketing	Dataset	2 days ago	MarketingWS	—	Confidential\Microsoft Extended
	Customer	Dataset	2 days ago	MarketingWS	—	Confidential\Microsoft Extended
	Marketing Analytics	Report	3 days ago	Marketing Analytics WS	—	Confidential\Microsoft Extended

- Home
- Create
- Browse
- OneLake data hub
- Apps
- Metrics
- Monitoring hub
- Deployment pipelines
- Learn
- Workspaces
- Priya\_Demo\_workspace

# SaaS Architecture



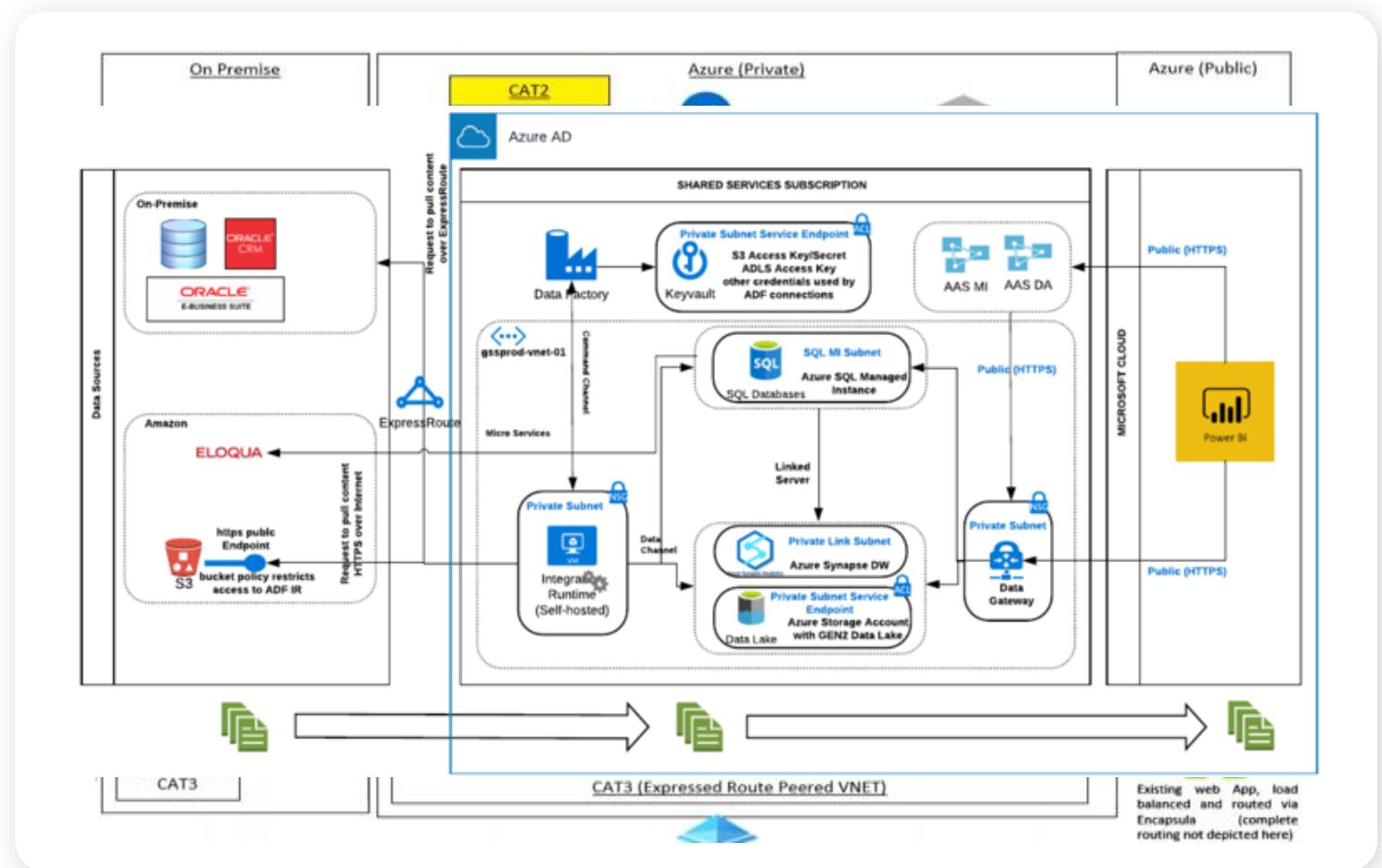
# Analytics is complex and fragmented

Every project has many subsystems

Every subsystem needs a different class of products

Products often comes from multiple vendors

Integration is complex, fragile and expensive

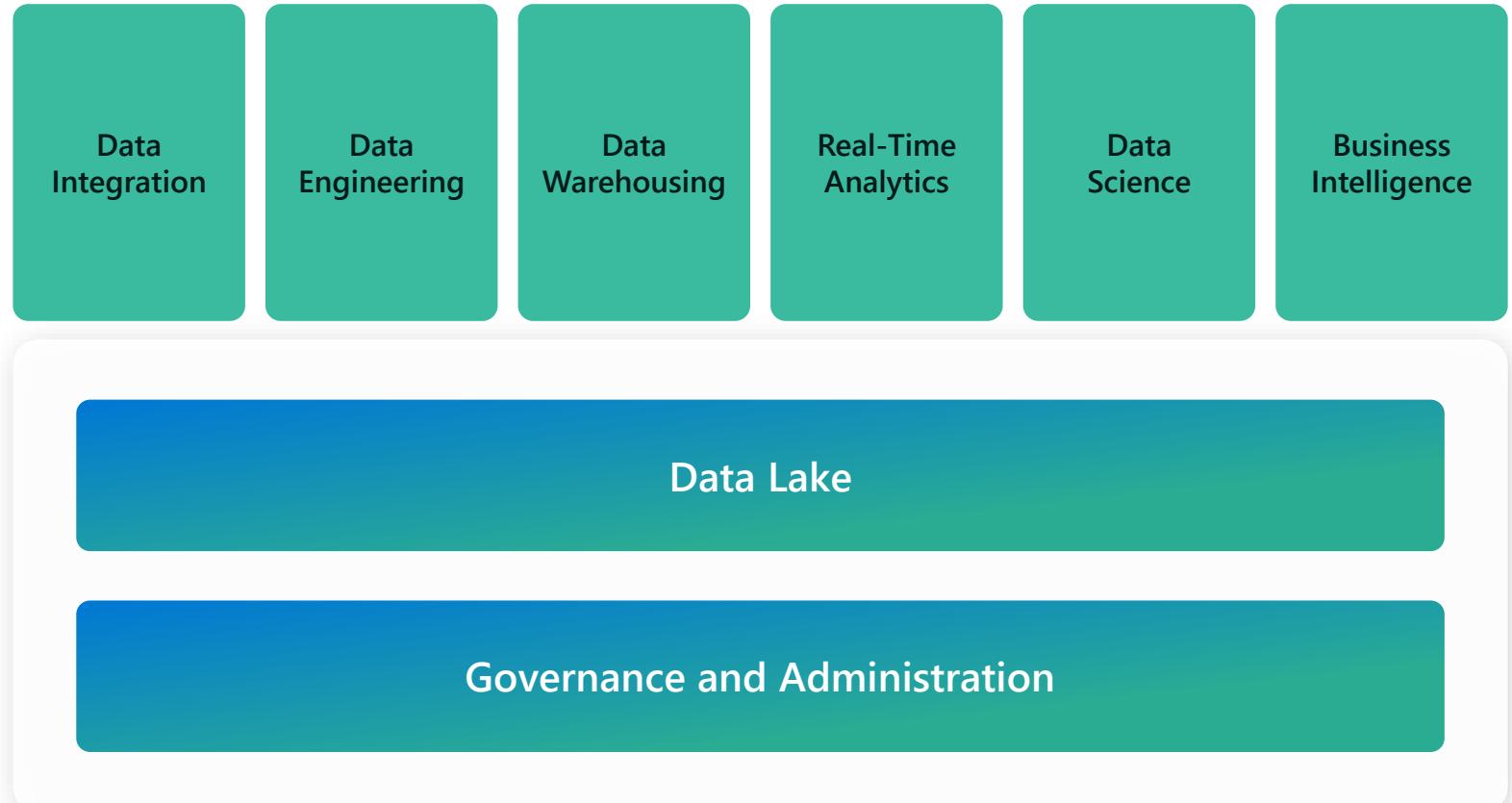


# A silver lining?

Analytics has very predictable patterns

---

Microsoft has all the products with the right scale needed to build a complete analytics system

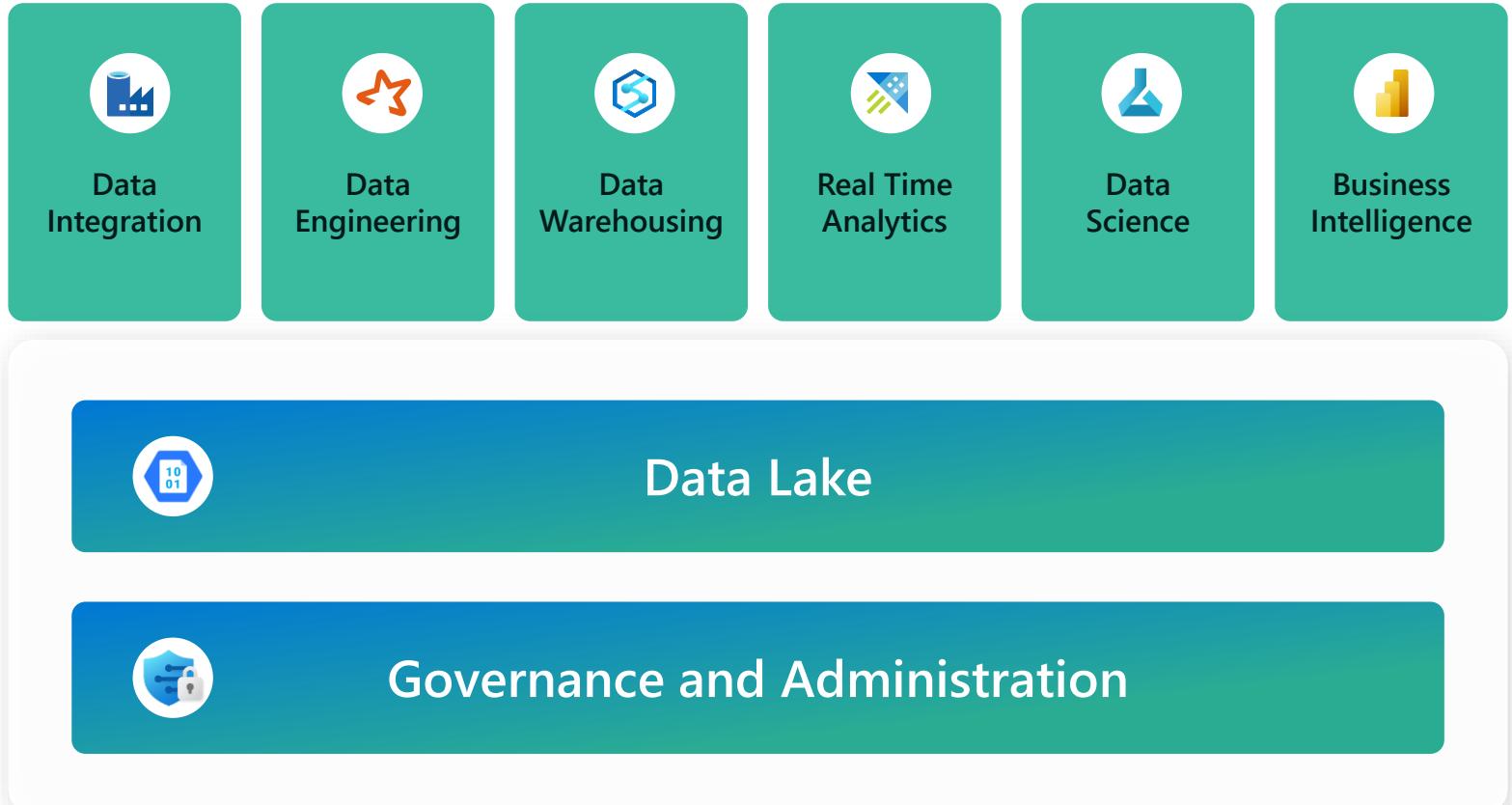


# A silver lining?

Analytics has very predictable patterns

---

**Microsoft has all the products with the right scale needed to build a complete analytics system**



# Still far too complex

Many Products

Different Experiences

Proprietary and Open

Dedicated and Serverless

PaaS and SaaS

Different Business Models

Steep Learning Curves

Deep Expertise Needed

High Integration Effort



Purview



Power BI



Kusto



Data Factory



Azure AI



Synapse DW



Synapse Spark

# SaaS

“It just works”

5x5

---

Frictionless onboarding

Instant provisioning

Quick results w/ Intuitive UX

Success  
by default

---

Minimal knobs

Auto-optimized

Auto-integrated

Centralized  
administration

---

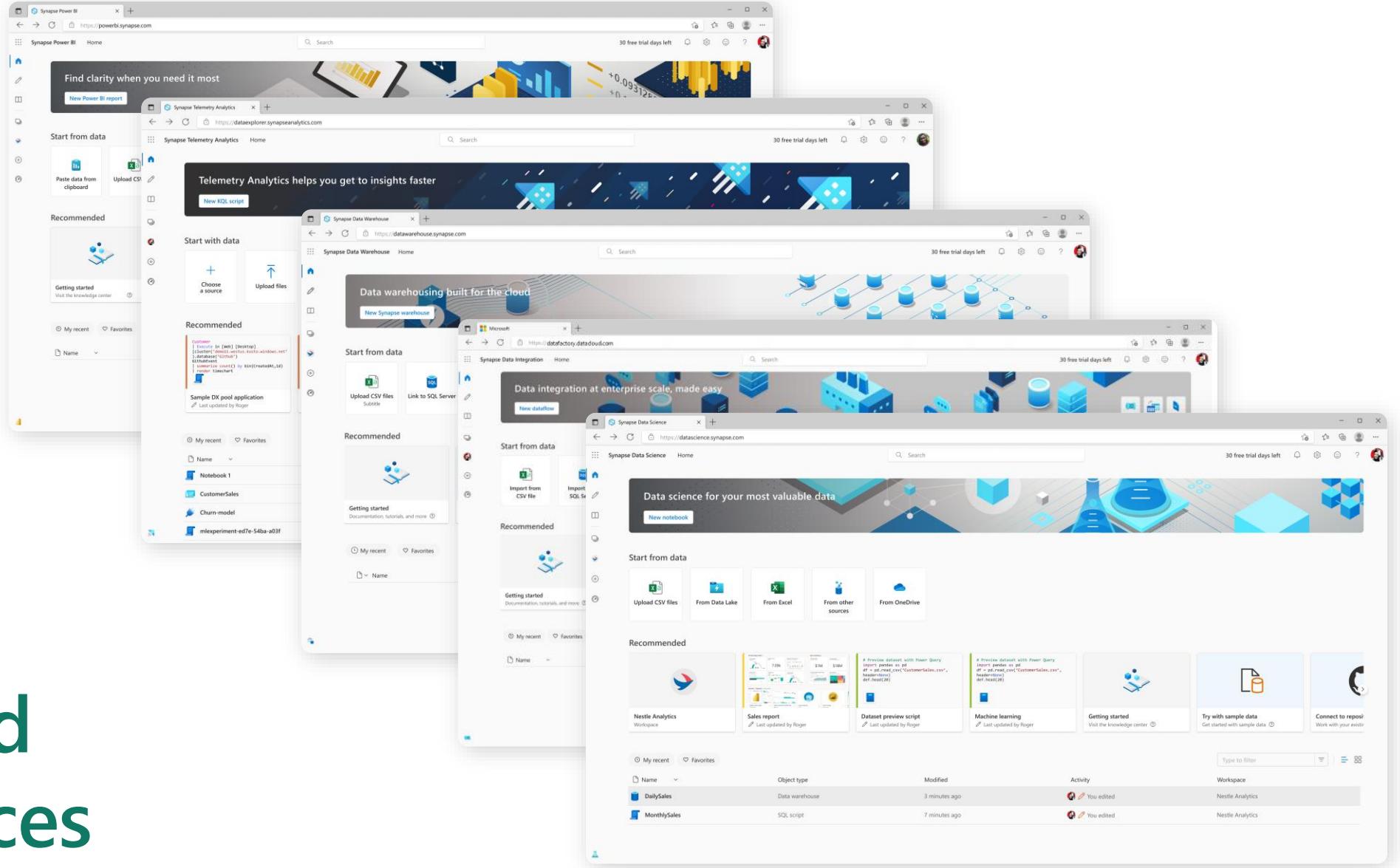
Tenant-wide governance

Centralized  
security management

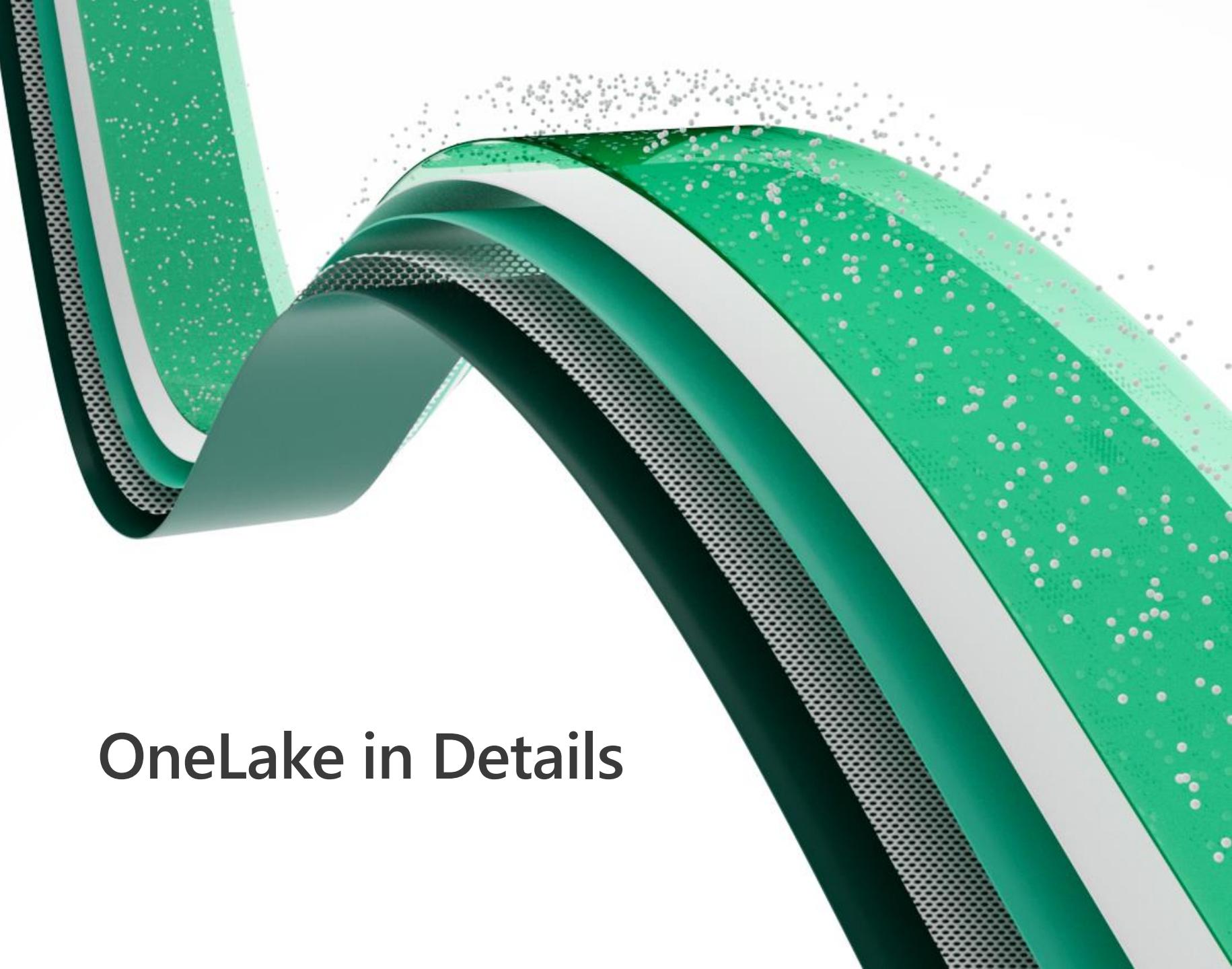
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Compliance built-in

# Persona optimized experiences

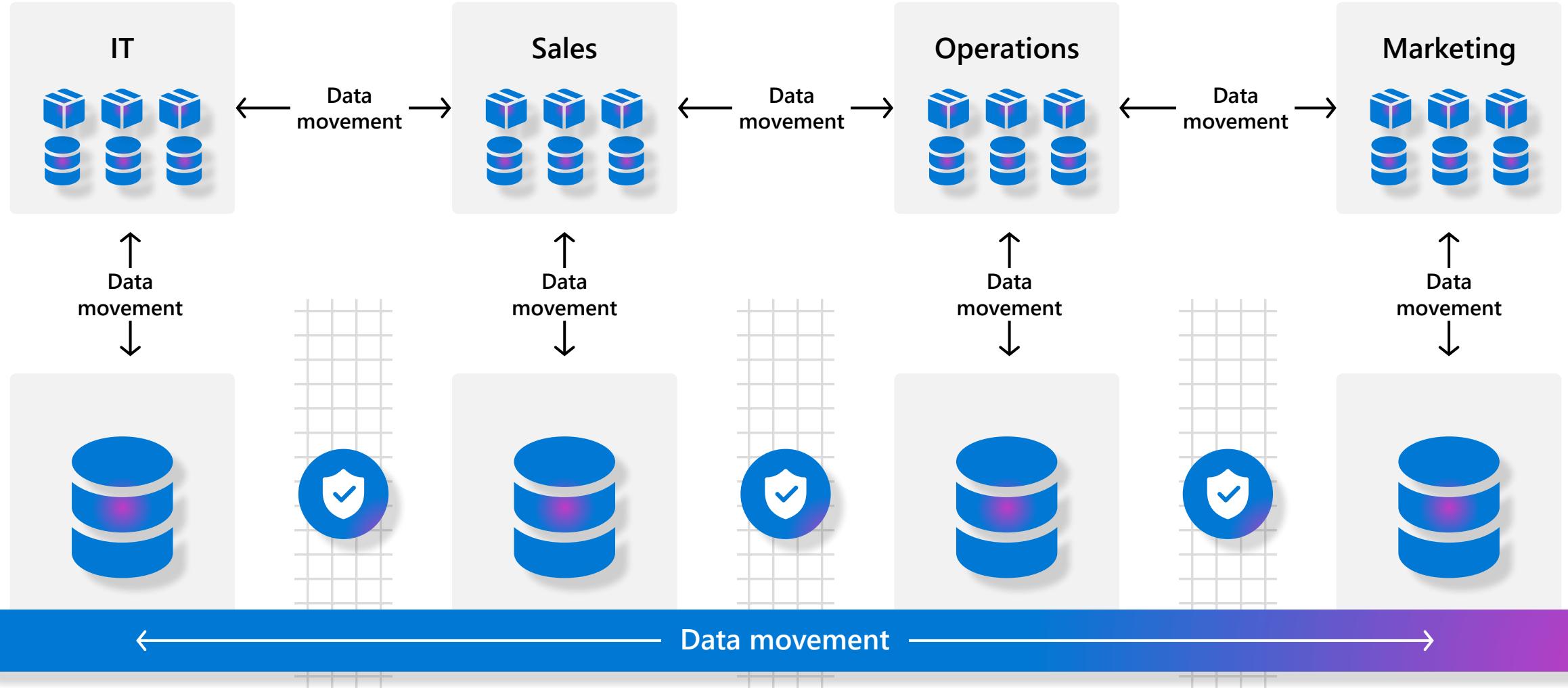


# 3

A large, stylized number '3' is positioned on the left side of the slide. To its right is a decorative graphic consisting of several overlapping, curved bands in shades of teal, green, and white. These bands have a subtle dotted texture and are set against a background of small, scattered white dots.

