

Onelake with Microsoft Fabric, The Data Lakeas-a-Service Platform



Tuesday 01-10-2024 Room 4 Time 11:15-12:15





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We Are InSpark

We help organizations

accelerating their digital

transformation with impactful

Microsoft solutions & expertise



Featured Partner Microsoft Fabric



Objectives of today



- Importance of Data
- Onelake
- Shortcuts
- External Data Sharing
- Recap





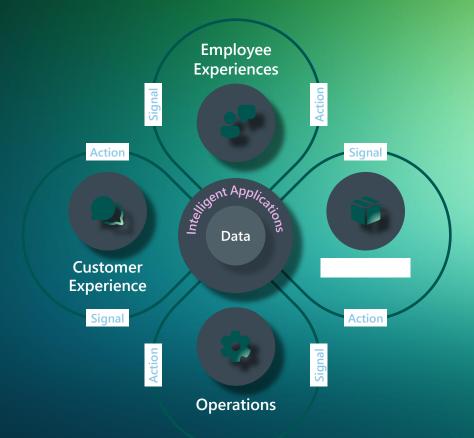
2024 world awash with data...



Data is the oxygen of digital transformation

"A new kind of company — we call them insights driven businesses — has formed. They are growing at an average of more than 30% annually"

Forrester Analytics Business Technographics Global Data & Analytics Survey





Today's data value creation challenges



Siloed systems and data



Fragmented toolset, Platforms requiring advanced skills



Costly integration and ongoing maintenance



Proprietary Platform, Vendor Lock in



Infrastructure not scalable as business grows

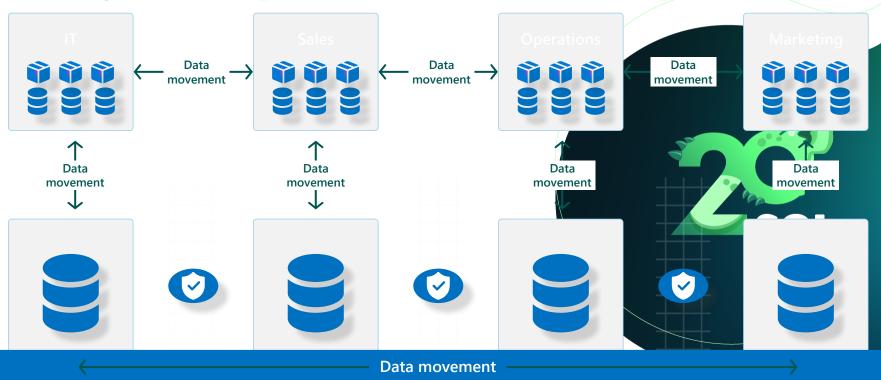


Gaining BI adoption to streamline data sharing, collaboration



Data and security risks, Governance & Compliance

Starting line: Multiple siloed lakes with lots of duplication



Typical sentiment about data-backed decision processes

"Too difficult to get to the data" "Data is highly fragmented" "We cannot re-use what we have" "We do not have that expertise"

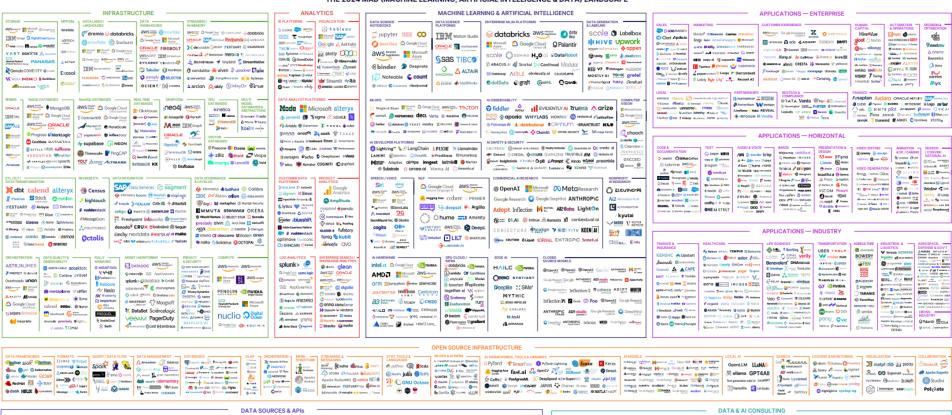
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How do you translate data into competitive advantage?