## OneLake in Details

# Today: Multiple siloed lakes with lots of duplication



# OneLake for all data

“The OneDrive for data”

## OneLake

- › A single unified logical SaaS data lake for the whole organization (no silos)
- › Organize data into domains
- › Foundation for all Fabric data items
- › Provides full and open access through industry standard APIs and formats to any application (no lock-in)

---

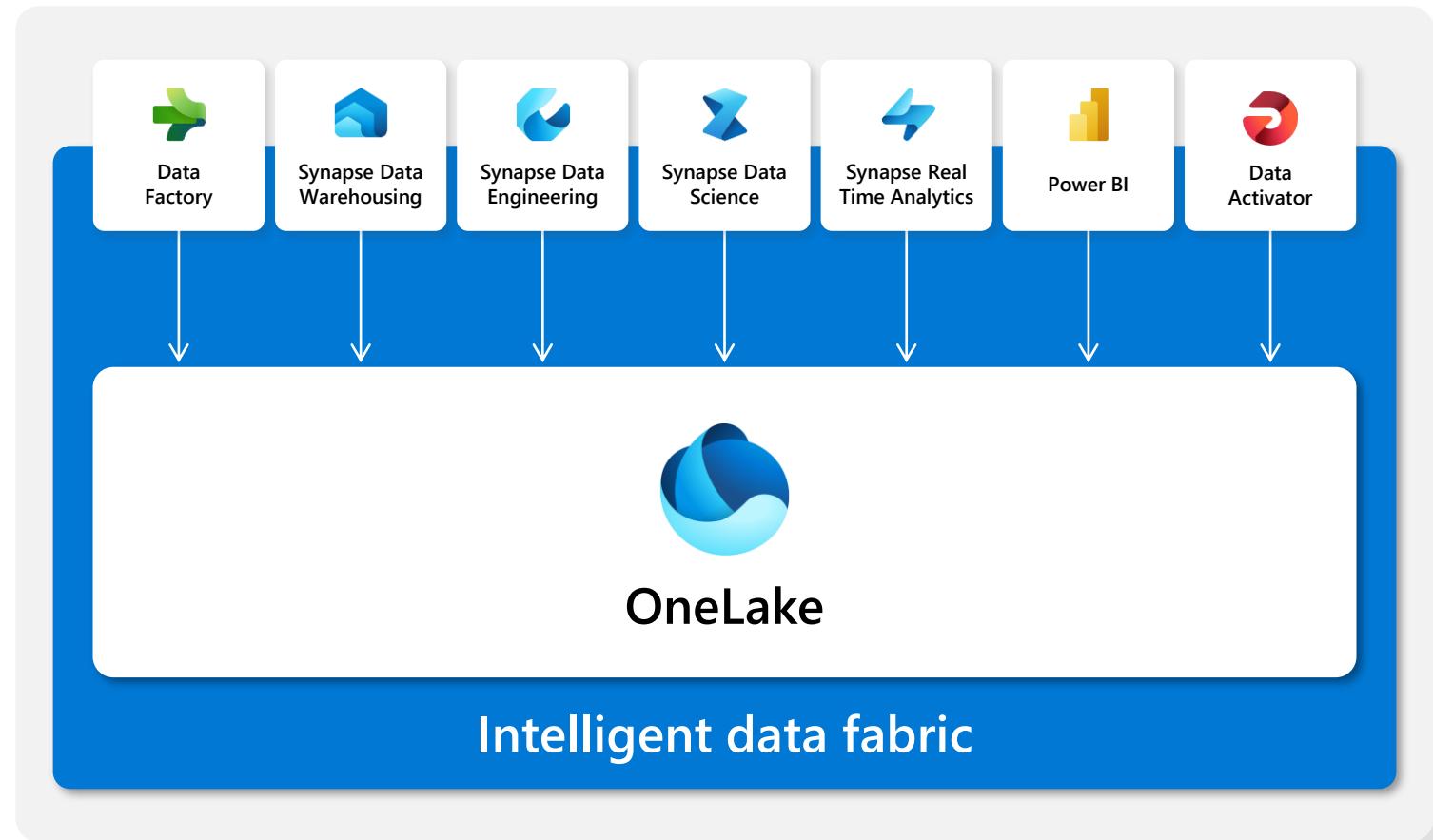
One Copy

---

One Security

---

OneLake Data Hub



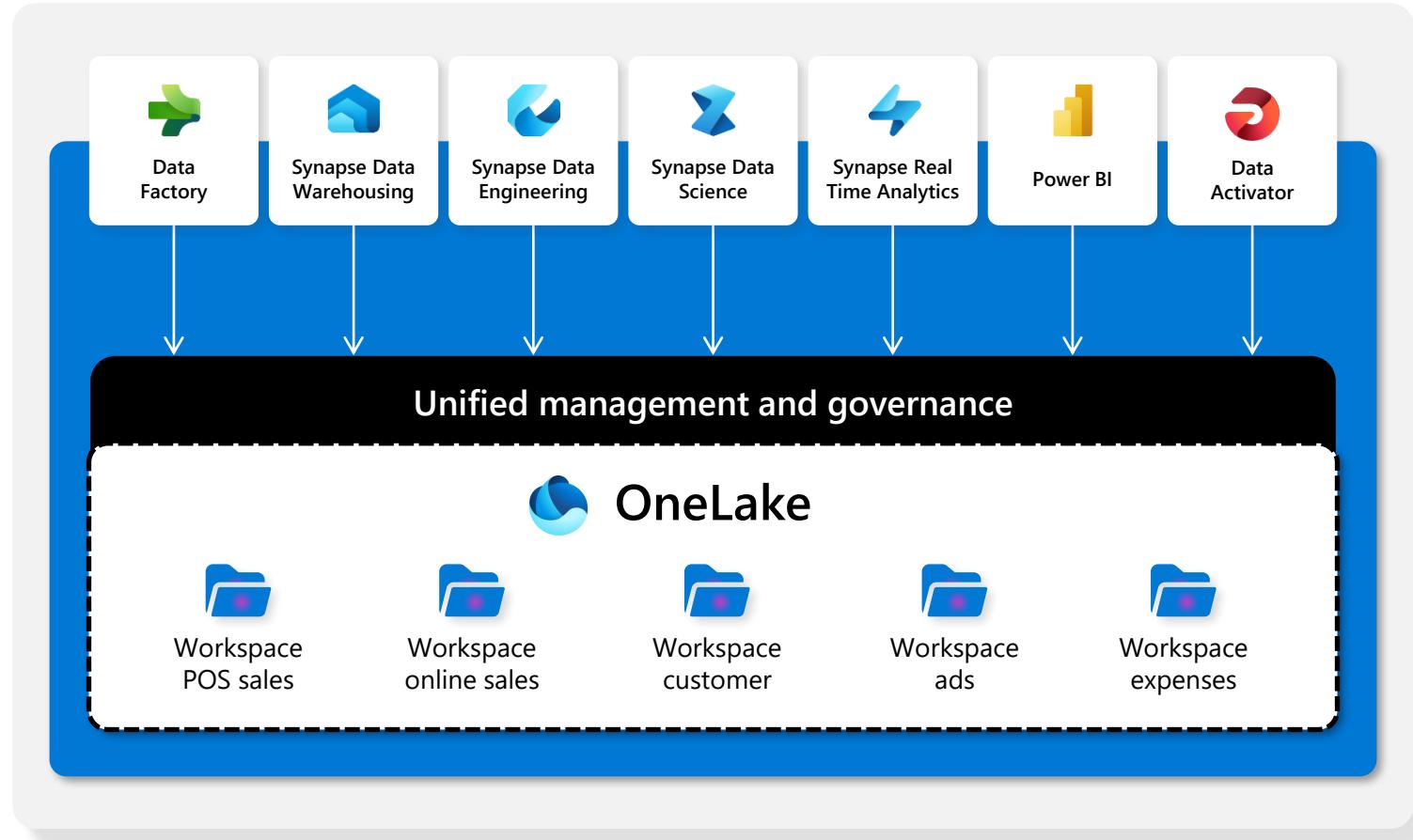
# A single unified SaaS data lake

## "No silos"

OneLake comes automatically provisioned with every Fabric tenant with no infrastructure to manage.

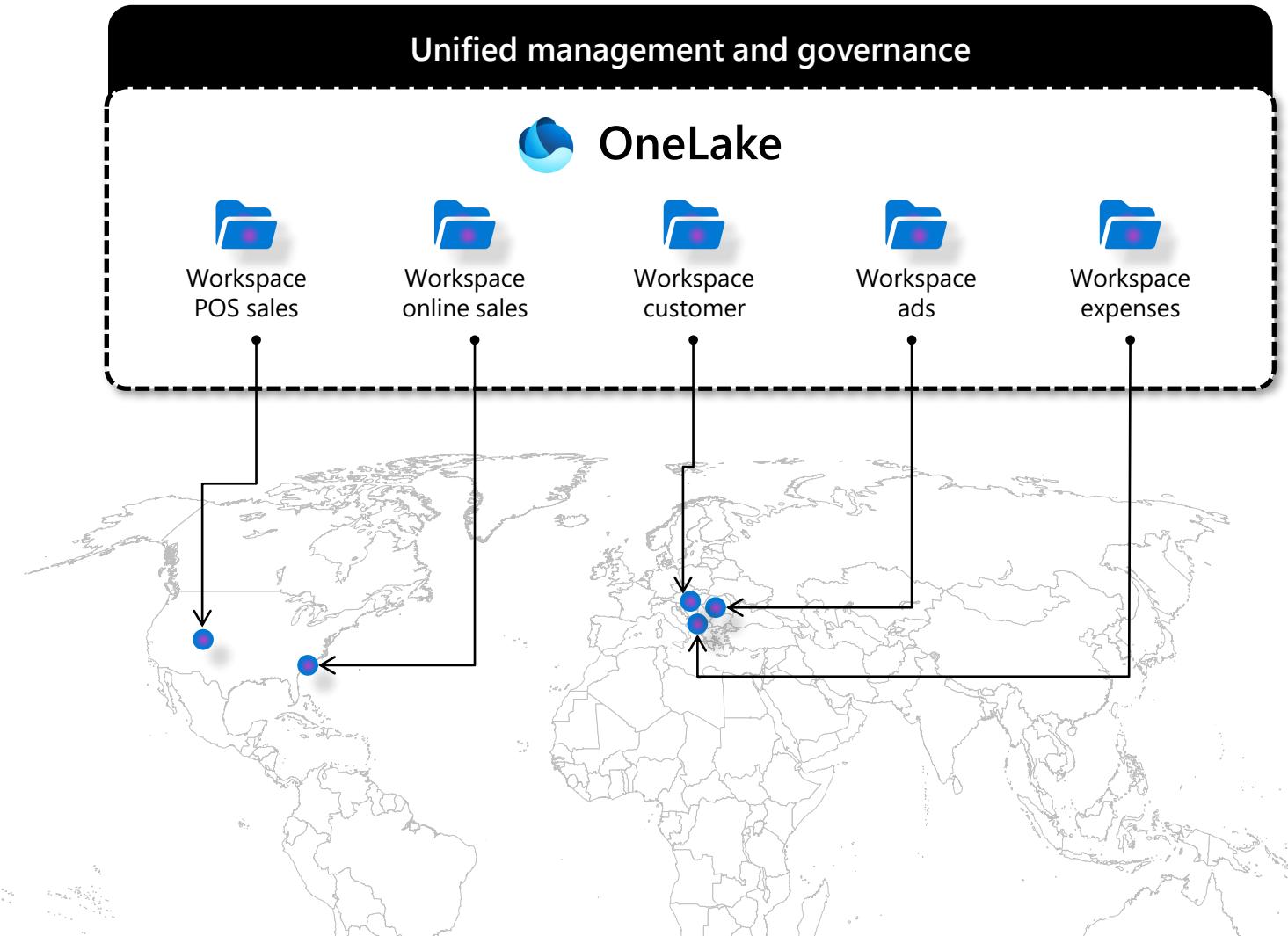
Any data in OneLake works with out-of-the-box governance such as data lineage, data protection, certification, catalog integration, etc. All data is ultimately under the control of a tenant admin.

OneLake enables distributed ownership. Different workspaces allow different parts of the organization to work independently while still contributing to the same data lake. Each workspace can have its own administrator, access control, region and capacity for billing.



# OneLake which logically spans the world

Workspaces can reside in different regions around the world while still being part of the same data lake.



# The foundation of all Fabric data items

Fabric data items are prewired to store data in OneLake in open formats

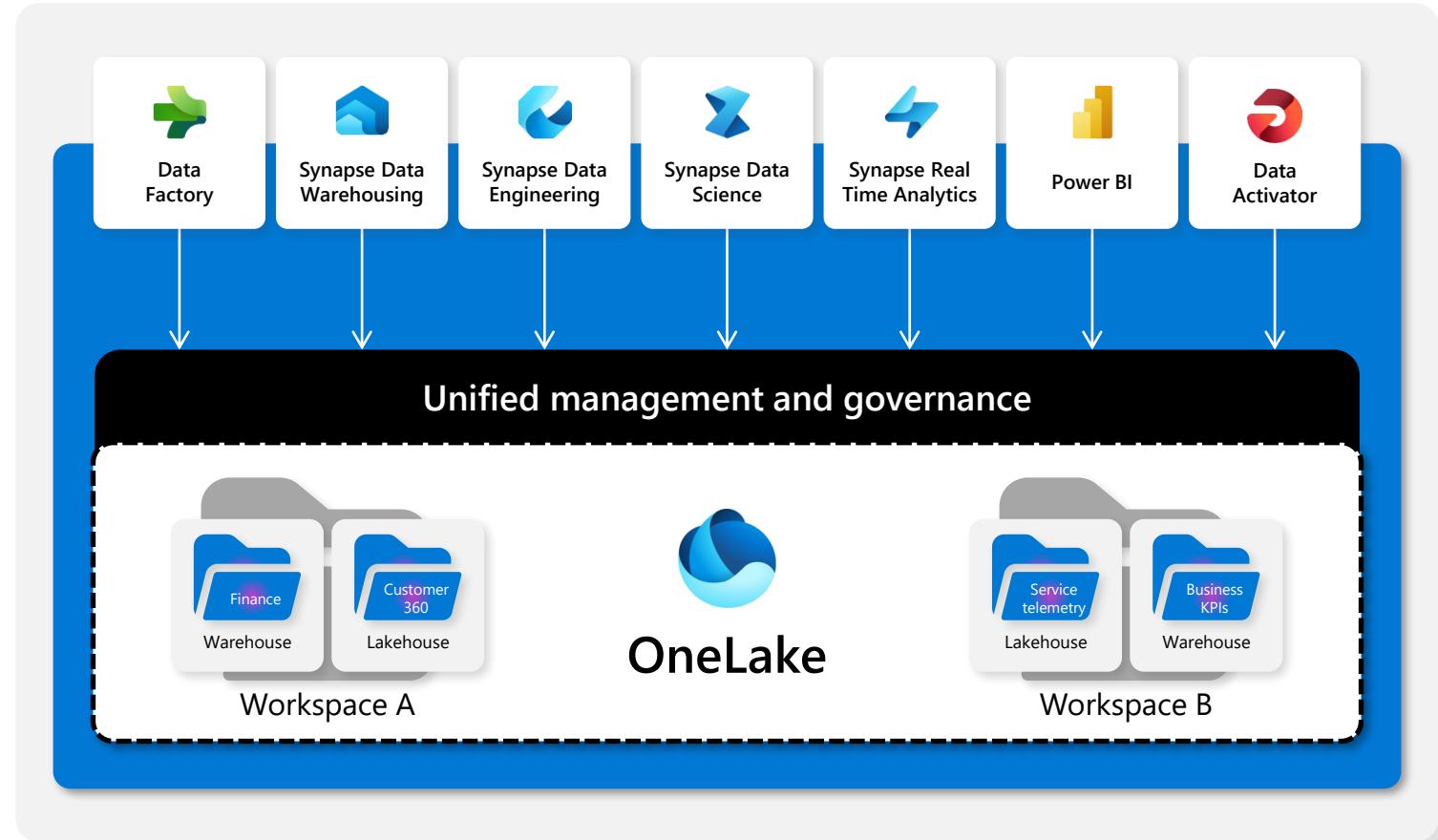
All data is stored in a Fabric data item.

Today, users interact with Power BI via items like datasets.

In Fabric, different items give tailored experiences for each persona and scenario when accessing OneLake.

Like how Office stores Word, Excel, and PowerPoint documents in OneDrive.

All data is stored on open file formats.  
All tabular data will be written in delta lake parquet format.



# Open access to data in OneLake

No lock-in with industry standard APIs and open file formats

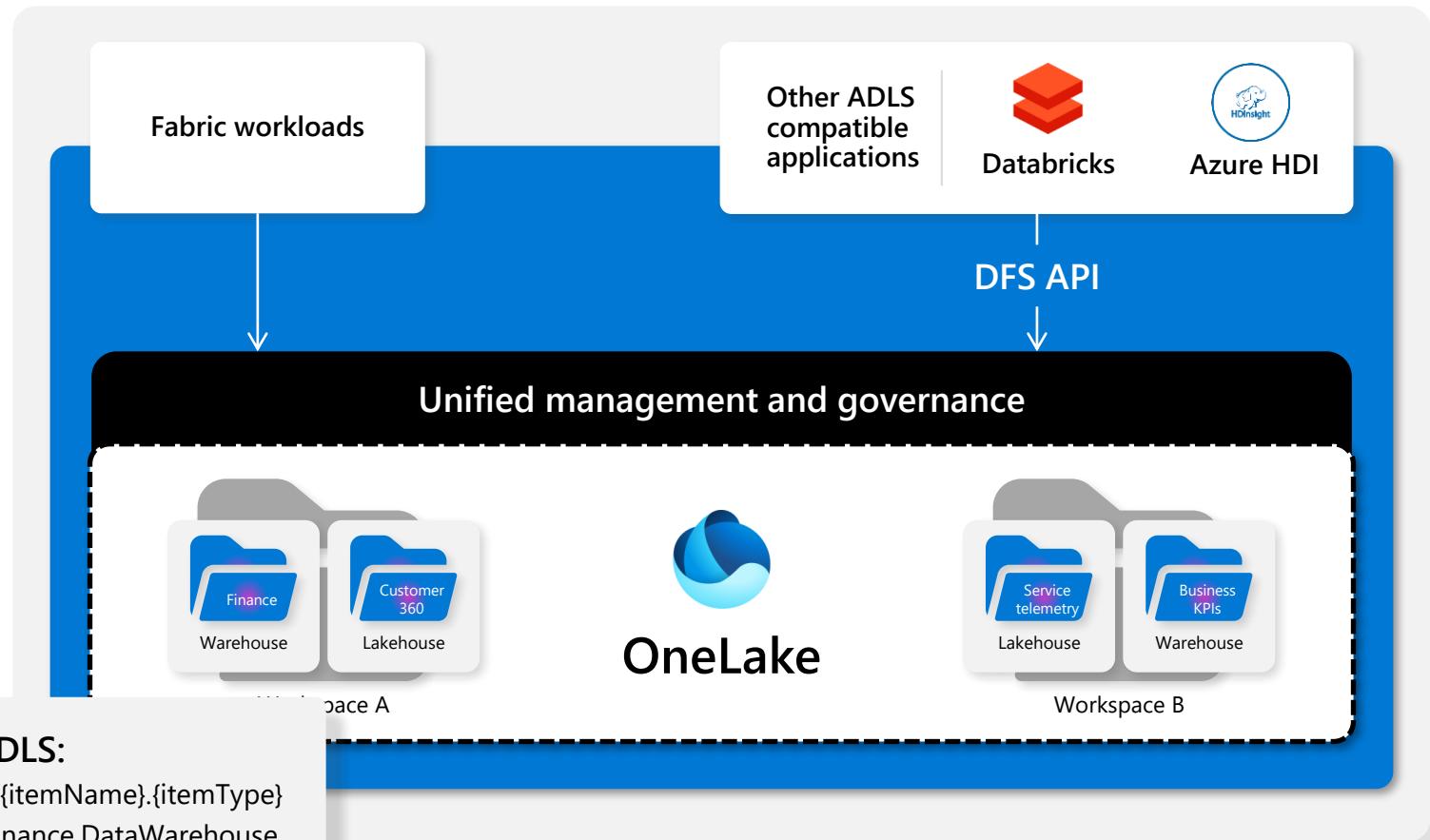
By supporting the ADLS Gen2 DFS APIs and SDKs, OneLake is compatible with existing ADLS applications

Tenants will appear as one big storage account with different workspaces appearing as different containers with data organized into folders

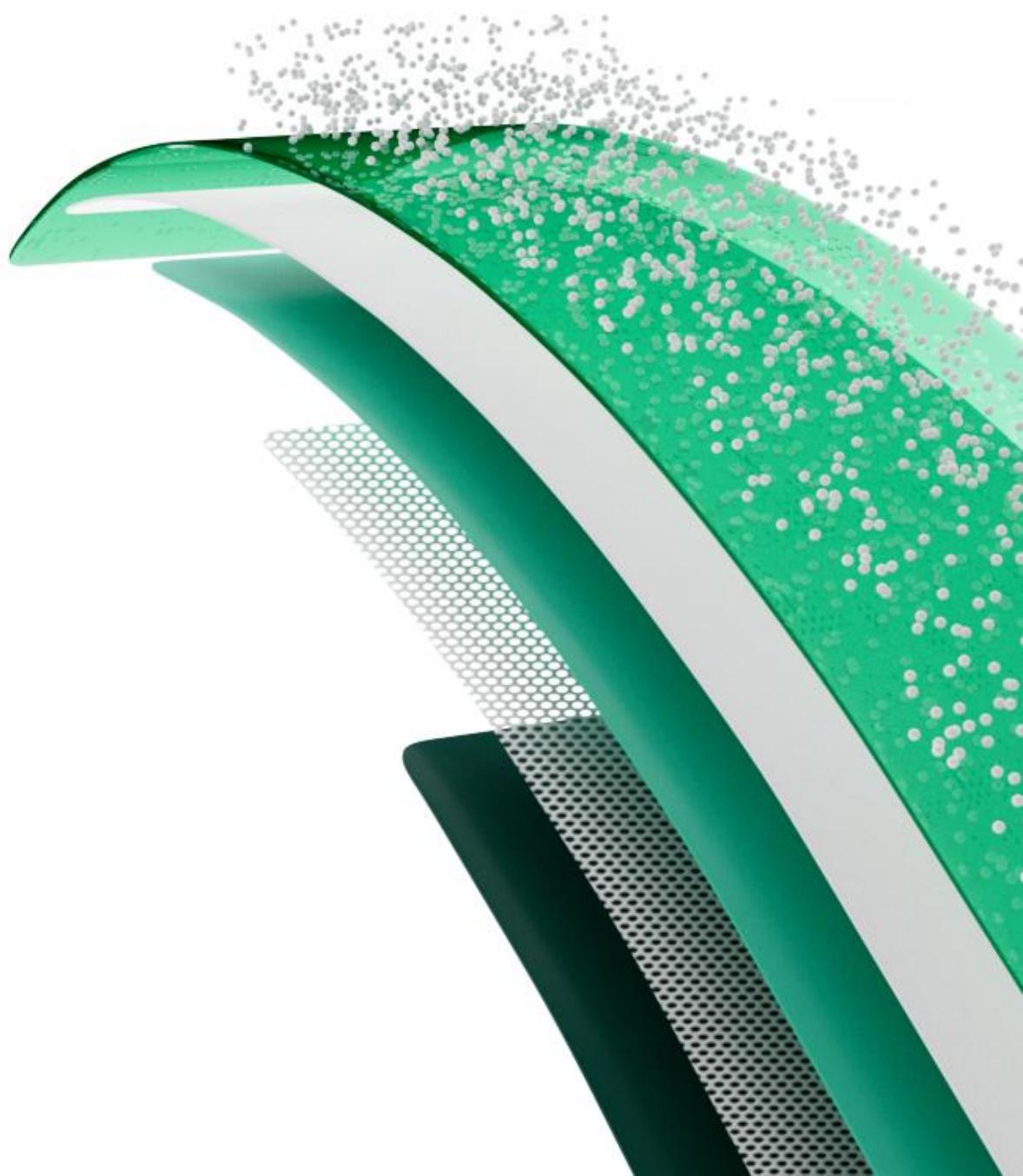
Underlying physical storage is virtualized away. OneLake ensures proper scale and performance.

**Addressing Fabric workspaces and items as ADLS:**

<https://onelake.dfs.fabric.microsoft.com/{workspaceName}/{itemName}.{itemType}>  
Ex. <https://onelake.dfs.fabric.microsoft.com/Workspace A/Finance.DataWarehouse>



**DEMO:**  
OneLake



  
Home  
+ Create  
Browse  
Data hub  
Workspaces

## New

New items saved to :  01\_Contoso\_KPIWorkspace Show less ^

Warehouse



Data pipeline

## Recommended

You frequently open this



01\_Contoso\_Workspace

You frequently open this



01\_Contoso\_KPIWorkspace

You frequently open this



#Contoso\_Development

You frequently open this



My workspace

Getting started



Learn how to store and

## Quick access

 Recent  Favorites  Shared with me

Filter by keyword

Filter

	Name	Type	Opened	Owner	Endorsement	Sensitivity	Workspace
	01_Contoso_KPIWorkspace 	Workspace	now	—	—	—	Workspaces
	BusinessKPIs	Warehouse	6 minutes ago	Matthew Hicks	—	—	01_Contoso_KPIWor...
	#Contoso_Campaigns 	Workspace	19 minutes ago	—	—	—	Workspaces
	LH	Lakehouse	19 minutes ago	Matthew Hicks	—	—	#Contoso_Campaigns
	LH	Lakehouse	19 minutes ago	Matthew Hicks	—	—	#Contoso_Strategy

# OneLake for all domains

## OneLake gives a true data mesh as a service

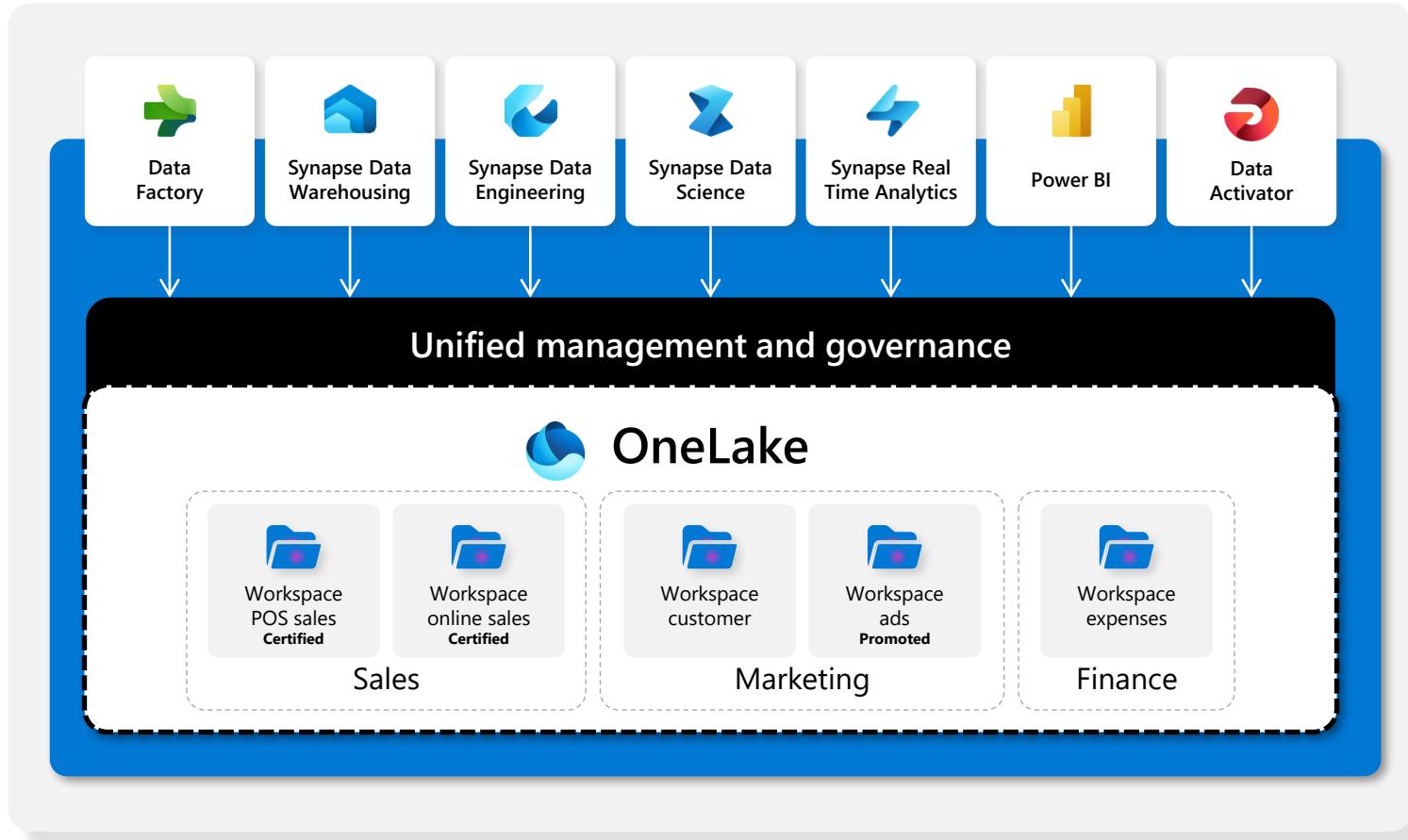
Introducing [domains](#) as an integral part of Fabric: A domain is a way to logically group together all the data in an organization relevant to an area or field, according to business needs

Domains are defined with [domain admins](#) and [contributors](#) who can [associate workspaces](#) and group them together under a relevant domain

[Federated governance](#) can be achieved by delegating settings to domain admins, thus allowing them to achieve more [granular control](#) over their business area

Domains simplify [discovery](#) and [consumption](#) of data across the organization, thus allowing business optimized consumption

Avoid data swamps by endorsing certain data as [certified](#) or [promoted](#), thus encouraging reuse.





# OneLake for all data

“The OneDrive for data”

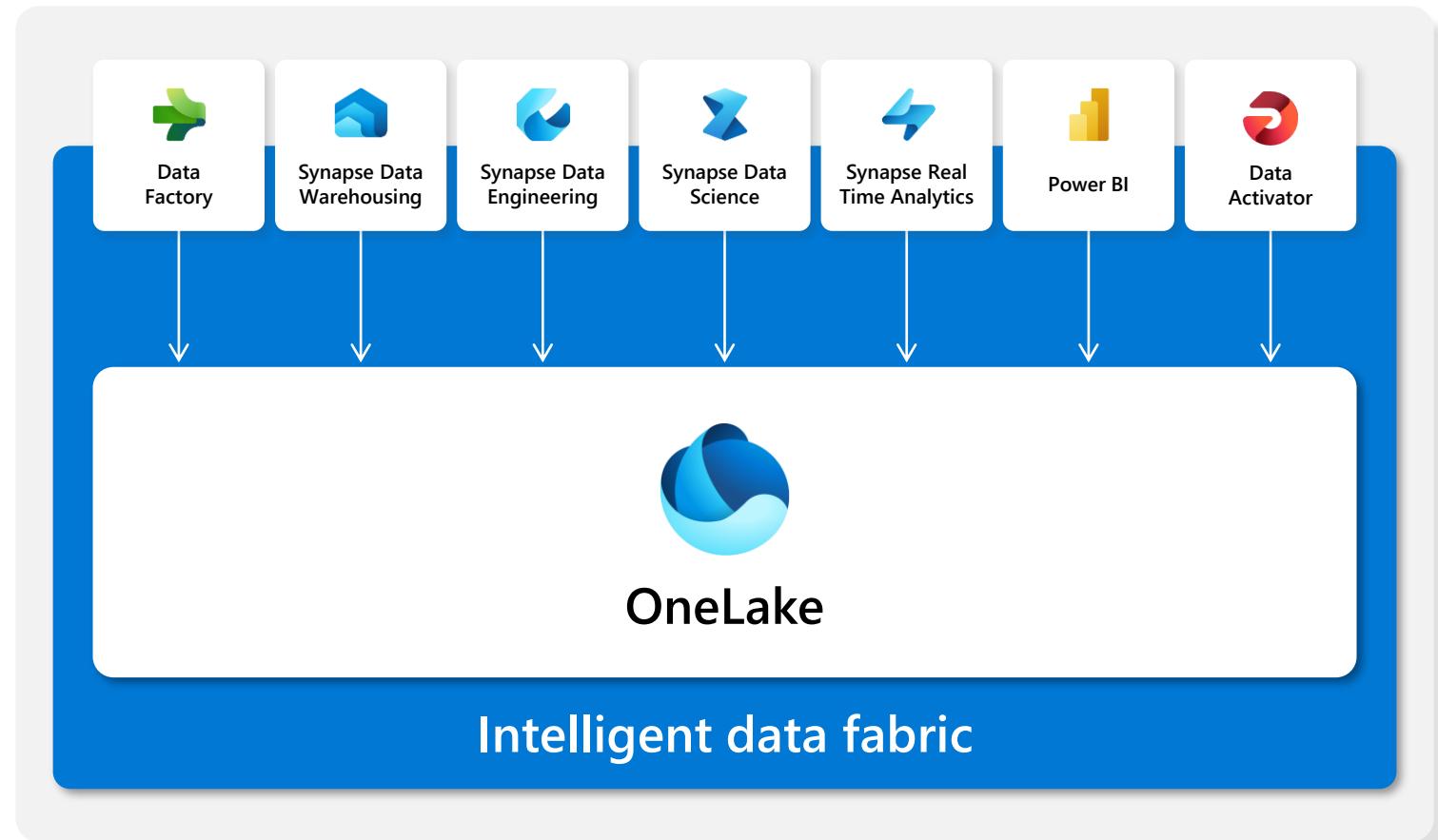
OneLake

## One Copy

- › Virtualize data across domains and clouds into a single logical lake with shortcuts
- › The One Copy of data for all the analytical engines of Fabric without moving or duplicating data

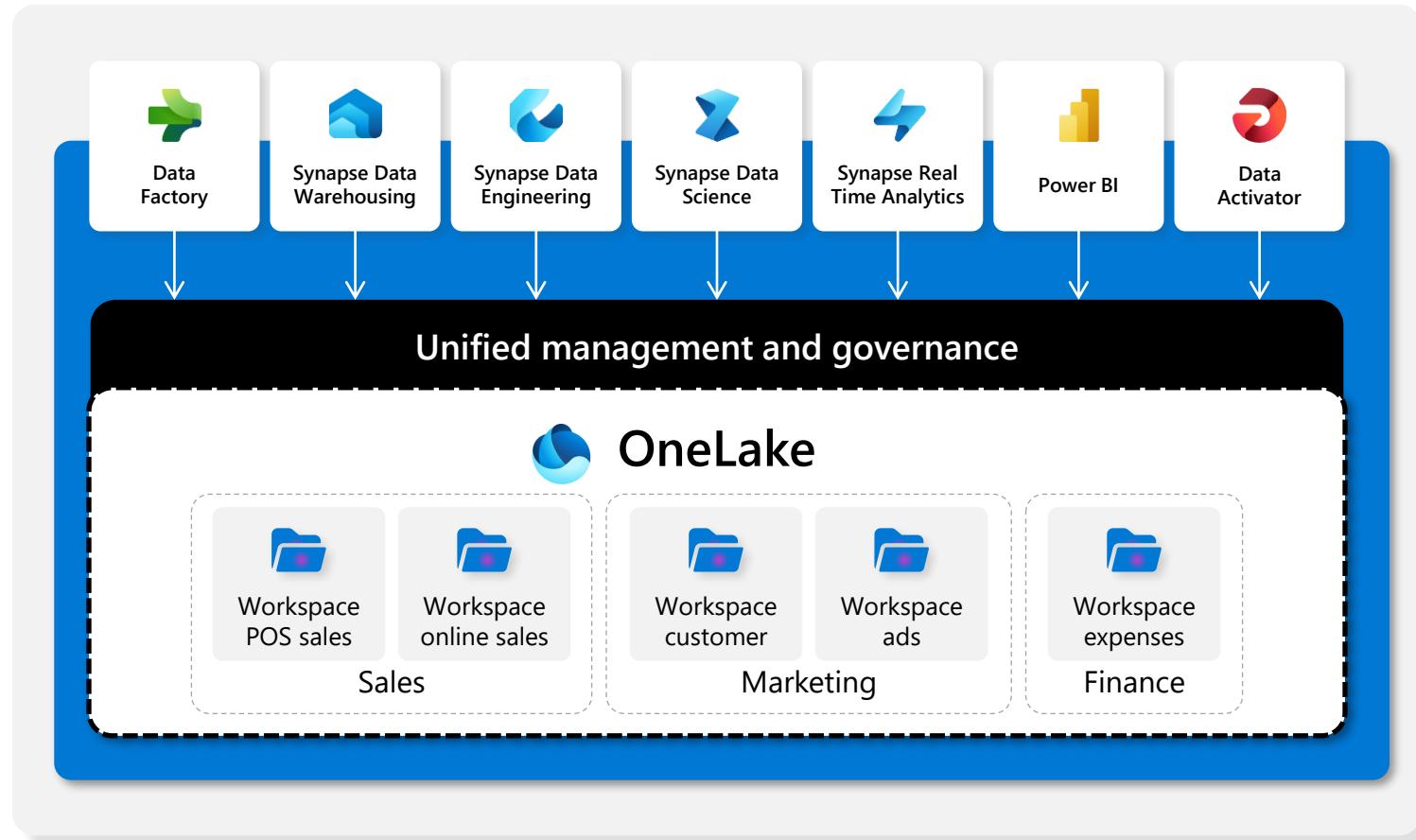
One Security

OneLake Data Hub



# OneLake gives a true data mesh as a service

## One Copy enables data to be used across domains, clouds and engines

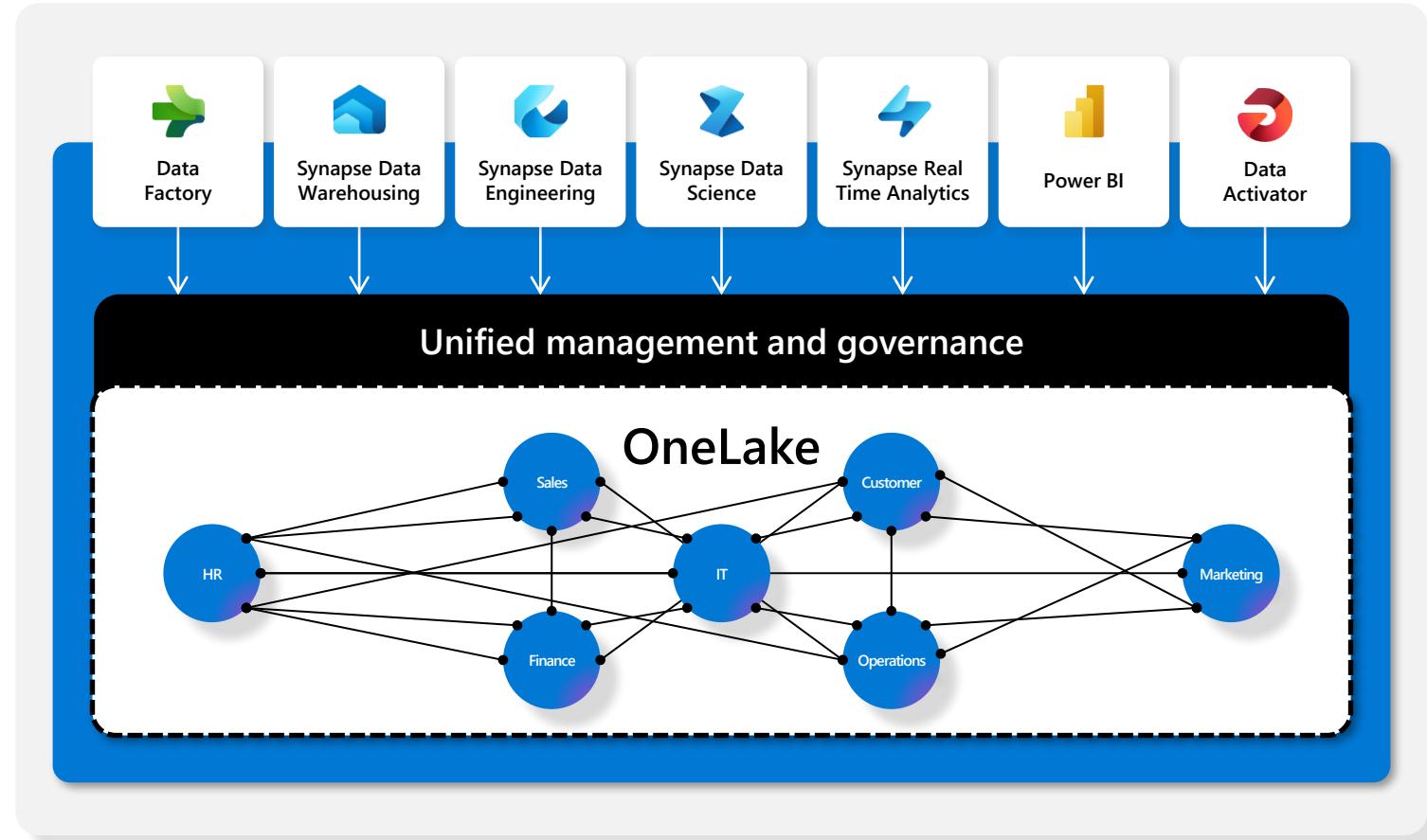


# OneLake gives a true data mesh as a service

## One Copy enables data to be used across domains, clouds and engines

An organization will have many data domains with many workspaces with different data owners. However, a single data product can span multiple domains.

Shortcuts provide the connections between domains so that data can be virtualized into a single data product without data movement, data duplication or changing the ownership of the data.



# Mirroring in Microsoft Fabric

## Simplify near real-time analytics

Fabric Mirroring enables adding existing databases and data warehouses to Fabric without any ETL.

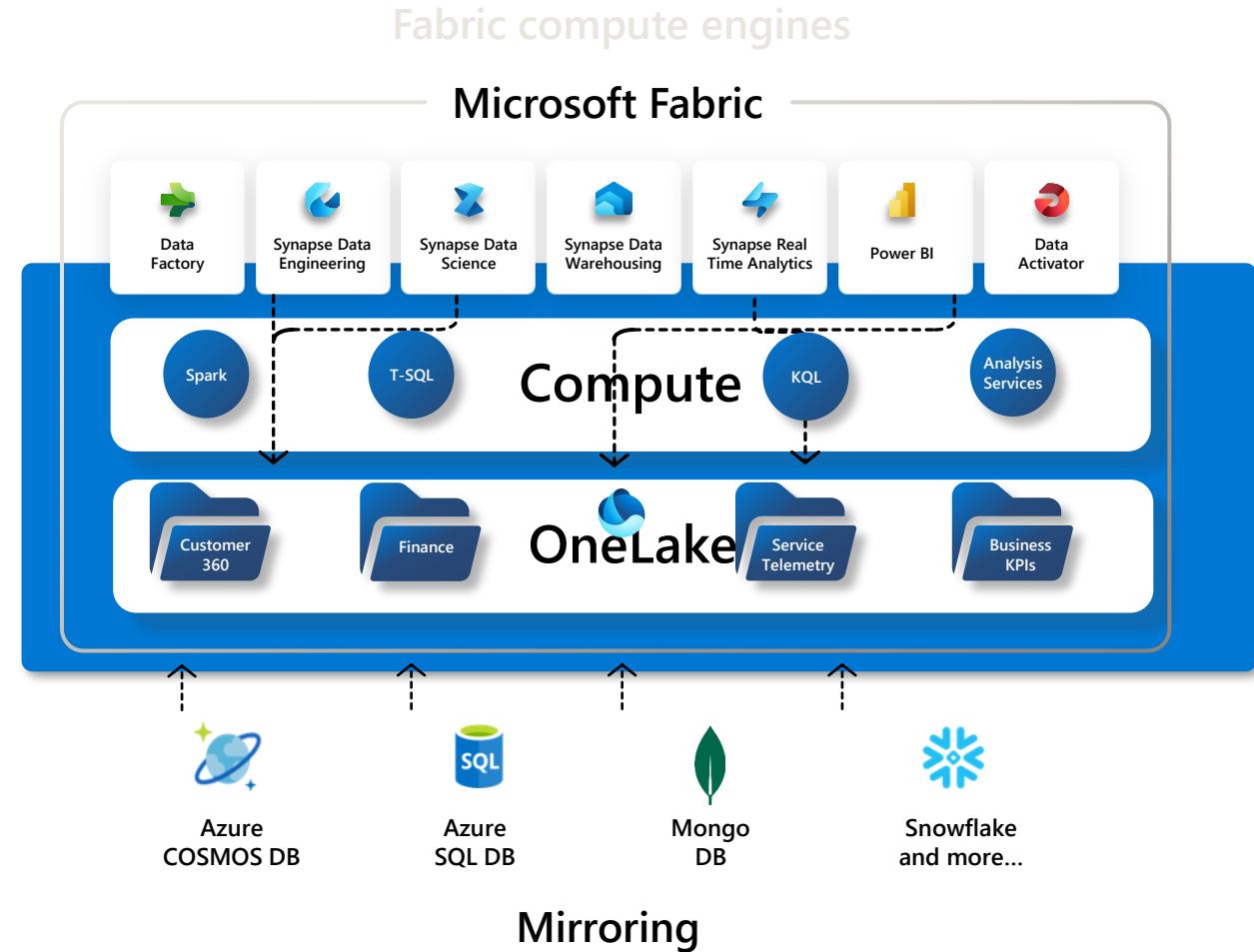
A full editing experience of the source database is available for the Mirrored database.

Data is replicated into OneLake in Delta format and kept up-to-date in near-real-time.

All the Fabric experiences instantly work with the OneLake replica.

Analysts and Data Scientists can work with real-time data.

The replica protects operational databases from analytical queries.



# Shortcuts virtualize data across domains and clouds

## No data movements or duplication

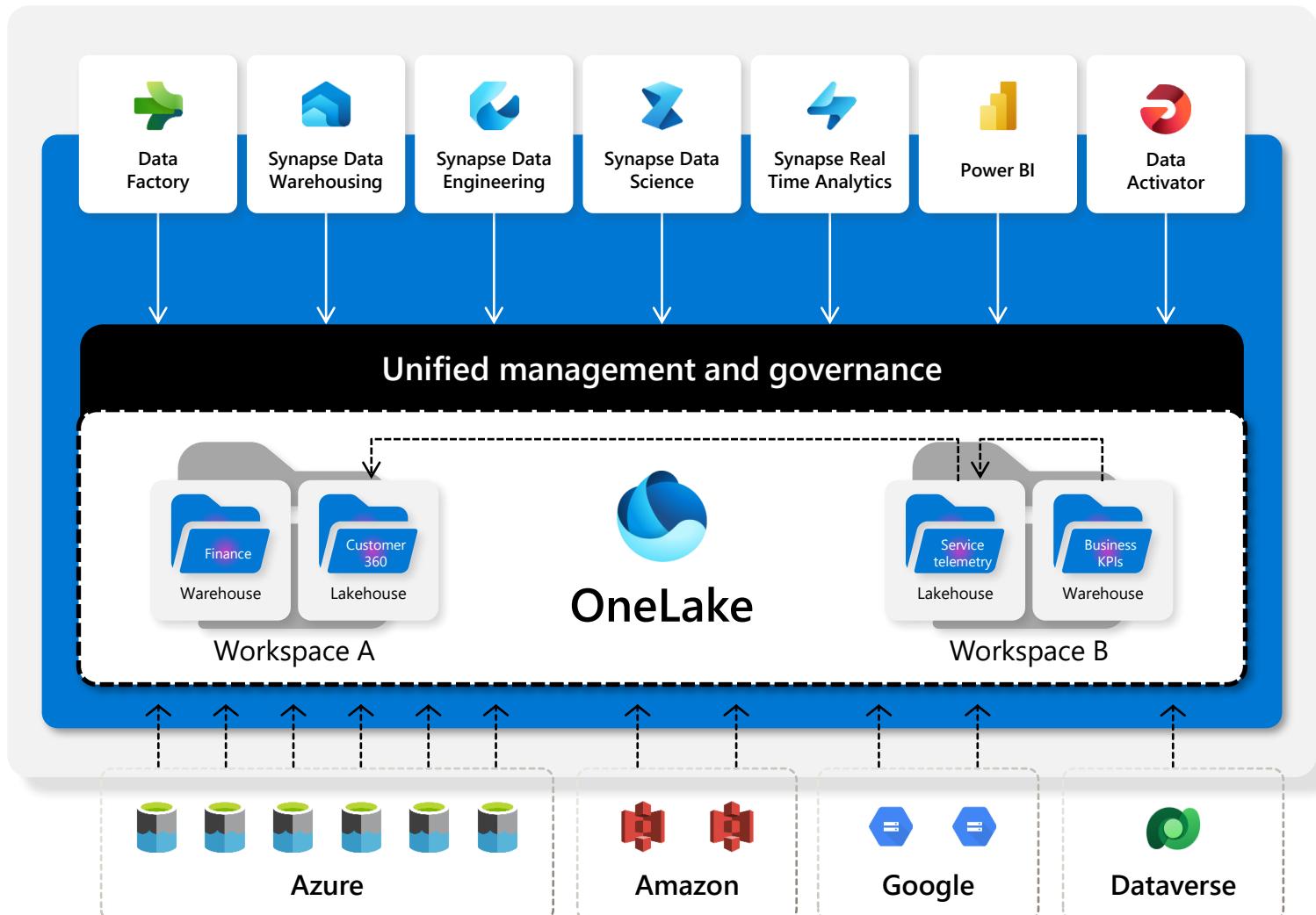
A shortcut is a symbolic link which points from one data location to another

Create a shortcut to make data from a warehouse part of your lakehouse

Create a shortcut within Fabric to consolidate data across items or workspaces without changing the ownership of the data. Data can be reused multiple times without data duplication.