The 2024 ML, AI, and Data Landscape

THE 2024 MAD (MACHINE LEARNING, ARTIFICIAL INTELLIGENCE & DATA) LANDSCAPE



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Unify,

I am the Chief Information Officer and don't want to be the Chief Integration Officer.

Help me unleash AI in my data estate."

Every CIO, Every Enterprise



How many are using Microsoft Fabric?





Microsoft Fabric

Data analytics for the era of Al

From To **Unified stack Isolated component** Single database All the data Gen Al Bolted-in Gen AI built in



Microsoft Fabric

Data analytics for the era of Al

Complete Analytics Platform

Lake Centric and Open

Empower Every Business User

Powered



Microsoft Fabric

The data platform for the era of Al

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

Al Powered

Copilot accelerated

ChatGPT on your data

Al driven insights



Microsoft Fabric The data platform for the era of Al

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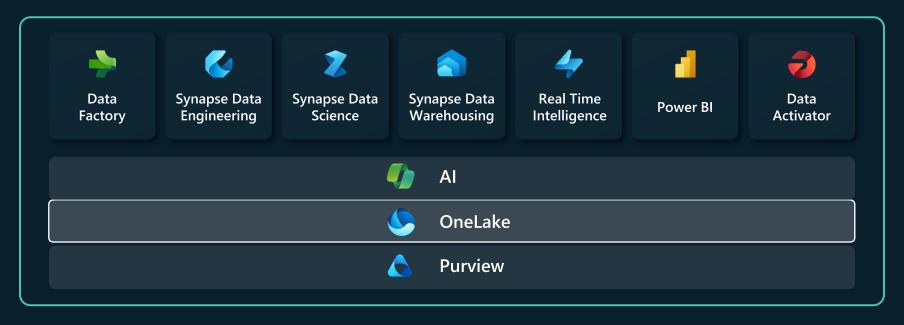
Copilot accelerated

ChatGPT on your data

AI driven insights



Microsoft Fabric The unified data platform for the era of Al



Unified architecture

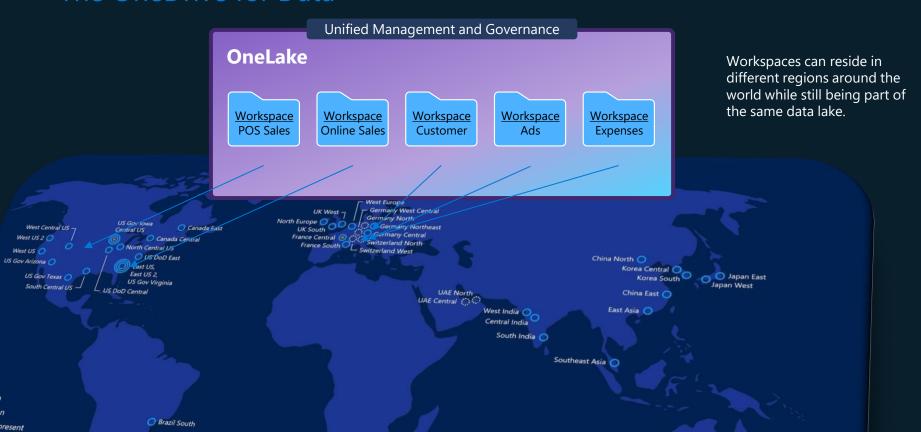
Unified experience

Unified governance

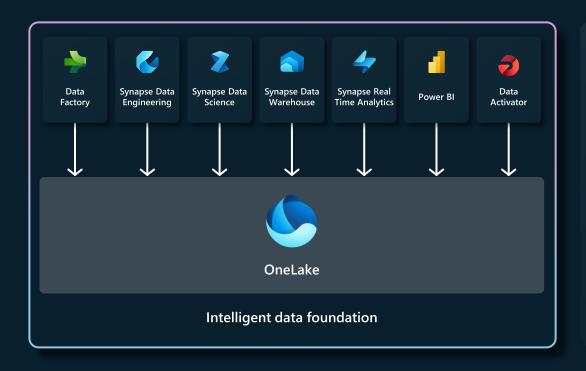
Unified business model

OneLake which logically spans the world

"The OneDrive for Data"