Existing ADLS gen2 storage accounts and Amazon S3 buckets can be managed externally to Fabric and Microsoft while still being virtualized into OneLake with shortcuts

All data is mapped to a unified namespace and can be accessed using the same APIs including the ADLS Gen2 DFS APIs



# One Copy for all computers

## Real separation of compute and storage

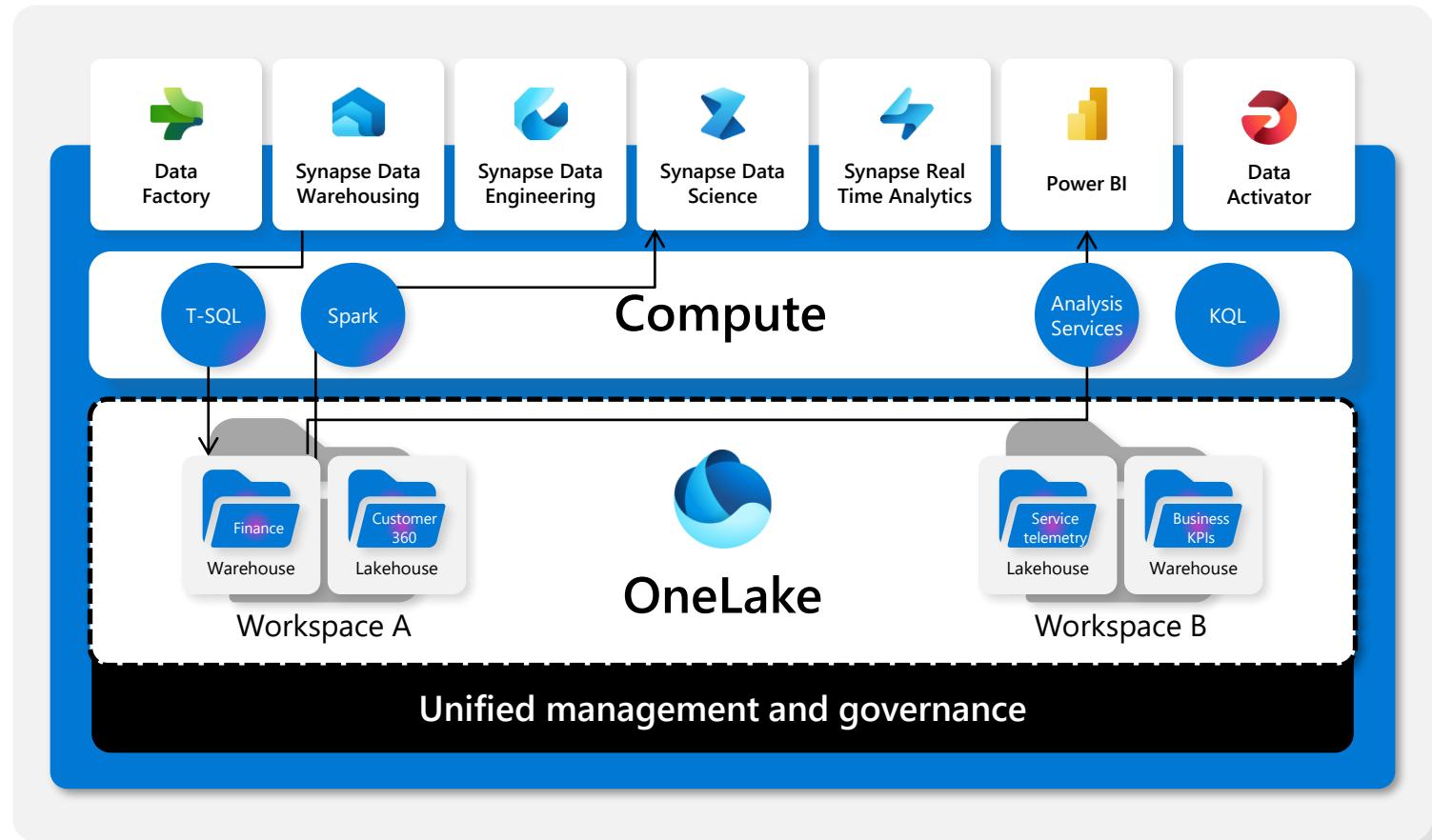
Compute powers the applications and experiences in Fabric. The compute is separate from the storage.

Multiple compute engines are available, and all engines can access the same data without needing to import or export it. You are able to choose the right engine for the right job.

A SQL developer can use T-SQL to create tables and load data.

The same data can be read by a data scientist using Spark.

A business user can view the same data in a Power BI report using DirectLake.



# One Copy for all computers

## Real separation of compute and storage

Compute powers the applications and experiences in Fabric. The compute is separate from the storage.

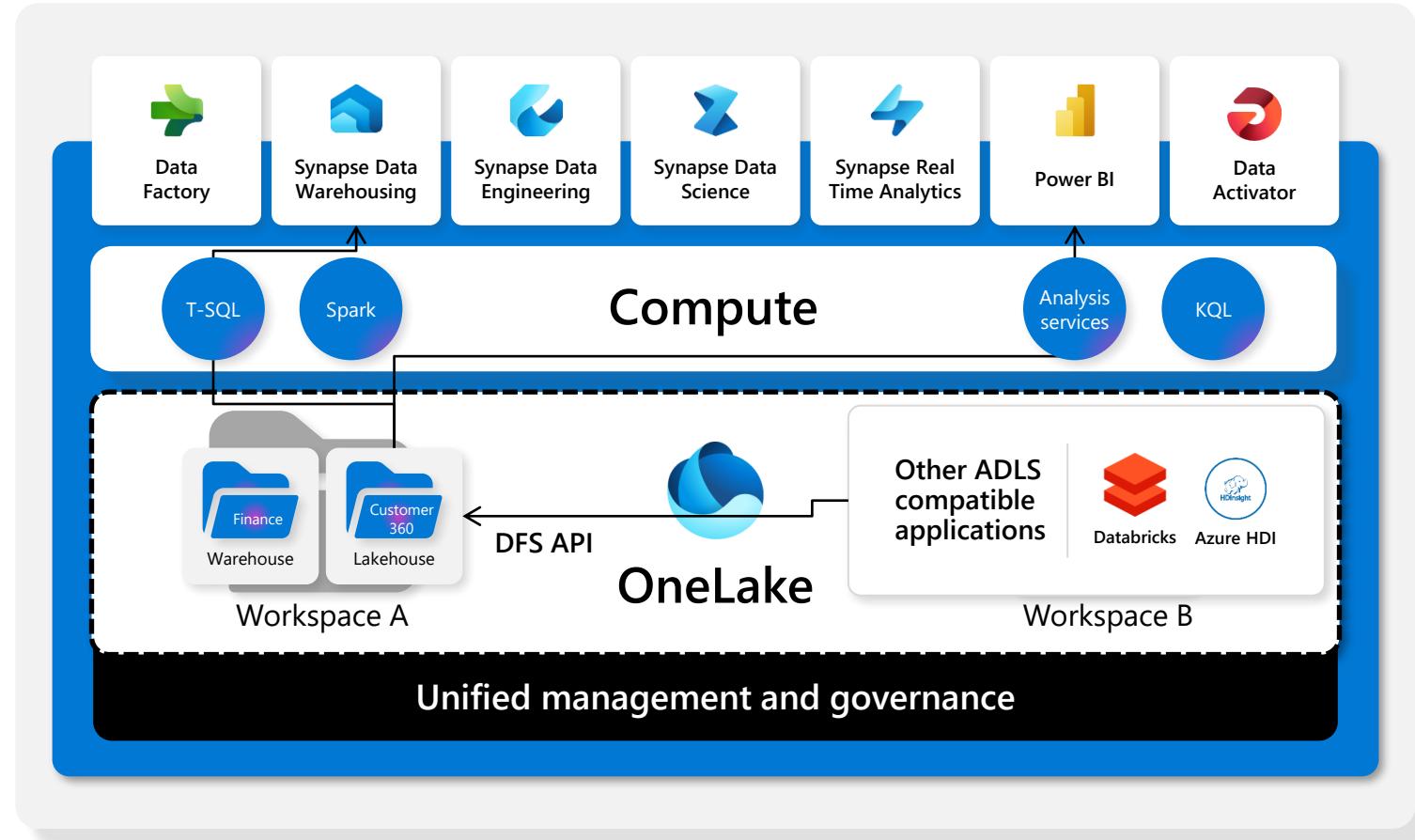
Multiple compute engines are available, and all engines can access the same data without needing to import or export it. You are able to choose the right engine for the right job

Non-Fabric engines can also read/write to the same copy of data using the ADLS APIs or added through shortcuts

A data engineer can load data using a Databricks Notebook.

A data analyst can query the data using T-SQL.

A business user can view the same data in a Power BI report using DirectLake.



# One Copy for all computers

## Real separation of compute and storage

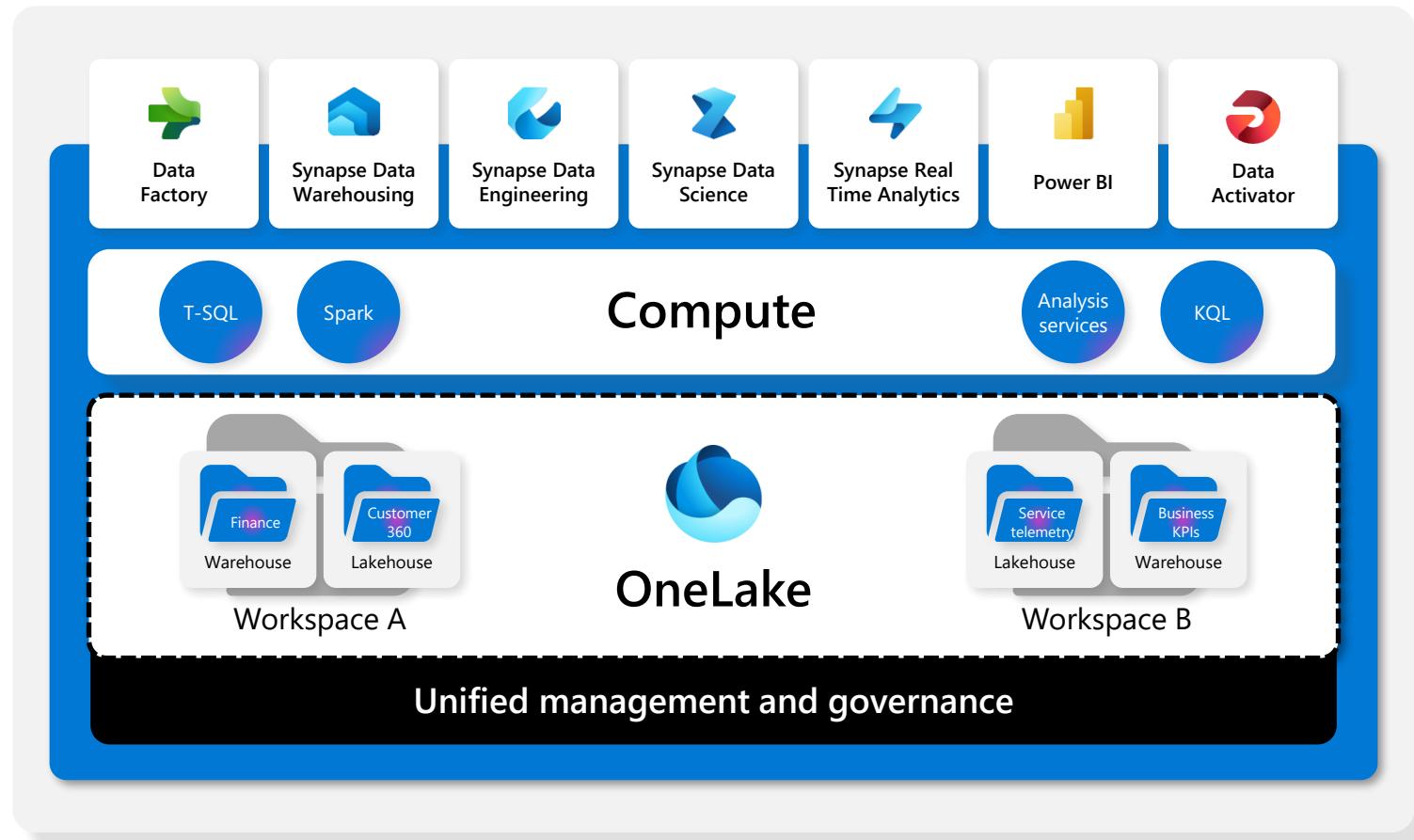
Compute powers the applications and experiences in Fabric. The compute is separate from the storage.

Multiple compute engines are available, and all engines can access the same data without needing to import or export it. You are able to choose the right engine for the right job.

Non-Fabric engines can also read/write to the same copy of data using the ADLS APIs or added through shortcuts

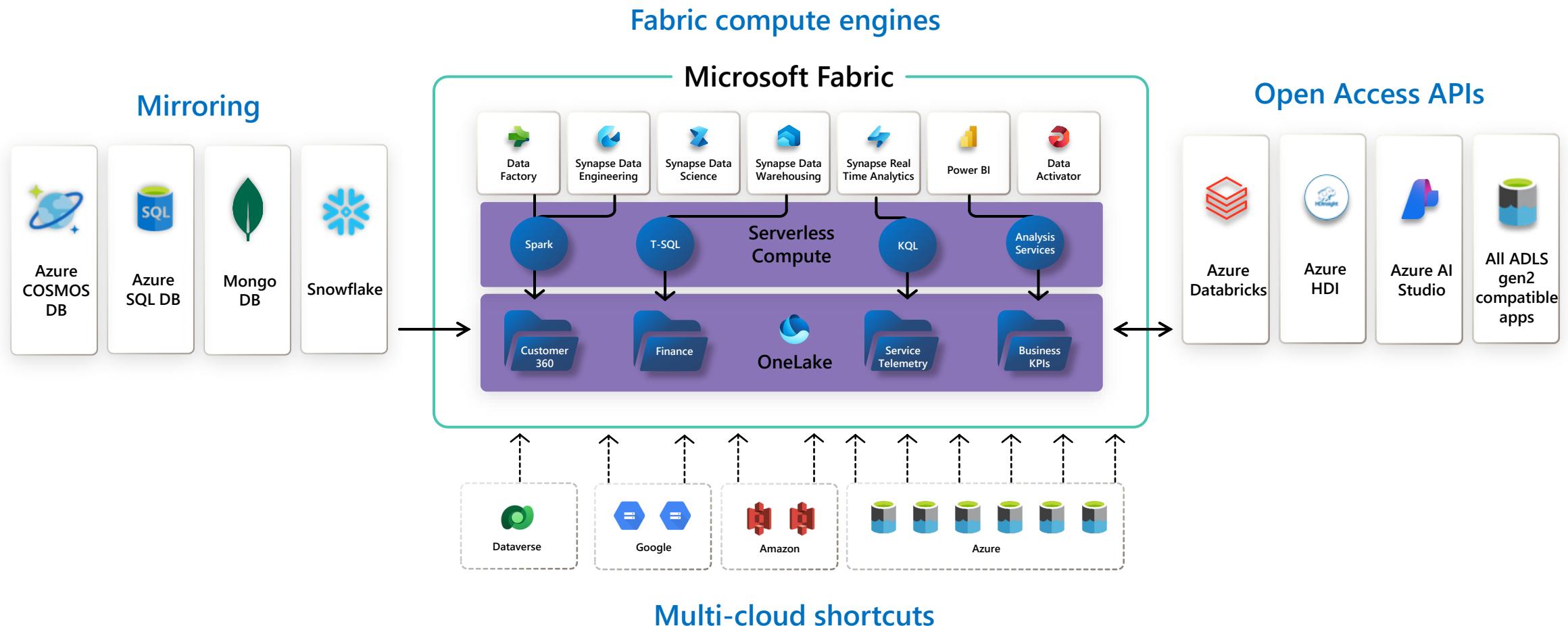
No matter which engine or item you use, everyone contributes to building the same lake.

Engines are being optimized to work with Delta Parquet as their native format

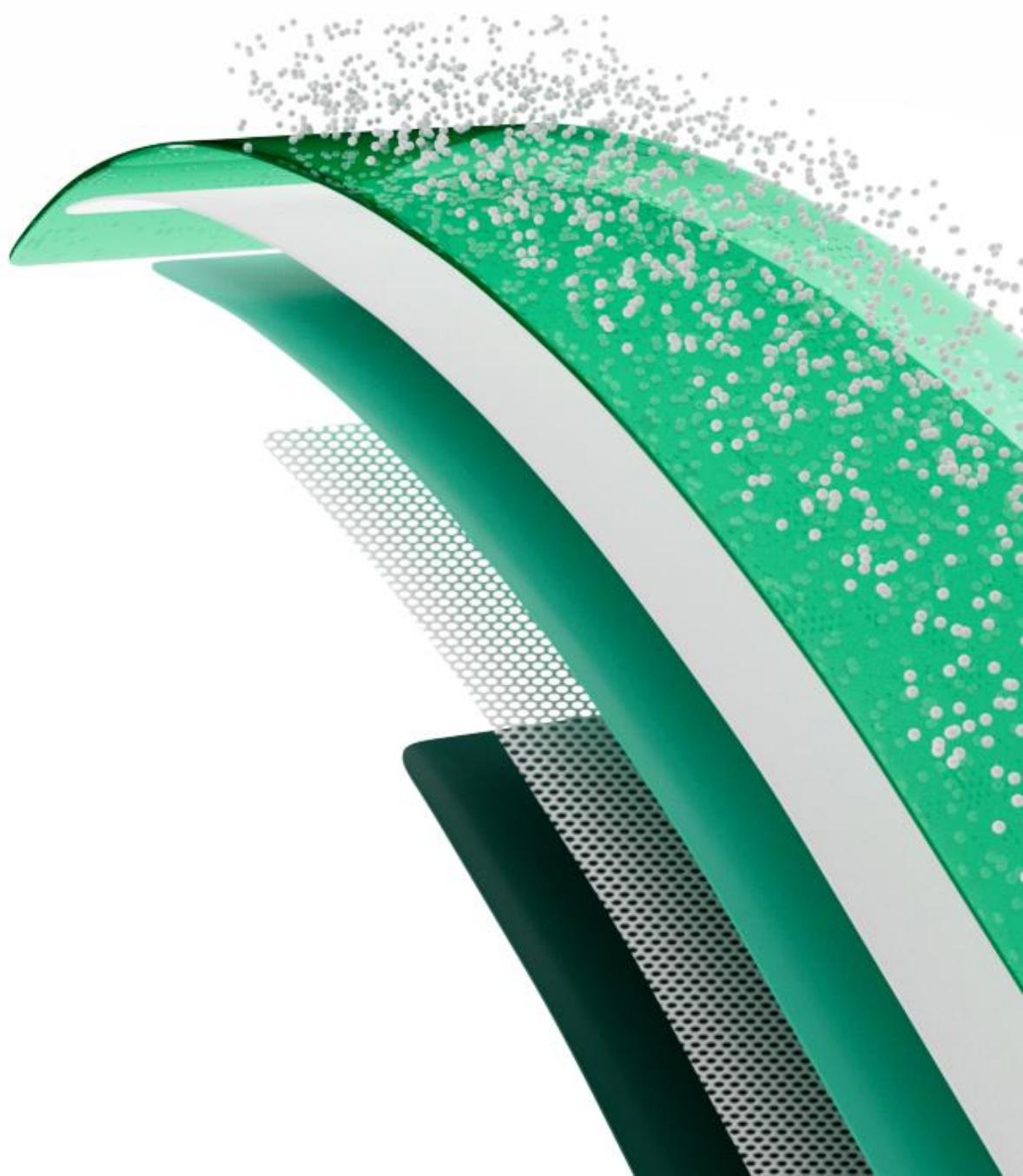


# All roads lead to OneLake

## Creating Data Gravity in OneLake



**DEMO:**  
OneCopy





Home

Home



Create



Browse



Data hub



Monitoring hub



Workspaces



Customer



LandingZone



RawTransactions



2021



2022



2023



Data

Engineering

Get data

New Power BI dataset

Open notebook

## Lakehouse explorer

## Contoso\_Lakehouse

## Tables

DIM\_Geography

DIM\_Product

DIM\_Supplier

TransportationRecords

## Files

Customer

LandingZone

## RawTransactions

2021

2022

2023

Search

Load data in your lakehouse



New Dataflow Gen2



New data pipeline

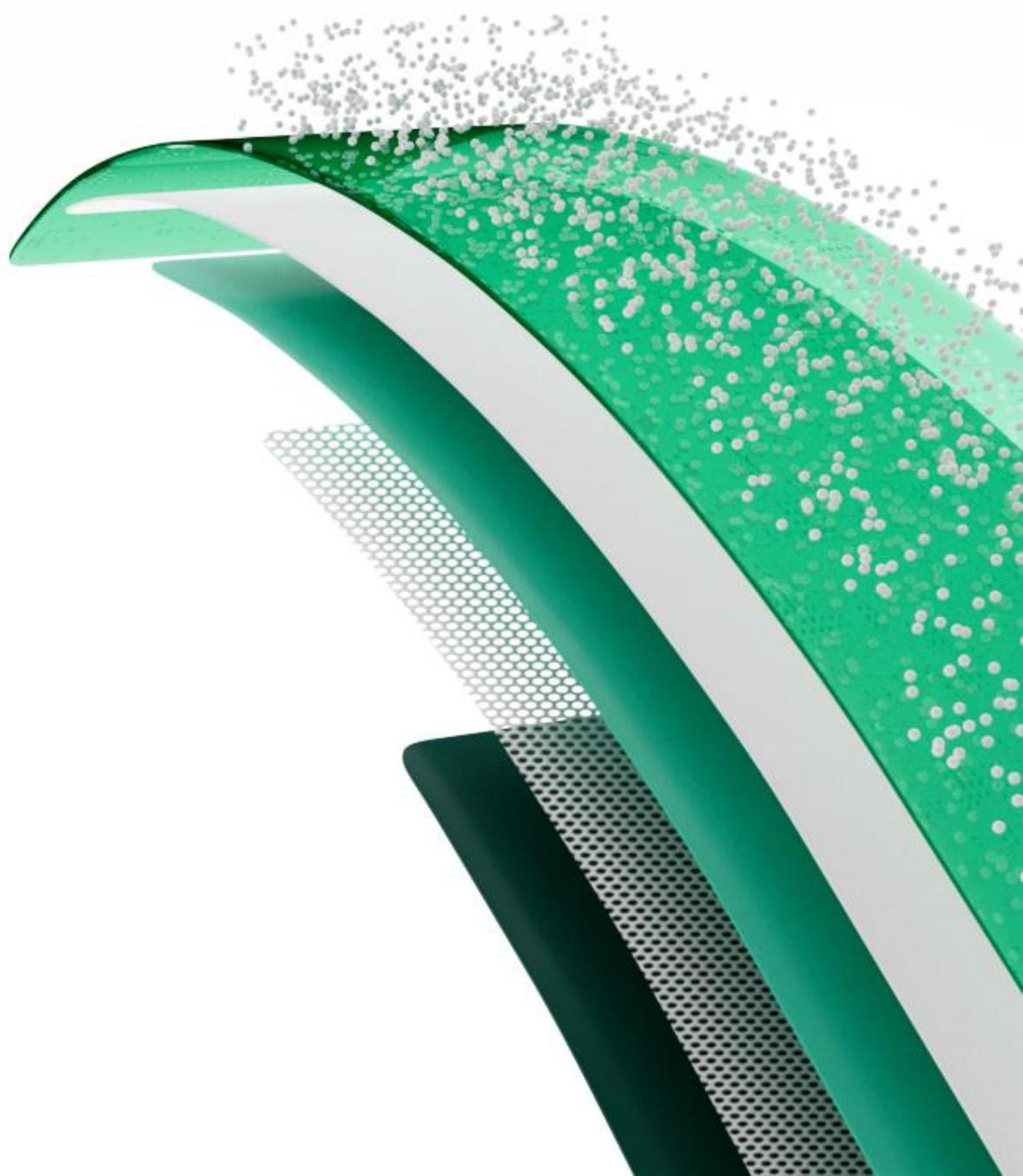


Open notebook



New shortcut

**DEMO:**  
OneCopy using the  
Lakehouse



## Home

Get data

## Explorer

- ✓ MSSalesLH
  - ✓ Tables
    - > DistributionChannel
    - > FiscalCalendar
    - > Geography
    - > ManagementReporting
    - > ProductMasterFamily
    - > ReportedSubsegmentDefinition
    - > Revenue
    - > RevSumHierarchy
    - > Segment
  - ✓ Files
    - > MSSalesRaw
    - > Revenue

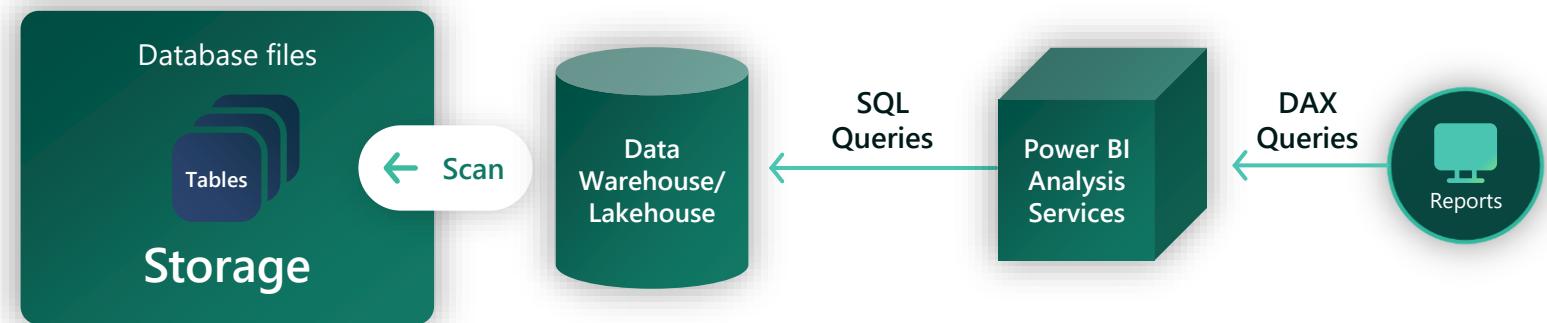
## Revenue

	FTxlatOrgId	CTxlatOrgId	TRCredited...	BillingCurr...	ProductId	DataSource...	Manageme...	RecordTyp...	BillingMon...	ActualQua...	ActualLice...	Secondary...	Legacy
1	3257564	128780890	1	15	2661545	982	4307622	3	10241	0	0	0	0
2	3257564	128780890	1	15	2661700	982	4307622	3	10241	0	0	0	0
3	3257564	128780890	1	15	10178506	982	4307622	3	10241	0	0	0	0
4	3257564	128780890	1	15	10224223	982	4307622	3	10241	0	0	0	0
5	3257564	128780890	1	15	2649901	982	4307622	3	10241	0	0	0	0
6	3257564	128780890	1	15	2650197	982	4307622	3	10241	0	0	0	0
7	3257564	128780890	1	15	10216572	982	4307622	3	10241	0	0	0	0
8	3257564	128780890	1	15	10216539	982	4307622	3	10241	0	0	0	0
9	3257564	128780890	1	15	2662213	982	4307622	3	10241	0	0	0	0
10	3257564	128780890	1	15	10216766	982	4307622	3	10241	0	0	0	0
11	3257564	128780890	1	15	2661343	982	4307622	3	10241	0	0	0	0
12	3257564	128780890	1	15	10216635	982	4307622	3	10241	0	0	0	0
13	3257564	128780890	1	15	10216552	982	4307622	3	10241	0	0	0	0
14	3257564	128780890	1	15	2661739	982	4307622	3	10241	0	0	0	0
15	3257564	128780890	1	15	2670046	982	4307622	3	10241	0	0	0	0

Lakehouse

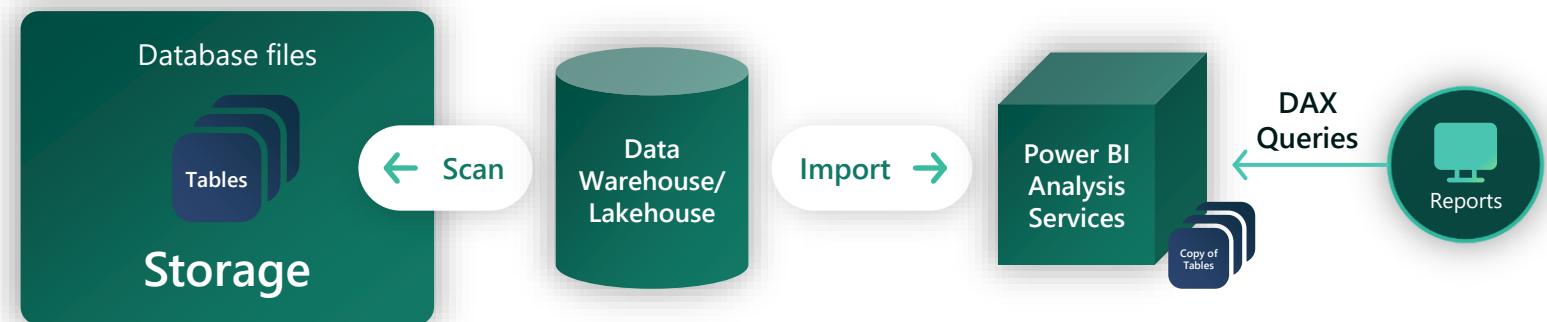
## “Direct Query Mode”

Slow, but real time



## “Import Mode”

Latent & duplicative but fast



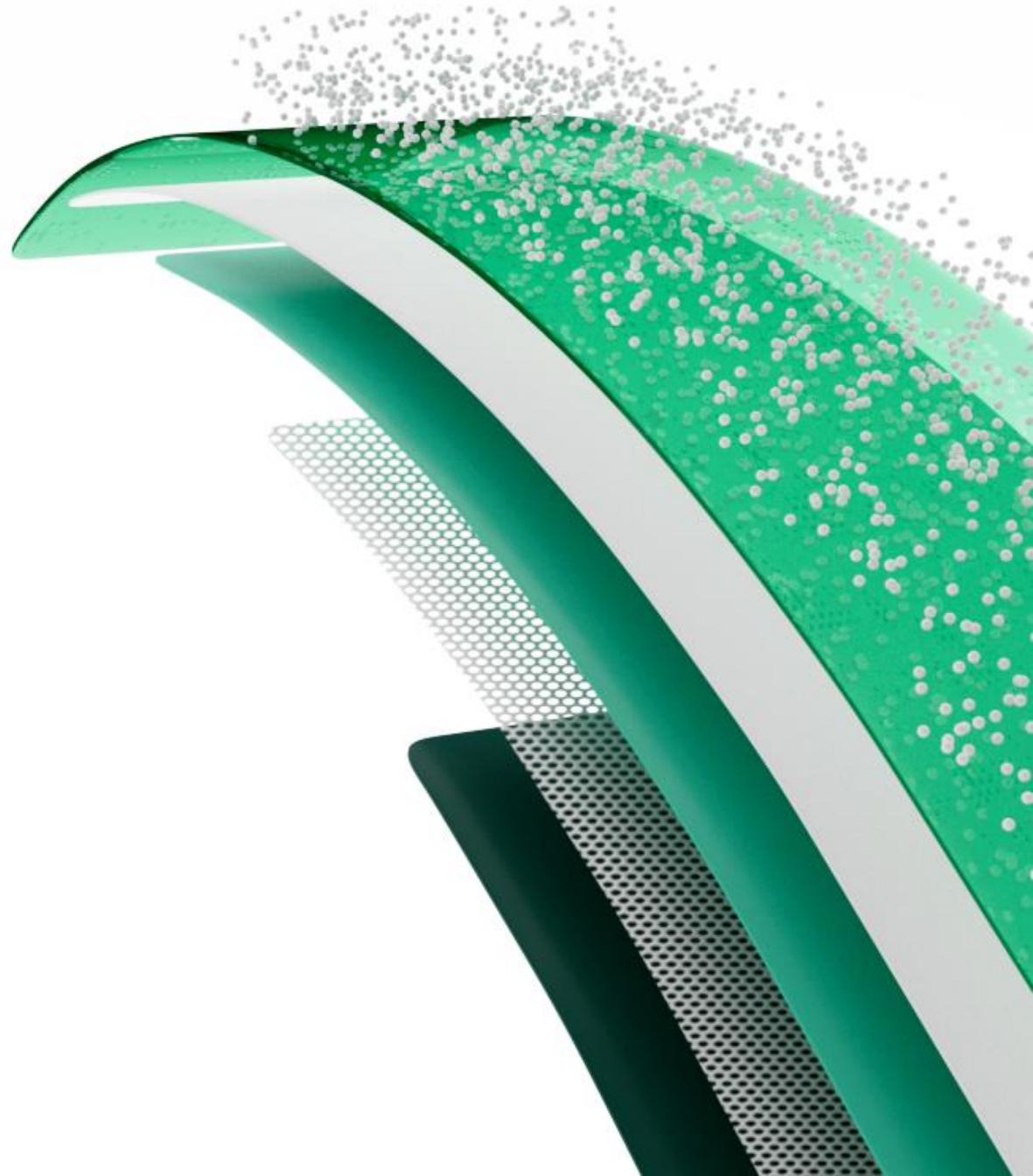
New

## “Direct Lake Mode”

Perfect!

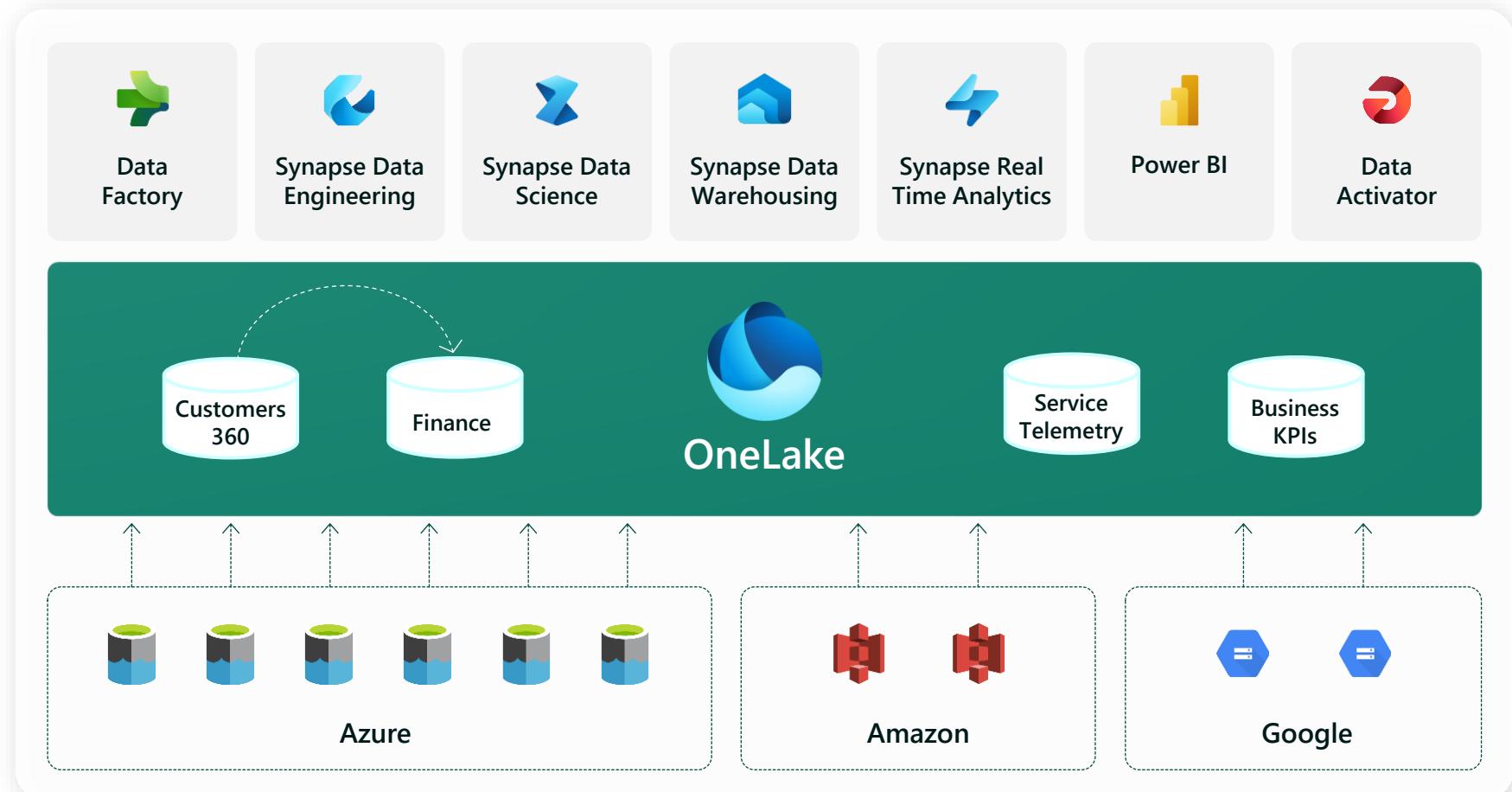


**DEMO:**  
OneCopy and Power BI  
with Direct Lake



# Taking One Copy to the Next Level

## Shortcuts



Sharing data in OneLake is as easy as sharing files in OneDrive, removing the needs for data duplication

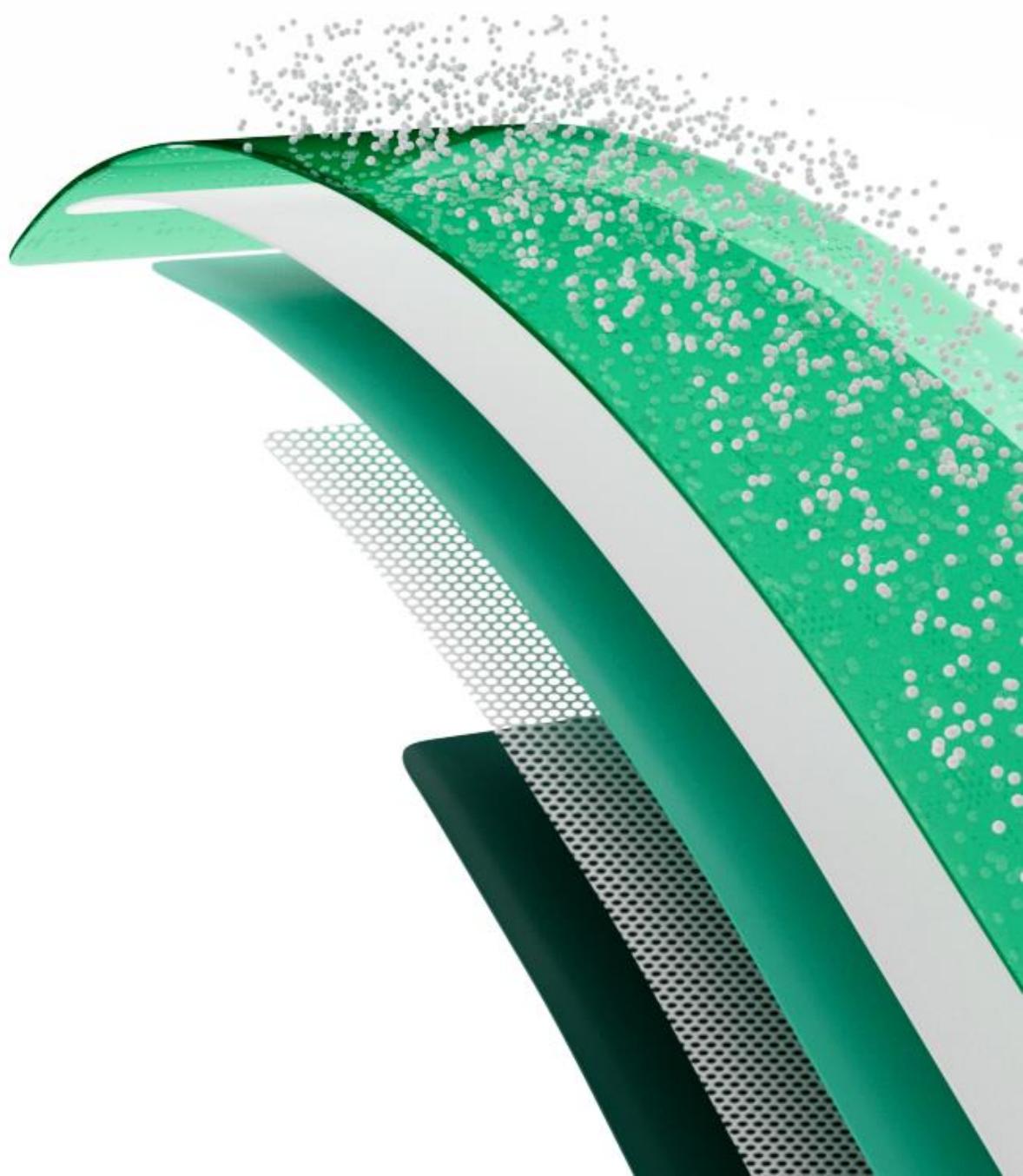
With **shortcuts**, data throughout OneLake can be composed together without any data movement

Shortcuts also allow instant linking of data already existing in Azure and in other clouds, without any data duplication and movement, making **OneLake the first multi-cloud data lake**

With support for industry standard APIs, OneLake data can be directly accessed by any application or service

# DEMO:

## OneLake Shortcuts





## Home

  Get data  New Power BI dataset  Open notebook

Lakehouse

## Explorer

## Marketing

## Tables

>  businessunit>  calendar>  campaign>  channel>  customer ...>  customercall>  geography>  product>  promotion>  vendor

## Files

## customer

Showing &lt;50&gt; rows

	FirstName	LastName	CompanyN...	Address	City	County	State	Zip	HomePhone	WorkPhone	Email
1	James	Smith	Benton, Joh...	6649 N Blu...	New Orleans	Orleans	LA	70116	504-621-89...	504-845-14...	jsmith@gm...
2	Josephine	Darakjy	Chanay, Jeff...	4 B Blue Ri...	Brighton	Livingston	MI	48116	810-292-93...	810-374-98...	josephine_d...
3	Art	Venere	Chemele, Ja...	8 W Cerrito...	Bridgeport	Gloucester	NJ	8014	856-636-87...	856-264-41...	art@venere...
4	Lenna	Paprocki	Feltz Printin...	639 Main St	Anchorage	Anchorage	AK	99501	907-385-44...	907-921-20...	lpaprocki@...
5	Donette	Foller	Printing Di...	34 Center St	Hamilton	Butler	OH	45011	513-570-18...	513-549-45...	donette.foll...
6	Simona	Morasca	Chapman, ...	3 Mcauley Dr	Ashland	Ashland	OH	44805	419-503-24...	419-800-67...	simona@m...
7	Mitsue	Tollner	Morlong As...	7 Eads St	Chicago	Cook	IL	60632	773-573-69...	773-924-85...	mitsue_toll...
8	Leota	Dilliard	Commercial...	7 W Jackso...	San Jose	Santa Clara	CA	95111	408-752-35...	408-813-11...	leota@hot...
9	Sage	Wieser	Truhlar And...	5 Boston Av...	Sioux Falls	Minnehaha	SD	57105	605-414-21...	605-794-48...	sage_wieser...
10	Kris	Marrier	King, Christ...	228 Runam...	Baltimore	Baltimore C...	MD	21224	410-655-87...	410-804-46...	kris@gmail....
11	Minna	Amigon	Dorl, James...	2371 Jerrol...	Kulpsville	Montgomery	PA	19443	215-874-12...	215-422-86...	minna_ami...
12	Abel	Maclead	Rangoni Of...	37275 St Rt...	Middle Island	Suffolk	NY	11953	631-335-34...	631-677-36...	amaclead@...
13	Kiley	Caldarera	Feiner Bros	25 E 75th St...	Los Angeles	Los Angeles	CA	90034	310-498-56...	310-254-30...	kiley.caldar...
14	Graciela	Ruta	Buckley Mill...	98 Connecti...	Chagrin Falls	Geauga	OH	44023	440-780-84...	440-579-77...	gruta@cox...
15	Cammy	Albares	Rousseaux, ...	56 E Moreh...	Laredo	Webb	TX	78045	956-537-61...	956-841-72...	calbares@g...

# OneLake for all data

“The OneDrive for data”

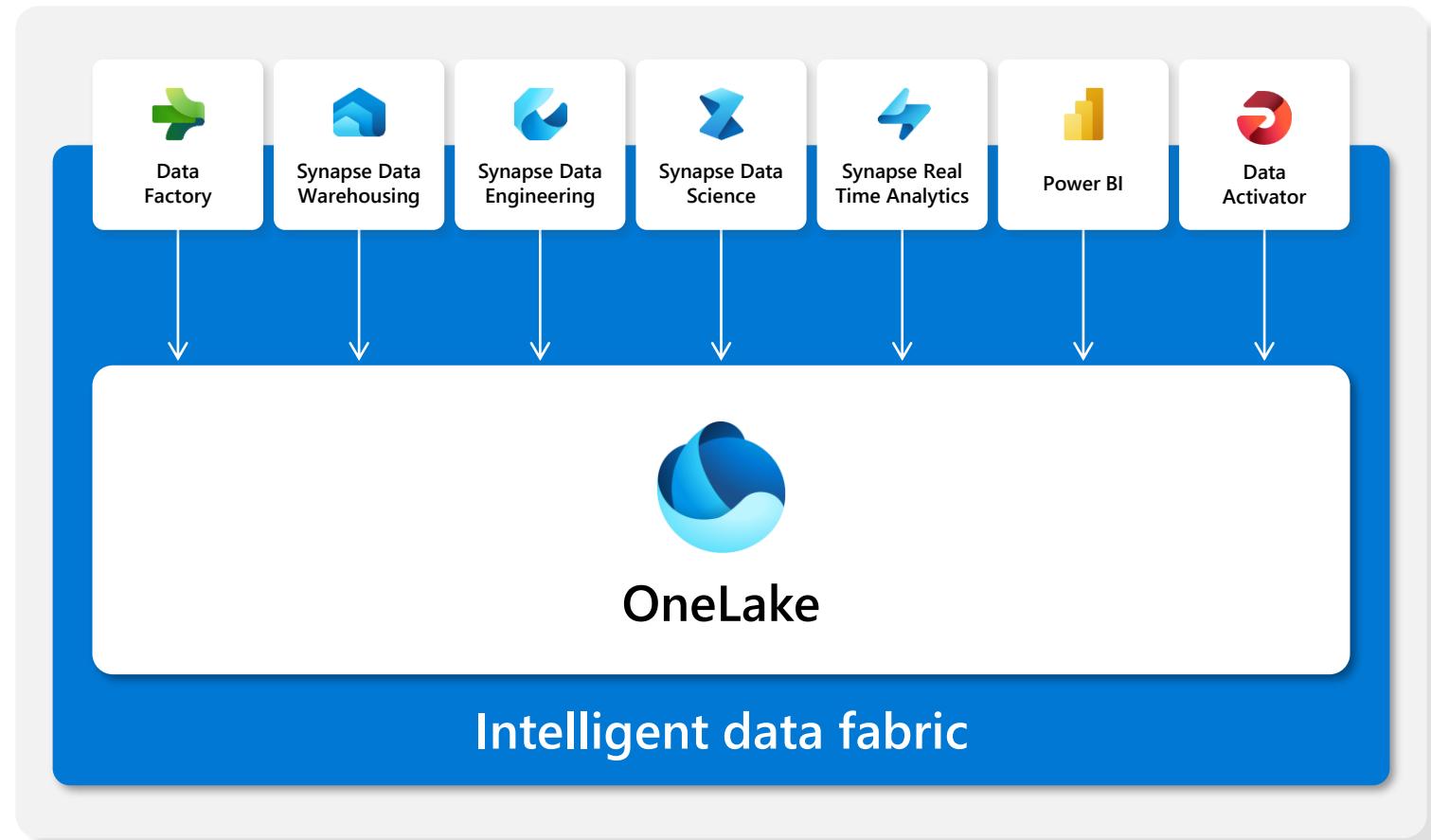
OneLake

One Copy

One Security

- Secure once and use anywhere

OneLake Data Hub



# OneLake Data Hub

Discover, manage and use data in one place

**Central location** within Fabric to discover, manage, and reuse data

Data can be easily discovered by its **domain** (e.g. Finance) so users can see what matters for them

Efficient data discovery using **search, filter and sort**

**Explorer** capability to easily browse and find data by its folder (workspace) hierarchy

Name	Type	Owner	Refreshed	Location	Endorsement	Sensitivity
Sales health	Dataset	Yaron Canari	1/22/23, 6:27:31 PM	BizHealth	Certified	Public
Product_Ninja	Dataset	Assaf Shemesh	4/20/23, 11:04:45 AM	BizHealth	Certified	Public
DemoLake	Lakehouse	Yaron Canari	-	My_Trident	Certified	Confidential\FTE
dwtesty1	Warehouse	Yaron Canari	-	My_Trident	-	-
dwtesty1	Dataset (default)	Yaron Canari	2/5/23, 10:22:32 AM	My_Trident	-	-
AssafLake	Lakehouse	Yaron Canari	-	My_Trident	Certified	Non-Business
KustoDB Io	KOL Database	Yaron Canari	-	Mv Trident	-	General

# OneLake Data Hub

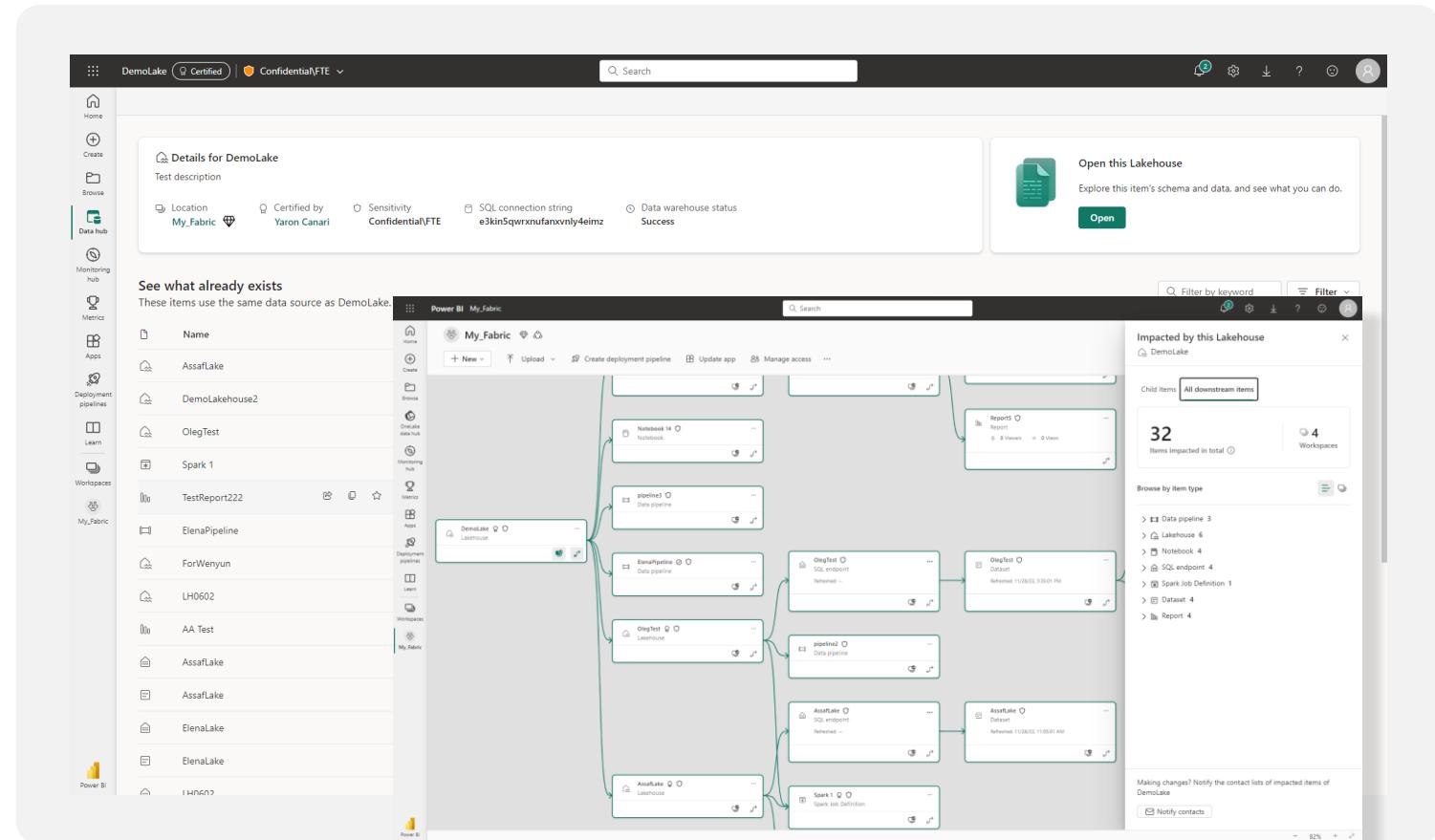
Deep dive into the details, explore and reuse related items