OneLake for all Data "The OneDrive for Data"



A single SaaS lake for the whole organization

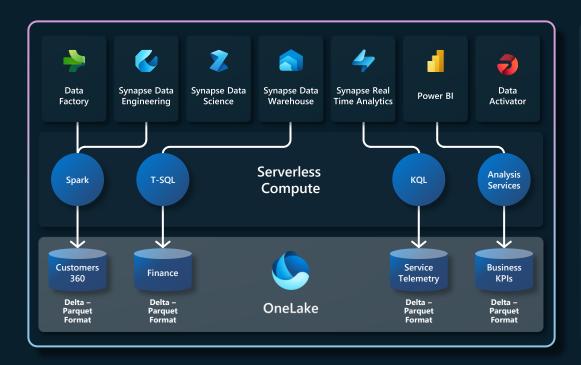
Provisioned automatically with the tenant

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 Analytics vNext

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

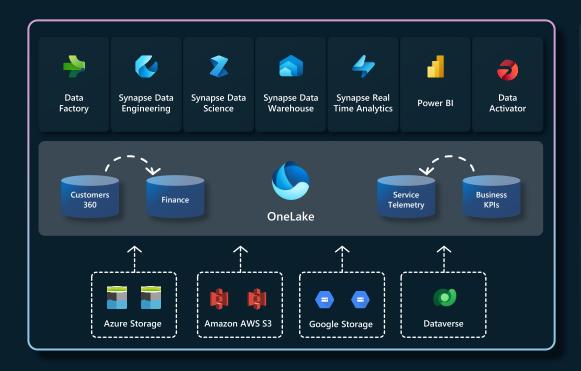


Sharing data in OneLake is as easy as sharing files in OneDrive, removing the needs for data duplication

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



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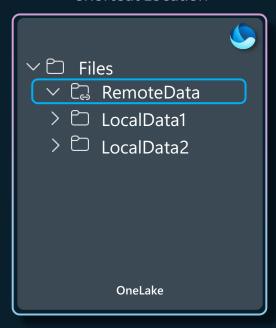
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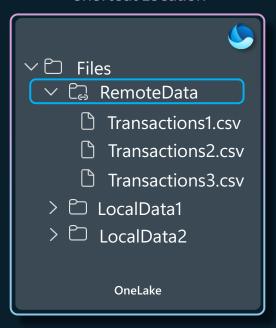
What is a shortcut?

Shortcut Location

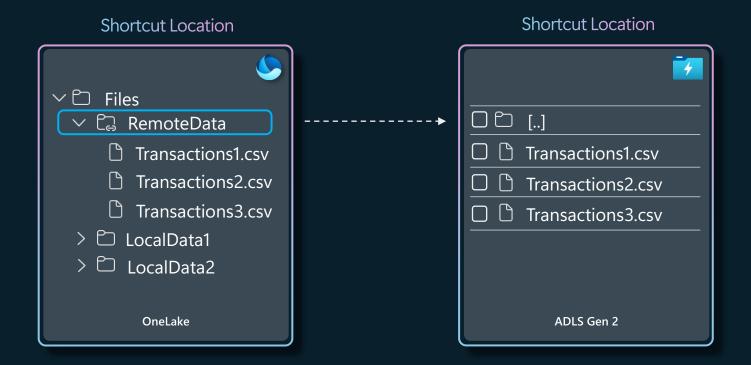


What is a shortcut?

Shortcut Location



What is a shortcut?





Any questions so far?





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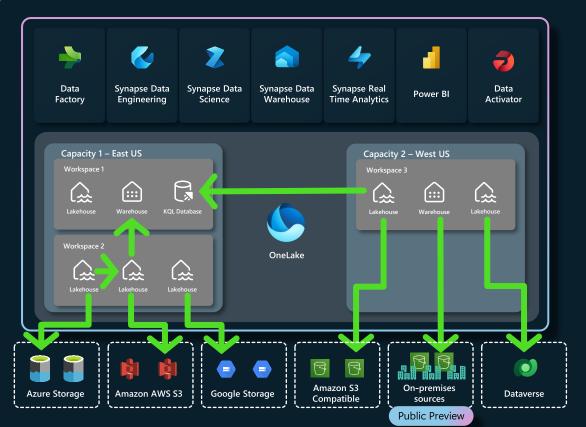


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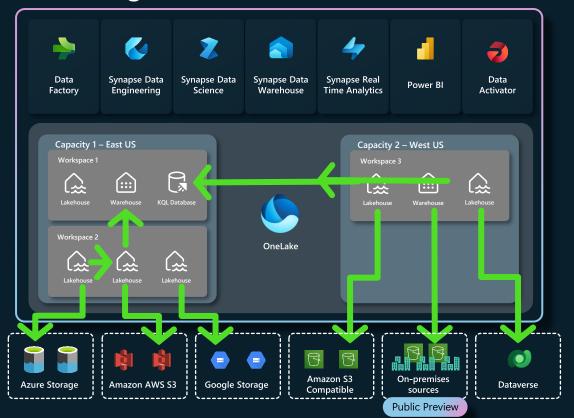
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Unifying data in OneLake

External Data Sharing (Preview)



Unifying data in OneLake External Data Sharing (Preview)

△ External data sharing (preview)

Enabled for the entire organization

Users can share a read-only link to data stored in OneLake with collaborators outside your organization. When you grant them permission to do so, users can share a link to data in lakehouses and additional Fabric items. Collaborators who receive the link can view, build on, and share the data both within and beyond their own Fabric tenants, using their organization's licenses and capacities. Learn More



① Usage of shared data within a recipient tenant is not restricted by policies within your tenant, such as Conditional Access, Information Protection, Microsoft Cloud App Security, etc. Shared data may also be processed outside the region where it's stored.

△ Users can accept external data shares (preview)

Enabled for the entire organization

Users can accept a read-only link to data from another organization's Fabric tenant. Users who accept an external share link can view, build on, and share the data, both inside and outside of your organization's tenant. For more information about the security limitations of this preview feature, view the feature documentation. Learn More



Your organization is solely responsible for use of this feature. Potential risks include malicious intent on the part of the data provider, changes in the data at source, and legal liability arising from the accessing of regulated, proprietary, or sensitive data, responsibility for licensing enforcement, or the processing of data across regions.

Mirroring in Fabric

Connect your databases and data warehouses to OneLake seamlessly with Zero ETL (Preview)









Azure Cosmos DB

Mongo DB Azure SQL DB

Snowflake

Mirroring in Fabric

Connect your databases and data warehouses to OneLake seamlessly with Zero ETL (Preview)



Fabric Mirroring allows adding existing databases and data warehouses to Fabric without any ETL with a new item type Mirrored database

A full live querying 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-realtime via change data feed technology

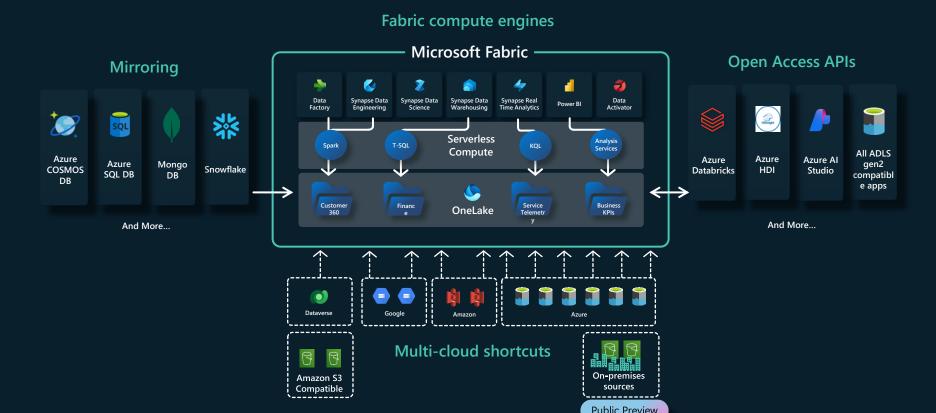
All the Fabric experiences instantly work with the OneLake replica, including data warehousing, Spark, Bl experiences

Analysts and Data Scientists can work with real-time data

The replica protects operational databases from analytical queries

All roads lead to OneLake

Creating Data Gravity in OneLake





DEMO





FEEDBACK FEEDBACK





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