An item details page provides a deep-dive into a specific item with all metadata, including the item's **description, endorsement and sensitivity label**

To encourage data reuse, all **related items, both downstream and upstream** are easily accessible

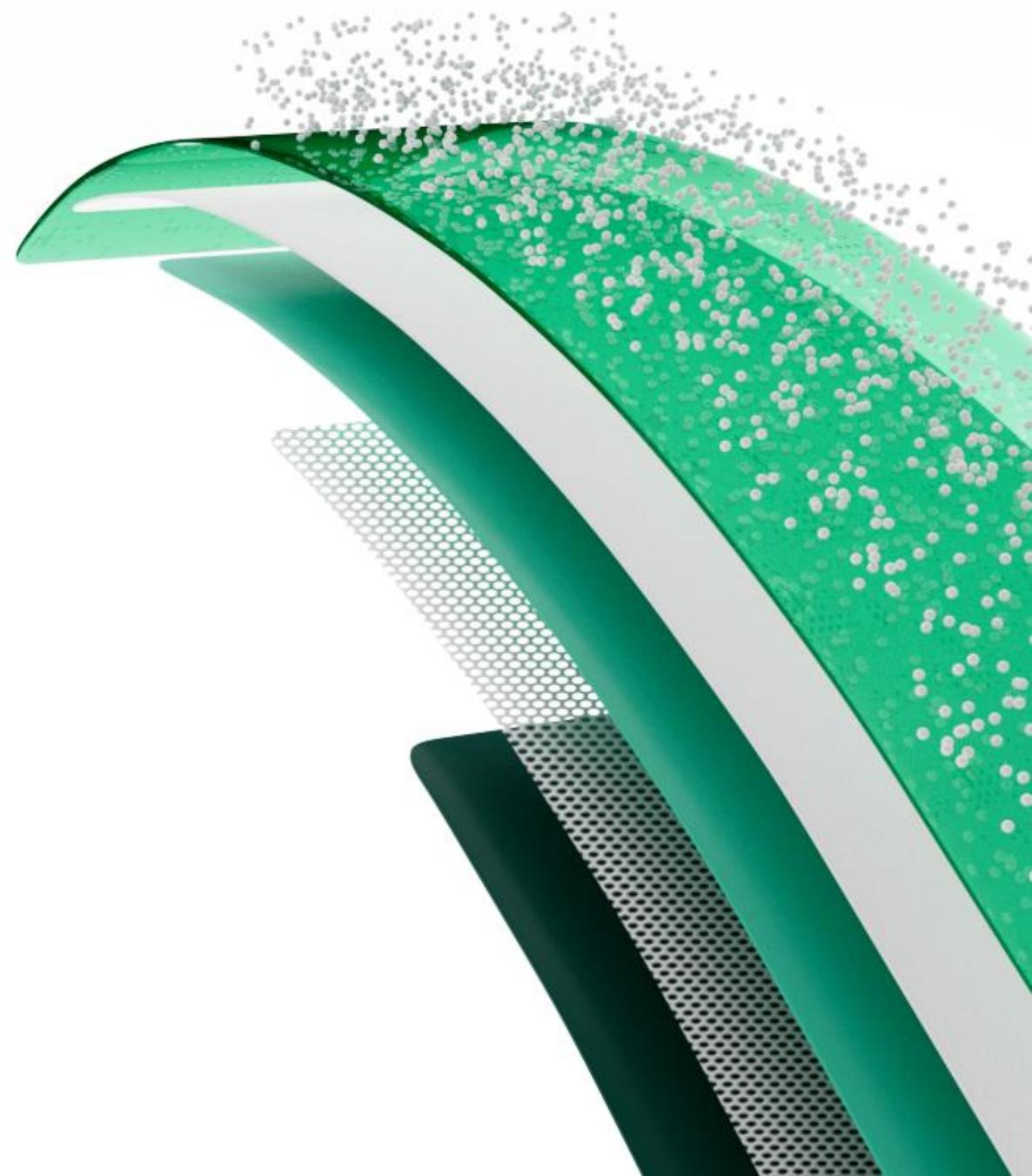
Actions such as **Data preview, Explore, Analyze in Excel, Create a report**, can be easily done, even by non-technical users.

Understand how **data flows** in Fabric. Explore **lineage** and perform **impact analysis** to assess potential impact of upcoming changes.



# **DEMO:**

## OneLake Data Hub



## OneLake data hub

Discover, manage, and use data from across your org. [Learn more about OneLake data hub](#)

All domains ▾

## Recommended

DemoLake ⓘ <span>Certified</span>	LHDemo1 ⓘ <span>Certified</span>	DemoLake2 ⓘ <span>Certified</span>	DemoLakehouse2 ⓘ <span>Certified</span>	DemoLake3 ⓘ <span>Certified</span>	KustoDB Io
Owner: Details ▾ ...	Owner: Yaron Canari Details ▾ ...	Owner: Details ▾ ...	Owner: Omer Sade Details ▾ ...	Owner: Yaron Canari Details ▾ ...	Owner: Details ▾

All

My data

Endorsed in your org

Filter by keyword

Filter ▾

## Explorer

- All
- My Workspace
- L\_impact\_analysis\_1
- ajk deployment 2
- Alexandr Gavrishev's w...
- Assafshemeshfsdfsdfsg...
- bbash
- BizHealth
- Boba Inventory
- CDS for Apps raw data

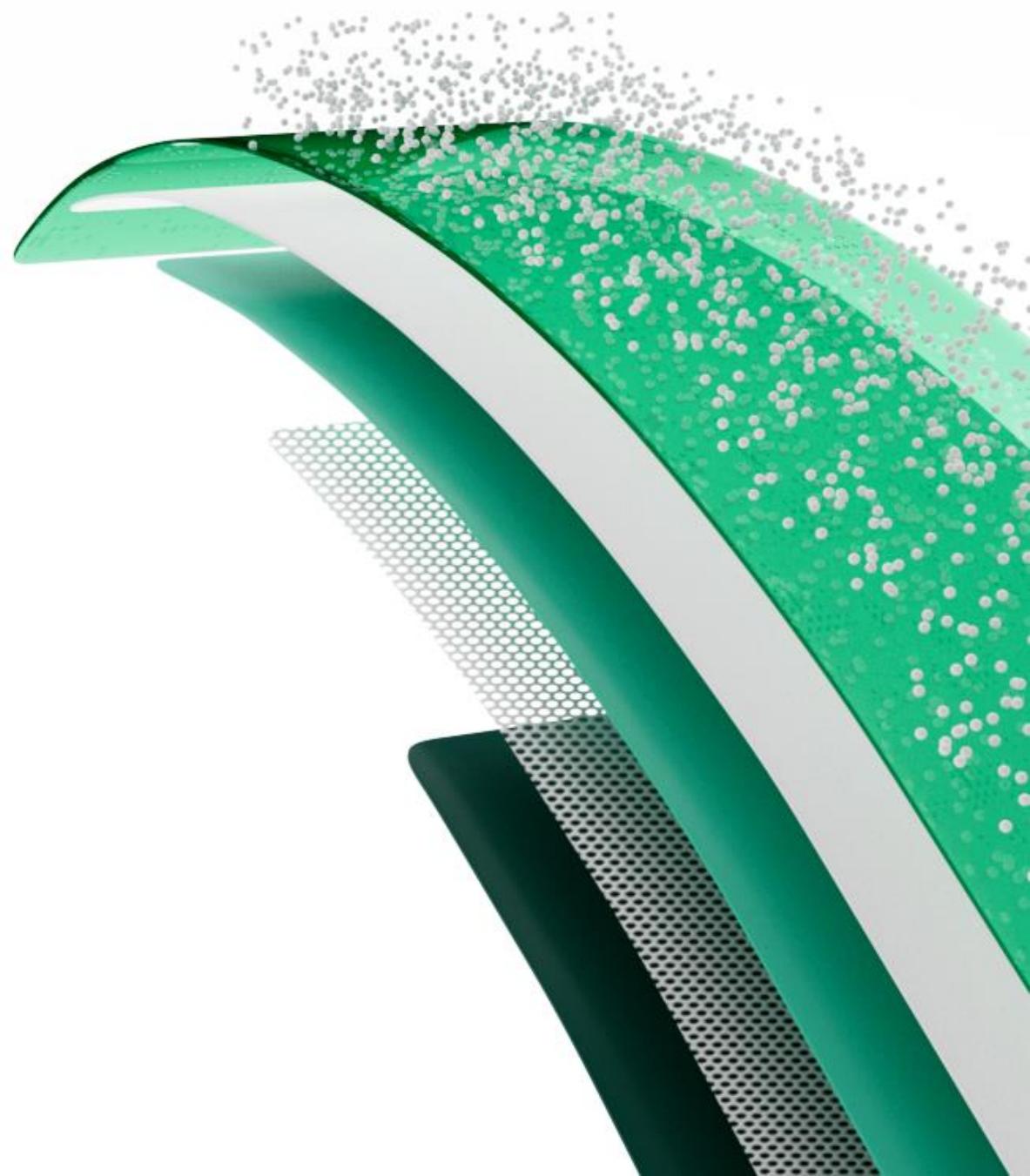
Name	Type	Owner	Refreshed	Location	Endorsement	Sensitivity
DemoLake ⓘ	Lakehouse	①	-	My_Fabric	<span>Certified</span>	Confidential\FTE ⓘ
Sales health ⓘ	Dataset	Yaron Canari	1/22/23, 6:27:31 PM ⚡	BizHealth	<span>Certified</span>	Public ⓘ
DemoLake3	Lakehouse	Yaron Canari	-	My_Fabric	-	General ⓘ
Account Revenue	Dataset	Yaron Canari	1/22/20, 9:32:08 AM	Yaron demo WS2	<span>Certified</span>	-
LHDemo1	Lakehouse	Yaron Canari	-	Yaron Demo WS1	<span>Certified</span>	Confidential\FTE ⓘ
DemoLake2 ⓘ	Lakehouse	①	-	My_Fabric	<span>Certified</span>	Non-Business ⓘ
DemoLakehouse2 ⓘ	Lakehouse	Omer Sade	-	Compact view	<span>Certified</span>	Highly Confidential... ⓘ

# 4

## Security Overview



# Fabric admin portal



## Admin portal

- Usage metrics
- Users
- Premium Per User
- Audit logs
- Domains (preview)
- Tenant settings**
- Capacity settings
  - Refresh summary
- Embed Codes
- Organizational visuals
- Azure connections
- Workspaces
- Custom branding
- Protection metrics
- Featured content

## Information protection

- Allow users to apply sensitivity labels for content

*Enabled for the entire organization*

With this setting enabled, Microsoft Purview Information Protection sensitivity labels published to users by your organization can be applied. All [prerequisite steps](#) must be completed before enabling this setting.

Note: Sensitivity label settings, such as encryption and content marking for files and emails, are not applied to content. [Learn More](#)

Visit the [Microsoft Purview compliance portal](#) to view sensitivity label settings for your organization.

Note: Sensitivity labels and protection are only applied to files exported to Excel, PowerPoint, or PDF files, that are controlled by "Export to Excel" and "Export reports as PowerPoint presentation or PDF documents" settings. All other export and sharing options do not support the application of sensitivity labels and protection.



Enabled

The setting below determines which users in the organization can apply and change sensitivity labels. All other users in the organization can only view the labels.

## Apply to:

- The entire organization
- Specific security groups
- Except specific security groups

Apply

Cancel

- Apply sensitivity labels from data sources to their data in Power BI

*Enabled for the entire organization*

- Automatically apply sensitivity labels to downstream content

*Enabled for the entire organization*

- Allow workspace admins to override automatically applied sensitivity labels

*Enabled for the entire organization*

- Restrict content with protected labels from being shared via link with everyone in your organization

*Disabled for the entire organization*

-  Home
-  Create
-  Browse
-  Data hub
-  Monitoring hub
-  Workspaces
-  Admin monitoring
-  Data Engineering

## Admin portal

[Usage metrics](#)[Users](#)[Premium Per User](#)[Audit logs](#)[Domains \(preview\)](#)[Tenant settings](#)[Capacity settings](#)[Refresh summary](#)[Embed Codes](#)[Organizational visuals](#)[Azure connections](#)[Workspaces](#)[Custom branding](#)[Protection metrics](#)[Featured content](#)[Power BI Premium](#)[Power BI Embedded](#)[Trial](#)[Fabric Capacity](#)

## PREMIUM CAPACITIES

CAPACITY NAME	CAPACITY ADMINS	ACTIONS	CAPACITY SKU	CAPACITY UNITS	REGION	STATUS
Fabric Cap1 EUS	Admin user		F4	4	East US 2 EUAP	Active
Fabric Cap2 EUS	Admin user		F2	2	East US 2 EUAP	Active



## Admin portal

[Usage metrics](#)[Users](#)[Premium Per User](#)[Audit logs](#)[Domains \(preview\)](#)[Tenant settings](#)[Capacity settings](#)[Refresh summary](#)[Embed Codes](#)[Organizational visuals](#)[Azure connections](#)[Workspaces](#)[Custom branding](#)[Protection metrics](#)[Featured content](#)

## Fabric capacity &gt; Fabric Cap2 EUS

## Fabric capacity

Fabric Capacity is a set of computing resources used for creating, publishing, and sharing Microsoft Fabric items. Fabric Capacities are purchased through Microsoft Azure services. [Learn more](#)

[Details](#) [Delegated tenant settings](#)

- ▷ Capacity usage report
- ▷ Notifications
- ▷ Contributor permissions  
*Disabled for the entire organization*
- ▷ Admin permissions
- ▷ Power BI workloads
- ▷ Preferred capacity for My workspace
- ▷ Data Engineering/Science Settings
- ▷ Workspaces assigned to this capacity

# Fabric preview setting

## Admin portal

- Usage metrics
- Users
- Premium Per User
- Audit logs
- Domains (preview)
- Tenant settings**
- Capacity settings
  - Refresh summary
  - Embed Codes
  - Organizational visuals
  - Azure connections
  - Workspaces
  - Custom branding
  - Protection metrics
  - Featured content

**Microsoft Fabric (Preview)**

⚠️ Users can create Fabric items (public preview)  
*Disabled for the entire organization*

Users can create Fabric items with new capabilities in Microsoft Fabric. This setting may also be managed at the capacity level. [Learn More](#)

💡 Microsoft has released the Fabric Public Preview in an Off state by default. If you don't make changes to this setting, Microsoft will change the state to On after July 1. If you decide to opt out before July 1, Fabric Preview will remain off until you turn it on.

Accept Microsoft's default selection (Off for the entire organization)

Disabled

Delegate setting to other admins

Capacity admins can enable/disable

**Apply** **Cancel**

## Admin portal

- Usage metrics
- Users
- Premium Per User
- Audit logs
- Domains (preview)
- Tenant settings
- Capacity settings**
- Refresh summary
- Embed Codes
- Organizational visuals
- Azure connections
- Workspaces
- Custom branding
- Protection metrics
- Featured content

## Power BI Premium > Cap2- Fabricdaily4

Details **Delegated tenant settings**

### Microsoft Fabric (Preview)

- ⚠️ Users can create Fabric items (public preview)  
*Disabled for all users in capacity*

Users can create Fabric items with new capabilities in Microsoft Fabric. This setting may also be managed at the capacity level. [Learn More](#)

Override tenant admin selection

Disabled

**Apply** **Cancel**

# Fabric preview setting

## Admin portal

- Usage metrics
- Users
- Premium Per User
- Audit logs
- Domains (preview)
- Tenant settings
- Capacity settings
  - Refresh summary
  - Embed Codes
  - Organizational visuals
  - Azure connections
  - Workspaces
  - Custom branding
  - Protection metrics
  - Featured content

### Microsoft Fabric (Preview)

- Users can create Fabric items (public preview)

*Enabled for a subset of the organization*

Users can create Fabric items with new capabilities in Microsoft Fabric. This setting may also be managed at the capacity level. [Learn More](#)

Enabled

#### Apply to:

- The entire organization
- Specific security groups

 DataScientist Group  Enter security groups

Except specific security groups

#### Delegate setting to other admins

Capacity admins can enable/disable

Apply

Cancel

## Admin portal

- Usage metrics
- Users
- Premium Per User
- Audit logs
- Domains (preview)
- Tenant settings
- Capacity settings
  - Refresh summary
  - Embed Codes
  - Organizational visuals
  - Azure connections
  - Workspaces
  - Custom branding
  - Protection metrics
  - Featured content

### Power BI Premium > Fabric Cap2 EUS

Details Delegated tenant settings

### Microsoft Fabric (Preview)

- Users can create Fabric items (public preview)

*Enabled for a subset of users in capacity*

Users can create Fabric items with new capabilities in Microsoft Fabric. This setting may also be managed at the capacity level. [Learn More](#)

Override tenant admin selection

Enabled

#### Apply to:

- All the users in capacity
- Specific security groups

 DataScientist Group  Enter security groups

Except specific security groups

Apply  Cancel

# Visual cues for new tenant settings

The screenshot shows the Microsoft Fabric Admin portal interface. On the left is a vertical navigation bar with icons for Home, Create, Browse, OneLake data hub, Monitoring hub, Metrics, Apps, Deployment pipelines, Learn, Workspaces, and My workspace. The main content area has a header "Admin portal" and a search bar. A top-level navigation bar includes "Microsoft Fabric", a notification icon with '1', a gear icon, a download icon, a question mark icon, a smiley face icon, and a user profile icon.

**Tenant settings (New)**

- Usage metrics
- Users
- Premium Per User
- Audit logs
- Domains (preview)
- Capacity settings
  - Refresh summary
- Embed Codes
- Organizational visuals
- Azure connections
- Workspaces
- Custom branding
- Protection metrics
- Featured content
- Microsoft Purview setting

There are new or updated tenant settings. Expand to review the changes.

- Users can create Fabric items (public preview)**
- Users can work with content that doesn't comply with security requirements**
- Allow 3rd Party access to OneLake APIs**
- Users can sync data in OneLake with the OneLake File Explorer app**

**Microsoft Fabric (Preview)**

- Users can create Fabric items (public preview) **New**  
*Disabled for the entire organization*

**Help and support settings**

- Publish "Get Help" information  
*Disabled for the entire organization*
- Receive email notifications for service outages or incidents  
*Disabled for the entire organization*
- Users can try Microsoft Fabric paid features  
*Enabled for the entire organization*
- Show a custom message before publishing reports  
*Disabled for the entire organization*

**Workspace settings**

- Create workspaces (new workspace experience)  
*Enabled for the entire organization*
- Use datasets across workspaces  
*Enabled for the entire organization*

# Admin monitoring

- A dedicated workspace containing data & insights for Fabric admins for effective governance
- Plan capacity scale-up with confidence

The screenshot displays the 'Power BI Admin monitoring' workspace. On the left, a navigation menu includes Home, Create, Browse, Data hub, Monitoring hub, Metrics, Apps, Deployment pipelines, Learn, Workspaces, and Admin monitoring (which is selected). The main area shows a list of reports and datasets, and a detailed view of Premium Capacity Usage and Resource Utilization.

**Admin monitoring**

Manage access | Workspace settings

Name	Type	Owner	Refreshed
Feature Usage and Adoption	Report	Admin monitoring	4/23/23, 1:52:05 AM
Feature Usage and Adoption	Dataset	Admin Monitoring	4/23/23, 1:52:05 AM
Purview Hub	Report	Admin monitoring	4/23/23, 10:01:08 AM
Purview Hub	Dataset	Admin Monitoring	4/23/23, 10:01:08 AM

**Premium Capacity Usage and Resource Utilization**

Overview (Preview) Help

Capacity Name: PBI\_PlanningAndAnalytics

CU Duration Operations Users

By date: Dataflow, Dataset, Lakehouse, SynapseNotebook

CU %

Linear Logarithmic

Background % Interactive % Background Preview % Interactive Preview % Autoscale CU % Limit CU % Limit

CU %

0% 50% 100%

Fri 24 Sat 25 Sun 26 Mon 27 Tue 28 Wed 29 Thu 30

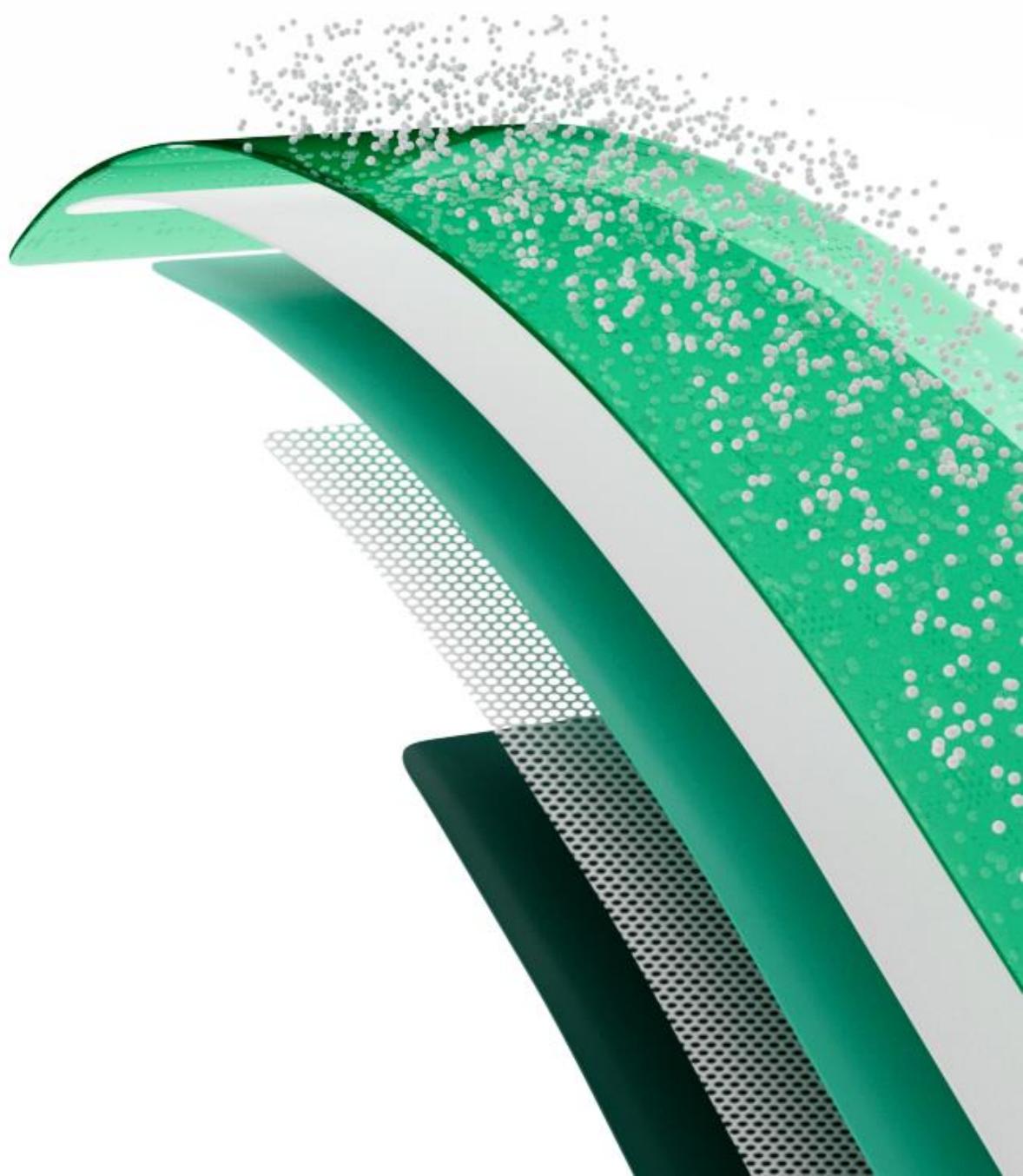
Select a field to obtain more details Explore

**Items (7 days)**

Item	CU(s)	Duration (s)	Users	Item Size (GB)	Overloaded minutes	Performance delta	Preview Status
Power BI Lifecycle Dataset \ Dataset \ Power BI Lifecycle Dataset	12872570.80	144557.26	83	31.69	10.00	33	False
Trident Lifecycle [Beta] \ Dataset \ IP Analytics	7617686.21	220349.53	63	1.23	0.50		False
Dataset Scheduled Refresh	5525550.61	194964.48	2				False
Data Loss Prevention Scan	1438728.37	226.37	1				False
Query	474425.46	19444.64	55				False
Dataset On-Demand Refresh	164048.78	5509.02	1				False
XMLA Read Operation	14932.99	184.63	14				False
IP Lifecycle \ Dataset \ IP Analytics	7095461.23	85539.05	37	24.09			False
.NBS_NotebookNameNotSpecified \ SynapseNotebook \ trident ipanalytics-prod01	4915535.88	230912.68	1				True
Notebook Pipeline Run	4881926.72	22811.94	1				True
Notebook Run	33609.16	2800.74	1				True
createSession							True
<b>Total</b>	<b>35413762.28</b>	<b>868983.11</b>	<b>83</b>				<b>False</b>

# **DEMO:**

## Admin monitoring



## Admin monitoring ⋮

Admin monitoring

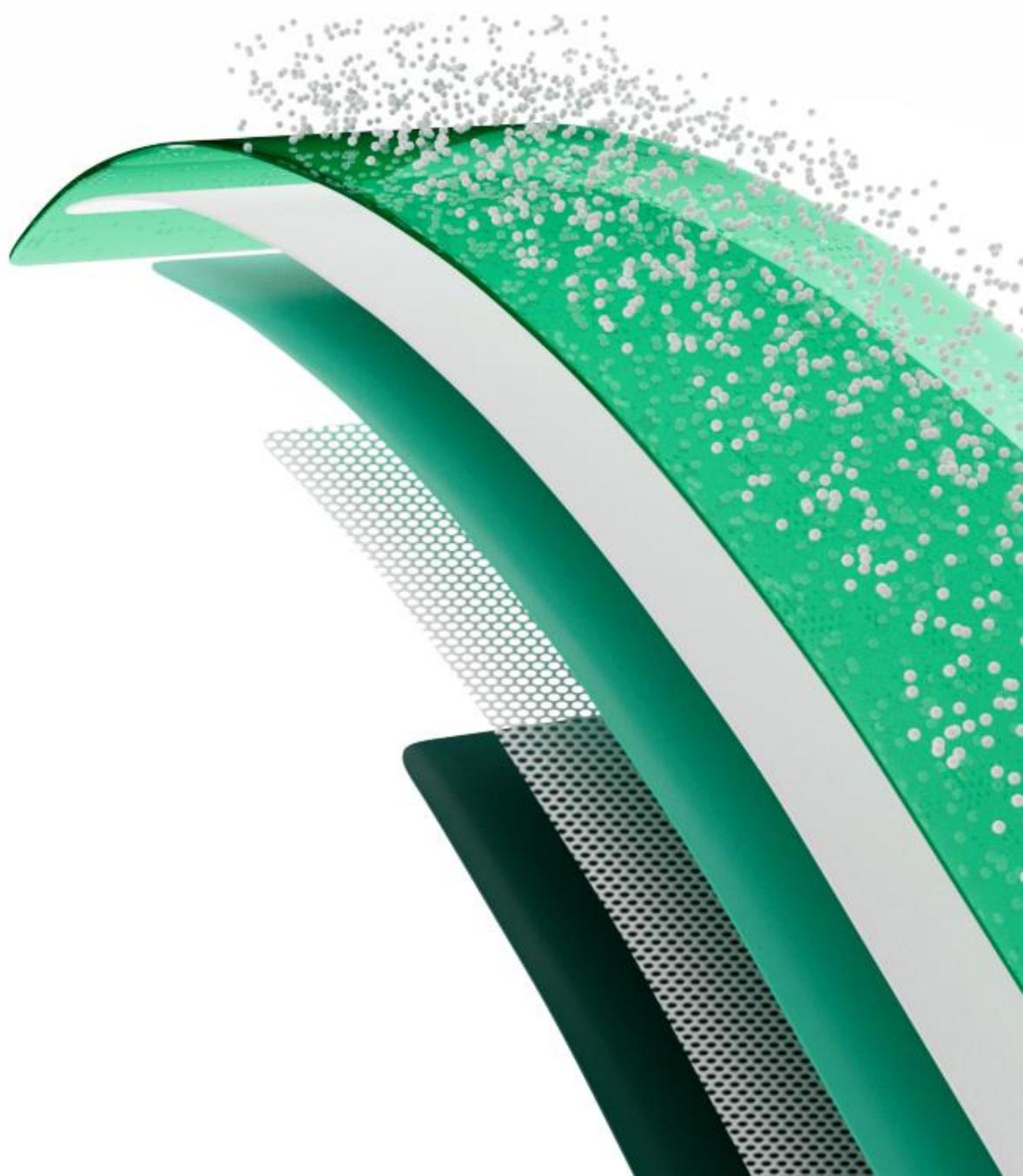
 Manage access  Workspace settings

X Filter ⋮

	Name	Type	Owner	Refreshed	Next refresh	Endorsement	Sensitivity
	Feature Usage and Adoption	Report	Admin monitoring	4/25/23, 1:40:32 AM	—	—	—
	Feature Usage and Adoption	Dataset	Admin Monitoring	4/25/23, 1:40:32 AM	4/26/23, 1:40:00 AM	—	—

# DEMO:

## Capacity insights



File Export Chat in Teams Get insights Subscribe to report ...


## Fabric Capacity Metrics

Gen 2 App Preview Report\_...

Gen 2 App Preview Report\_V...

## Premium Capacity Usage and Resource Utilization

Overview (Preview) Help

Capacity Name

Trident 01 Azure Data Insights

Pick a capacity to review in the Capacity Name picker. All visuals on the page will refresh each time a capacity is picked. Your selection will apply to other pages as well. Learn how to use this page by clicking the "info" button.

CU

Duration

Operations

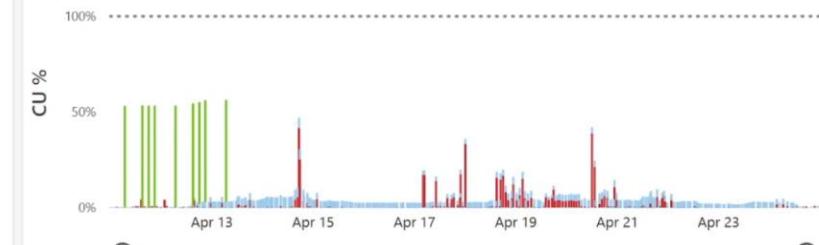
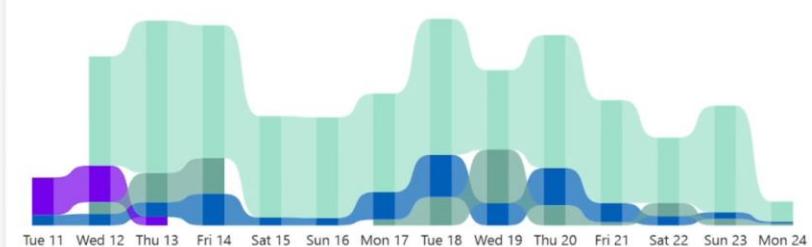
Users

Linear

Logarithmic

Background % Interactive % Background Preview % Interactive Preview % Autoscale CU % Limit CU % Limit

## By date

Dataflow Datamart Dataset Datawareh... KustoData... Lakehouse MLExperiment... MLModel SynapseN...


Select a field to obtain more details

Explore

< Dataset Datawarehouse KustoDatabase Lakehouse MLExperiment MLModel SynapseNotebook

## Items (14 days)

Item

CU(s) Duration (s) Users Item Size (GB) Overloaded minutes Performance delta Preview Status

<span>...</span> _NBS_NotebookNameNotSpecified \ SynapseNotebook \ trident ipanalytics-prod01	5630788.36	478941.48	2			True
Notebook Pipeline Run	5588503.50	474554.95	1			True
Notebook Run	42284.85	4386.53	1			True
<span>...</span> Azure Data Insights DL \ Dataset \ trident ipanalytics-prod01	563989.50	22268.32	6	22.91	-11	False
<span>...</span> PBI Customer Capacity Utilization \ Dataset \ Power BI	515369.14	16204.99	11	2.01	2	False
<span>...</span> _NBS_NotebookNameNotSpecified \ SynapseNotebook \ IP Analytics Trident Dogfood	369393.09	32047.11	1			True
<span>...</span> Test Performance \ SynapseNotebook \ TestNewWS	225300.21	18774.87	1			True
<span>...</span> OKR \ Lakehouse \ OKR E2E Testing	224065.53	129491.54	2			True
Lakehouse Operations	224060.41	18671.54	1			True
OneLake Compute	5.13	110820.00	1			True
<span>...</span> test_ds_lh \ Lakehouse \ IP Analytics Trident Dogfood	205582.93	631618.50	2			True
<span>...</span> Dataprod \ Lakehouse \ trident ipanalytics-prod01	153607.92	1180585.53	2			True
Lakehouse Operations	150787.62	12565.53	2			True
Total	9877812.58	12274375....	11			False

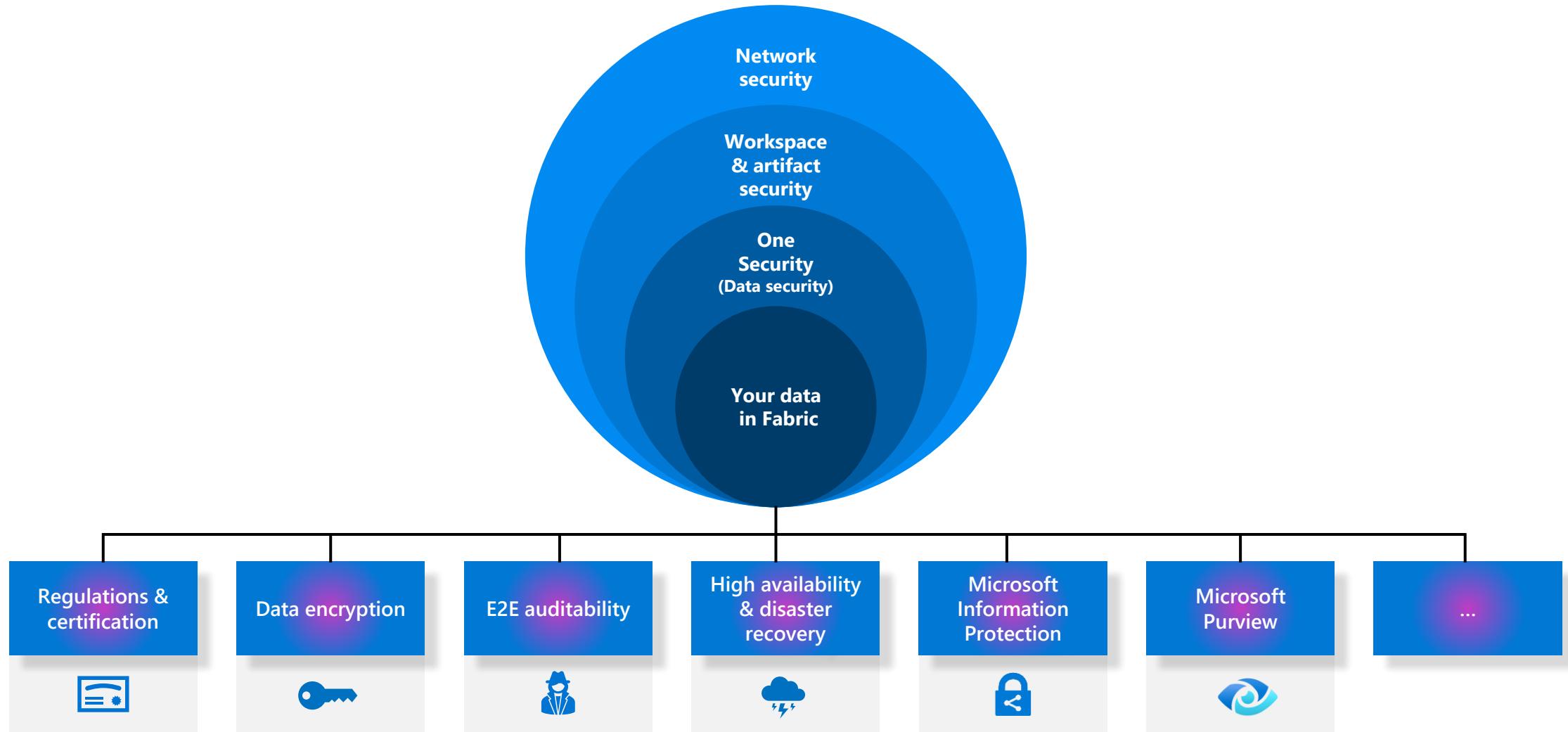
← Go back

# 5

## Governance Overview

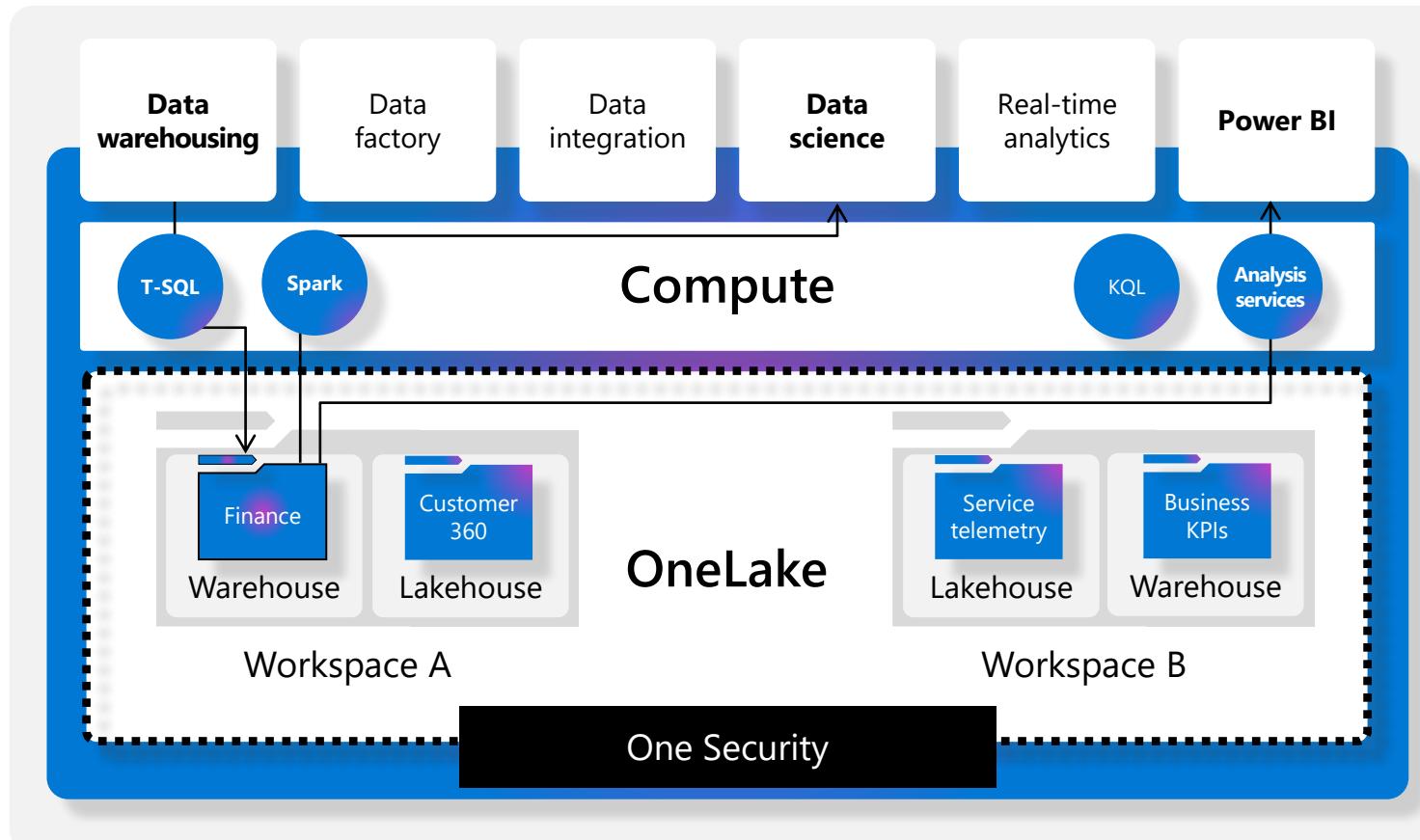


# Security, governance & reliability in Fabric – vision



# One Security (roadmap)

Secure once and use anywhere



One Security, a shared universal security model defined in OneLake alongside the data providing the necessary security capabilities so that data does not need to be copied into another place to be secured.

---

More granular security can be defined once in OneLake. This includes column level security, row level security, data masking, etc.

---

Security definitions will flow across all shortcuts and will be enforced in all engines including non-Fabric engines.

# Fabric workspace roles and artifact-level permissions

The screenshot displays two side-by-side views of the Microsoft Fabric platform interface.

**Left View: Access Panel**

- Section:** Access
- Team:** Sales and Marketing
- Add admins, members, or contributors:** Bianca Pisani (selected)
- Role Selection:** Member (selected), Admin, Member, Contributor (highlighted in blue), Viewer
- Table:** Shows users and their roles:

Name	Permission	...
Megan Bowen	Admin	...
MOD Administrator	Admin	...
Sales and Marketing	Member	...
- Buttons:** Close

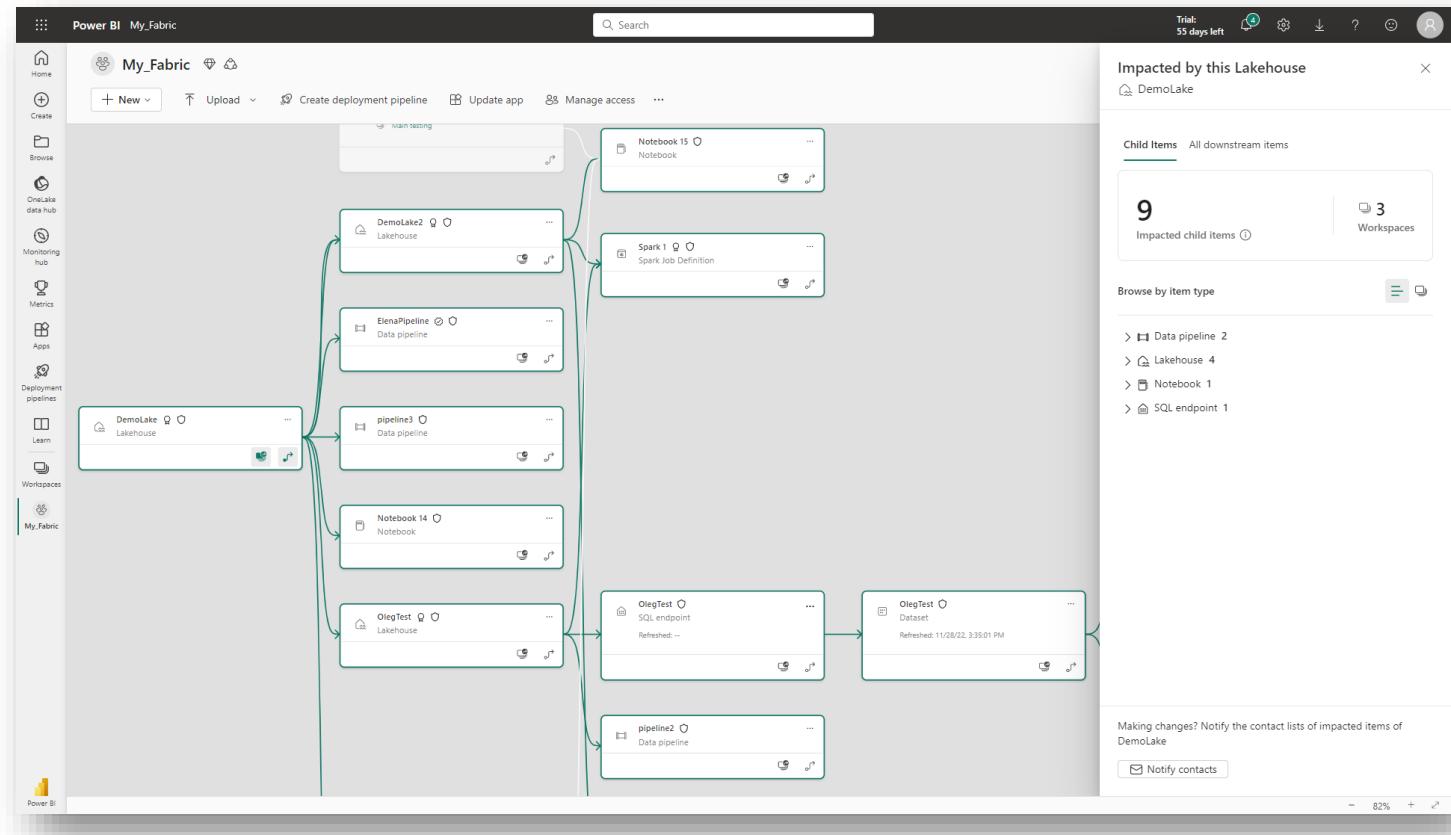
**Right View: Synapse Data Engineering - Notebook 1**

- Section:** Notebooks
- Title:** Notebook 1
- Add User:** + Add user
- Access Type:** Direct access (selected)
- Table:** Shows people and groups with access, their email addresses, roles, and permissions:

People and groups with access	Email Address	Role	Permissions
OneLakeCAtest	OneLakeCAtest@onelake.cscctp.net	Workspace Admin	Read, Write, Reshare, Execute
CaTestUser@onelake.cscctp.net	CaTestUser@onelake.cscctp.net		Read, Write, Execute
- Navigation:** Home, Create, Browse, Data hub, Monitoring hub, Workspaces, DemoWorks pace, Notebook 1

# Data Lineage and impact analysis

- See lineage view of complex analytical projects
- Understand how the data flows from the source to the destination through all Fabric items, including lakehouses, data warehouses, pipelines, datasets and reports.
- Troubleshoot data refresh issues while tracing the data back from the destination to the source and monitor refresh status.
- Gain trust in your data while understanding the source of the data.
- Perform impact analysis to assess impact for upcoming changes.



# Metadata scanning via API

- Fabric's Scanner APIs enables effective scanning of Fabric's tenant metadata and lineage, including item's name, owner, sensitivity label, endorsement, data source, etc.
- Robust enterprise capabilities like authentication with service principal, incremental scans
- Supports 1st and 3rd party catalog tools integration

Microsoft Purview  
Data Catalog



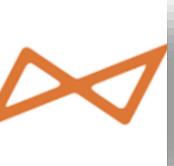
Informatica



Collibra



Alation



## Sample Response

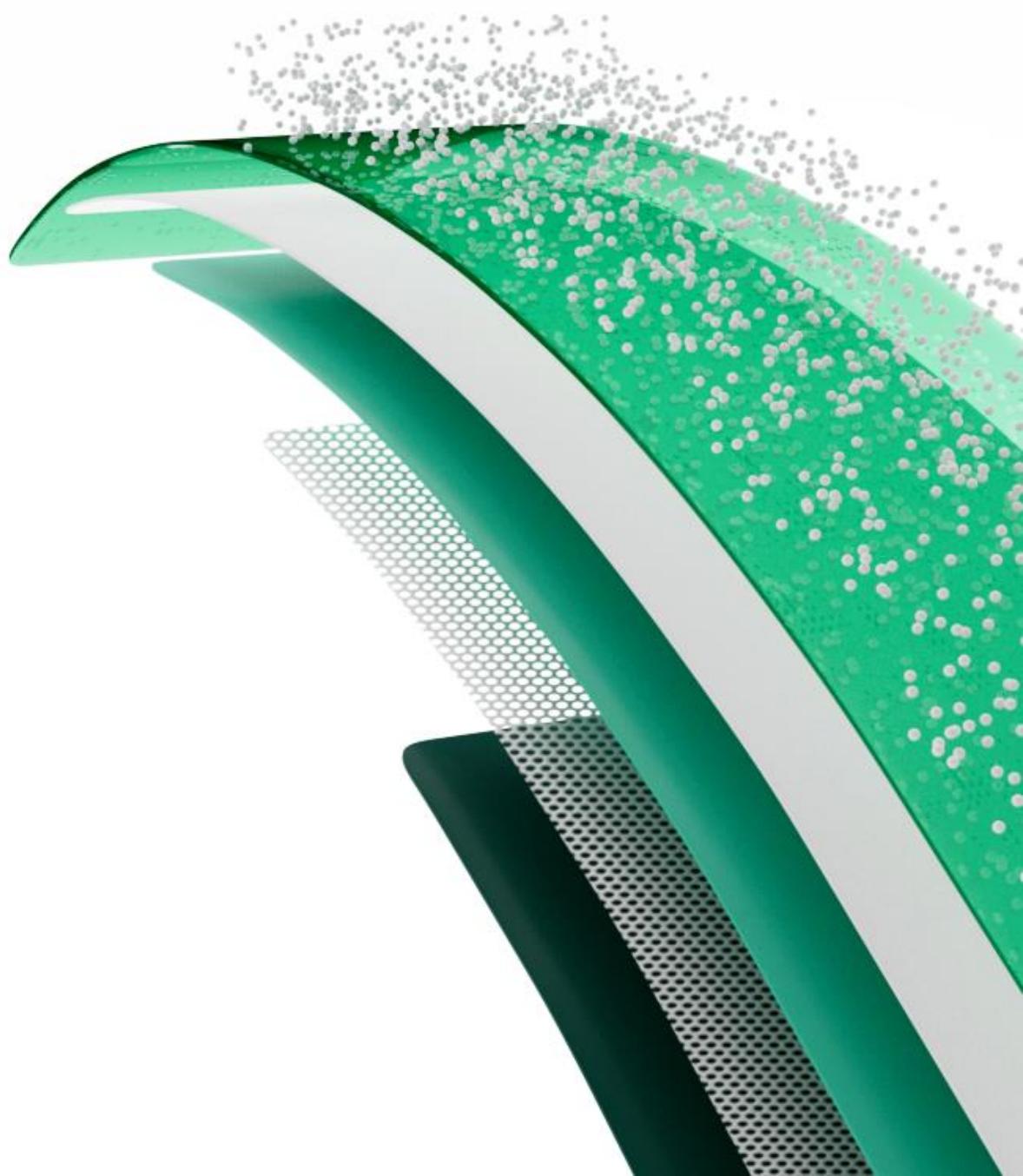
Status code: 200

JSON

```
{  
  "workspaces": [  
    {  
      "id": "d507422c-8d6d-4361-ac7a-30074a8cd0a1",  
      "name": "V2 shared",  
      "type": "Workspace",  
      "state": "Active",  
      "isOnDedicatedCapacity": false,  
      "reports": [  
        {  
          "id": "c6d072d1-ed20-4b60-8329-16c4b934203b",  
          "name": "CompositeModelParams-RLS",  
          "datasetId": "132593c4-bf8d-4548-8f25-1ebb16a1613c",  
          "createdDateTime": "2020-06-16T08:22:49.14",  
          "modifiedDateTime": "2020-06-16T08:22:49.14",  
          "modifiedBy": "john@contoso.com",  
          "reportType": "PaginatedReport",  
          "endorsementDetails": {  
            "endorsement": "Certified",  
            "certifiedBy": "john@contoso.com"  
          },  
          "sensitivityLabel": {  
            "labelId": "85b38049-4259-43a2-8feb-244e222d96c0"  
          },  
          "users": [  
            {  
              "displayName": "John Nick",  
              "emailAddress": "john@contoso.com",  
              "appUserAccessRight": "ReadExplore",  
              "identifier": "john@contoso.com",  
              "graphId": "3fadbe4-130c-4a8f-aeac-416e38b66756",  
              "principalType": "User"  
            }  
          ]  
        }  
      ],  
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              "title": "CompositeModelParamsDashboard",  
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            }  
          ],  
          "sensitivityLabel": {  
            "labelId": "85b38049-4259-43a2-8feb-244e222d96c0"  
          }  
        }  
      ]  
    }  
  ]  
}
```

Copy

# Fabric with Microsoft Purview



# Microsoft Purview

Comprehensive  
solutions to help  
govern, protect,  
and manage your  
data estate.

# Purview Data Map

- Purview automatically provisioned and attached to Fabric.
- Enables discovery of data assets across your landscape (multi-cloud, on-prem, SaaS) including Fabric starting with Power BI artifacts.
- Expansion to the full set of Fabric's analytics artifacts in the upcoming months

The screenshot shows the Microsoft Purview Data Map interface. The left sidebar has a 'Data Map' section expanded, showing 'Collections', 'Metamodel', 'Asset types', 'Source management', and 'Sources'. Under 'Sources', there are links for 'Scan rule sets', 'Pattern rules', 'Integration runtimes', 'Credentials', and 'Lineage connections'. Below these are sections for 'Apps' and 'Related' features like 'Data Estate Insights' and 'Data Catalog'. The main content area is titled 'Sources' and displays a list of data sources categorized by platform and source type. A search bar at the top allows filtering by 'Collection : All', 'Platform : All', and 'Source type : All'. The list includes:

- Contoso Tenant**: Tenant entry with a 'View details' button.
- ContosoAnalytics**: Fabric tenant entry with a 'View details' button.
- Contoso Azure tenant**: Azure tenant entry with a 'View details' button.
- Finance Collection**: Collection entry with a 'View details' button.
- Manufact Collection**: Collection entry with a 'View details' button.
- Financials**: Amazon S3 Bucket entry with a 'View details' button.
- Customer**: Azure SQL Database entry with a 'View details' button.
- ADB-Finance**: Azure Databricks entry with a 'View details' button.
- FY22-Full**: SAP ECC entry with a 'View details' button.
- Sup Dyn**: Dynamics entry with a 'View details' button.
- Oracle**: Oracle entry with a 'View details' button.

# Purview Data Catalog

- Browse & search assets across your hybrid data estate including Fabric starting with Power BI artifacts
- Connect Fabric artifacts with business, operational & location context
- Other capabilities, including Data Estate Insights, will start lighting up with the announcement and continue after

The screenshot shows the Microsoft Purview Data Catalog interface. On the left, there's a sidebar with navigation links like Home, Data Catalog, Overview, Browse (with a dropdown for 'By source type'), All apps, Related (Data Estate Insights, Data Classification, Data Map), and Properties, Lineage, Contacts, History.

The main content area displays a 'Customer' asset. It has a yellow bar chart icon and labels 'Customer' (Confidential, Certified), 'Power BI Report', and two tabs: 'CustomerReport' and 'FinanceReport'. Below this are buttons for 'Request access' and 'Refresh'.

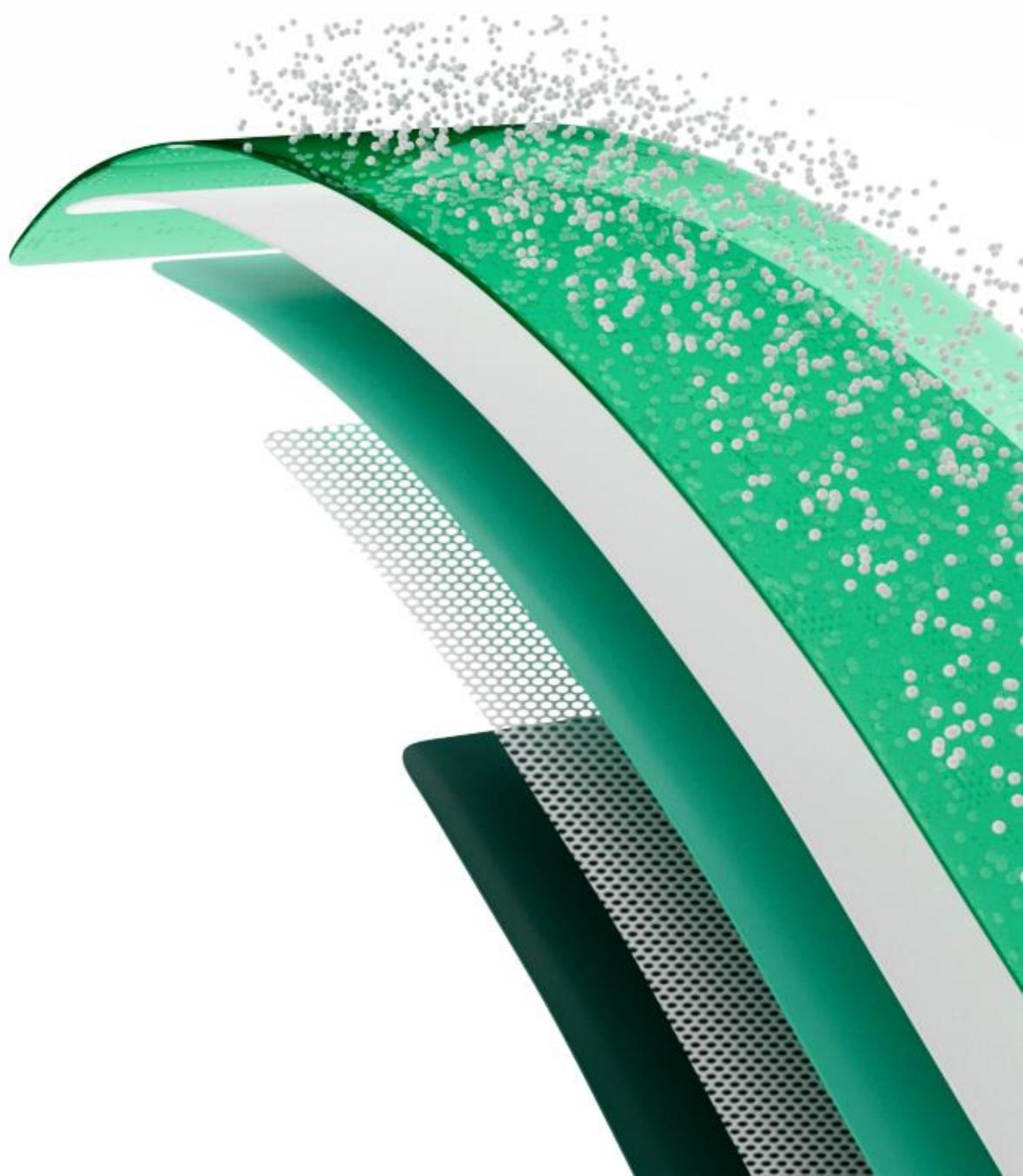
On the right, there are several sections: 'Asset description' (The Customer table contains a list of all customers. This table is referred to in the payment and rental tables using foreign keys. customer\_id: A [surrogate primary key](#) used to uniquely identify each customer in the system.), 'Properties' (Domain: Sales), 'See all', 'Classifications (1)' (Credit Card Number), 'Schema classifications (7)' (Credit Card Number, Email Address, EU Debit Card Number, Geolocation (Lat/Lon), Person's name, World Cities, Frammer SIN), and 'Glossary terms (4)' (% of Revenue, Customer Sales, Direct Customer, Finance).

# Purview Information Protection for Fabric

- Label Fabric items with organization's sensitivity labels, used in Microsoft 365 apps
- Sensitivity labels follow the data automatically as it flows from data lake to business users within Fabric and to Office

The screenshot shows the Microsoft Purview Data Protection interface. On the left, there is a sidebar with icons for Home, Create, Browse, OneLake data hub, Monitoring hub, Workspaces, CRM Analytics..., and Customer\_Data. The Customer\_Data item is currently selected. At the top, the dataset name is 'Customer\_Data' with a 'No label' sensitivity level. A dropdown menu for 'Sensitivity' is open, showing options: Non-Business (grey shield), Public (green shield), General (blue shield), Confidential (light blue shield), Highly Confidential (dark blue shield), and None (disabled). The 'None' option is highlighted with a grey background. To the right of the dropdown, there is a list of user categories: Any User (selected, highlighted with a red border), Extended, and FTE.

**DEMO:**  
Purview Information  
Protection for Fabric



⚠ Microsoft Confidential Private Preview — Do not share outside of Microsoft. Preview functionality is included automatically. [Learn more](#)

## Contoso IT management

[+ New](#)

Upload



Create deployment pipeline



Create app



Manage access



Filter by keyword



Main\_Lakehouse  
Lakehouse

Main\_code  
Notebook

Data\_Pipeline  
Data pipeline

Salse\_Lakehouse  
Lakehouse

Resource\_Pipeline  
Data pipeline

LH1  
Warehouse (default)  
Refreshed: --

LH1  
Dataset  
Refreshed: 22/02/23, 14:43:01

Sales Report  
Report

LH2  
Warehouse (default)  
Refreshed: --

LH2  
Dataset  
Refreshed: 22/02/23, 14:51:00

# Purview Data Loss Prevention policies

- Automatically detection of upload of sensitive data, supporting trigger alerts for admins and custom policy tip to data owners
- Data owners can provide feedback using report a false positive action

Microsoft Purview

Data loss prevention > Edit policy

Name

Locations

Advanced DLP rules

Policy mode

Finish

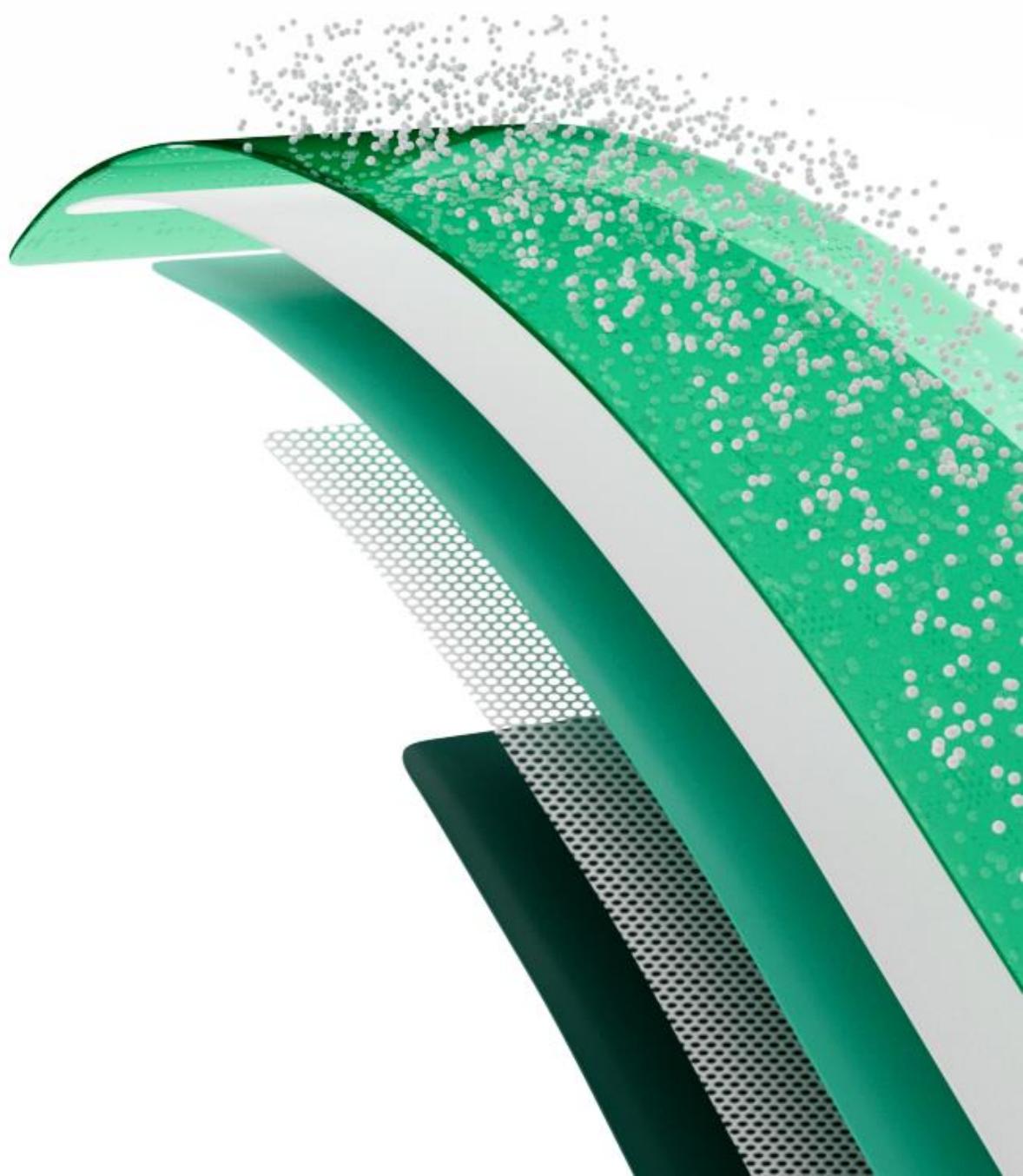
We'll apply the policy to data that's stored in the following locations:

Protecting sensitive info in on-premises repositories (SharePoint, OneDrive, Microsoft Defender for Cloud, Power BI) capability. [Learn more about the prerequisites](#)

Status	Location
On	Exchange email
On	SharePoint sites
On	OneDrive accounts
On	Teams chat and channel messages
On	Devices
On	Microsoft Defender for Cloud
On	On-premises repositories
On	Power BI (preview)

Back Next

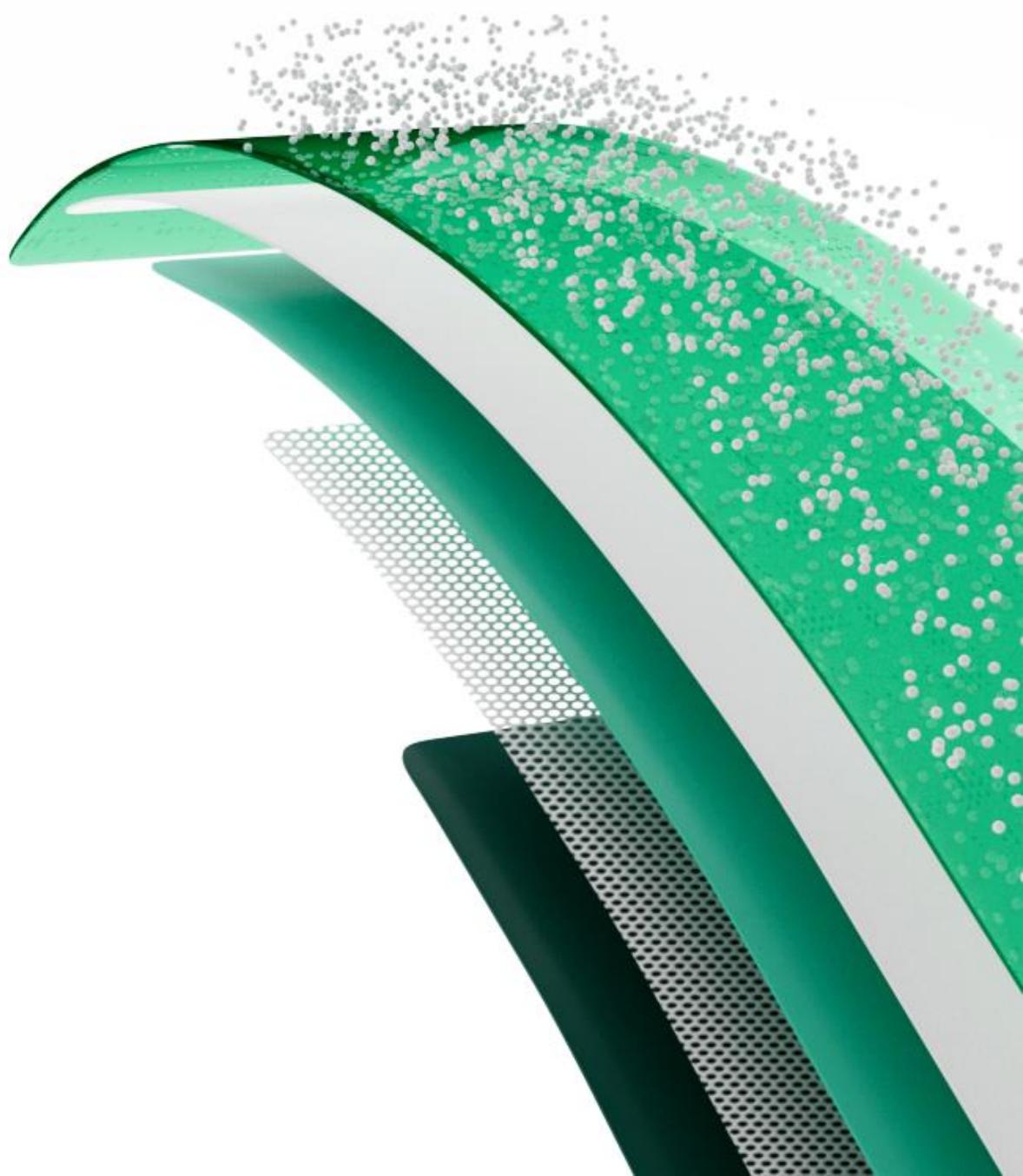
**DEMO:**  
Purview Information  
Protection for Fabric





# DEMO:

## Purview Hub



## Home

## Create

## Browse

 OneLake  
data hub Monitoring  
hub

## Workspaces

 My  
workspace Data  
Engineering

## New

New items saved to : My workspace Show less ^



## Recommended

**My workspace**  
You frequently open this

**oeim**  
You frequently open this

**Liza\_ws1**  
You frequently open this

**!!\_d2**  
You frequently open this

**CustomerData**  
You frequently open this

**Open** **Open** **Open** **Open** **Open**

## Quick access

Recent Favorites Shared with me

Filter by keyword

Filter ▾

Name	Type	Opened	Owner	Endorsement	Sensitivity	Workspace
CRM Analytics Project	Workspace	16 minutes ago	—	—	—	Workspaces
CustomerData	Lakehouse	16 minutes ago	Ina Powers	Promoted	—	CRM Analytics Project

6



## Licenses and Capacities

# Microsoft Fabric simplicity

Microsoft Fabric is a unified product for all your data and analytics workloads. Rather than provisioning and managing separate compute for each workload, with Microsoft Fabric, your bill is determined by two variables: the amount of compute you provision and the amount of storage you use.

## COMPUTE

A shared pool of capacity that powers all capabilities in Microsoft Fabric, from data modeling and data warehousing to business intelligence.

Pay-as-you-go (per sec billing with one minute minimum).

## STORAGE

A single place to store all data.  
Pay-as-you-go (\$ per GB / month).

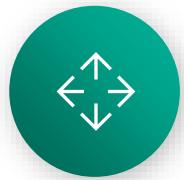
# Microsoft Fabric capacity

A shared capacity that provides a set of capacity units (CUs) powering the compute for Data Warehouse, Data Integration, Data Science, Data Engineering, Real-Time Analytics, and Power BI.



## Simplicity of purchasing

No need to purchase separate compute for each workload



## Flexibility in use

With no pre-allocation required, the same set of CUs can be used for any workload



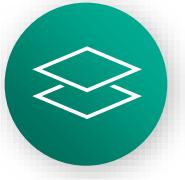
## Cost savings

All CUs are pooled together and are not locked to an idle workload



## Value optimization

Automatically adjust compute capacity by scaling up and down  
Easier to manage capacity with smoothing



## Transparent monitoring

Centralized dashboard to monitor usage and costs in Microsoft Fabric utilization and metrics app

# How it works

## Capacity units (CUs) = Compute power

Capacity units (CUs) are units of measure that represent a pool of compute power needed. Compute power is required to run queries, jobs, or tasks.

## CU Consumption

The CU consumption is highly correlated to the underlying compute effort needed for the tasks performed during the processing time by the capability.

Each capability, such as Power BI, Spark, Data Warehouse, with the associated queries, jobs, or tasks has a unique consumption rate.

# Fabric capacity pricing

Fabric capacity is priced uniquely across regions. The following table shows the pricing at US West 2 for your reference. Fabric capacity can be purchased at Azure portal.

1 CU pay-as-you-go price		\$0.18 / hour	Pay-as-you-go (hourly) at US West 2	Pay-as-you-go (monthly) at US West 2
SKU	Capacity unit (CU)			
F 2	2		\$0.36	\$262.8
F 4	4		\$0.72	\$525.6
F 8	8		\$1.44	\$1,051.2
F 16	16		\$2.88	\$2,102.4
F 32	32		\$5.76	\$4,204.8
F 64	64		\$11.52	\$8,409.6
F 128	128		\$23.04	\$16,819.2
F 256	256		\$46.08	\$33,638.4
F 512	512		\$92.16	\$67,276.8
F 1024	1024		\$184.32	\$134,553.6
F 2048	2048		\$368.64	\$269,107.2

Note:

1. Monthly rate calculation: F2 \$0.18\*2\*730 = \$262.8

2. Power BI Pro license requirement: (an existing requirement in Power BI Premium per capacity)

- Consumption of Power BI reports requires Pro license for F2-F32
- Publishing/authoring requires Pro license for all SKUs

# Translation for existing Power BI Premium per capacity Customers



Today		Microsoft Fabric Public Preview	
SKU	PBI vCore	SKU	CU
P1	8	F 64	64
P2	16	F 128	128
P3	32	F 256	256
P4	64	F 512	512
P5	128	F 1024	1024

- Power BI Premium P SKUs get **access to the full Fabric capabilities**
- 8 CUs are providing the same compute power of 1 Power BI Premium v-core for Power BI workloads. That is, **F64 provides the equivalent compute power of Power BI Premium P1**

# Microsoft Fabric storage

A single unified SaaS data lake that comes automatically provisioned with every tenant without additional infrastructure to manage



## Simplicity of purchasing

Automatically provisioned single storage service for all workloads



## Single source of truth

No need for data movement thus saving costs from duplicating data across lakes



## Maximize data investments

Allows linking your existing third-party storage systems natively and makes it available to Microsoft Fabric analytics workloads



## Open access

Open format democratizes access to multiple analytical engines, reducing additional resources needed to set up



## Simplified security

Simplified security, governance, and data discovery in one place to reduce maintenance overhead

# OneLake storage pricing at Public Preview

OneLake is a data lake built into Microsoft Fabric and provides a single place to store all organizational data. Data storage is charged at a rate of \$ per GB per month.



## Data Storage

Type	Pay-as-you-go price at West US 2
OneLake Storage	\$0.023 per GB / month



## Data Transfer

Cross-region data transfer network charges may apply based on source/destination of each storage access. Learn more at the [Bandwidth Pricing](#).



Thank you

