

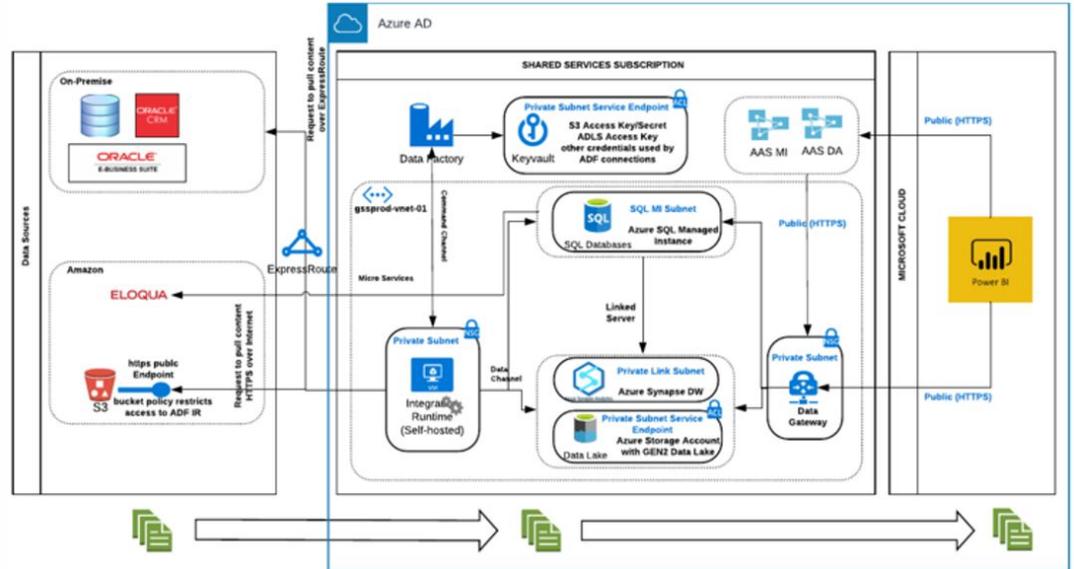
Microsoft Fabric

Data analytics for the era of AI

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Motivation: Scalable analytics are complex and fragmented

- Every analytics project has many subsystems
- Every subsystem need a different class of product
- Products often come from multiple vendors
- Integration at scale across products is complex, fragile, and expensive



What is Microsoft Fabric?

- Fabric is an end-to-end, unified Data Analytics platform that has all the data analytics tools an organization needs.
- The experience is delivered as a Software-as-a-Service model.
- Integrates Data factory, Data Warehouse, Data Engineering, Real time analytics, Power BI, Data Activator and Data Science

Microsoft Fabric

End-to-end analytics data fabric
From the data lake to the business user

Complete Analytics Platform

Best of Breed

Unified SaaS Solution

Low Code Plus Pro Dev

Lake-centric and Open

OneLake

One Copy

Always Synced

Empower Every Office User

Familiar and Intuitive

Built Into Office

Insight to Action

Persistent Security and Governance

End-to-End Visibility

Always Governed

Secure by Default

Microsoft Fabric



Data
Integration



Data
Lake



Spark
Engines



Data
Warehouse



Real Time
Analytics



Data
Science



Business
Intelligence



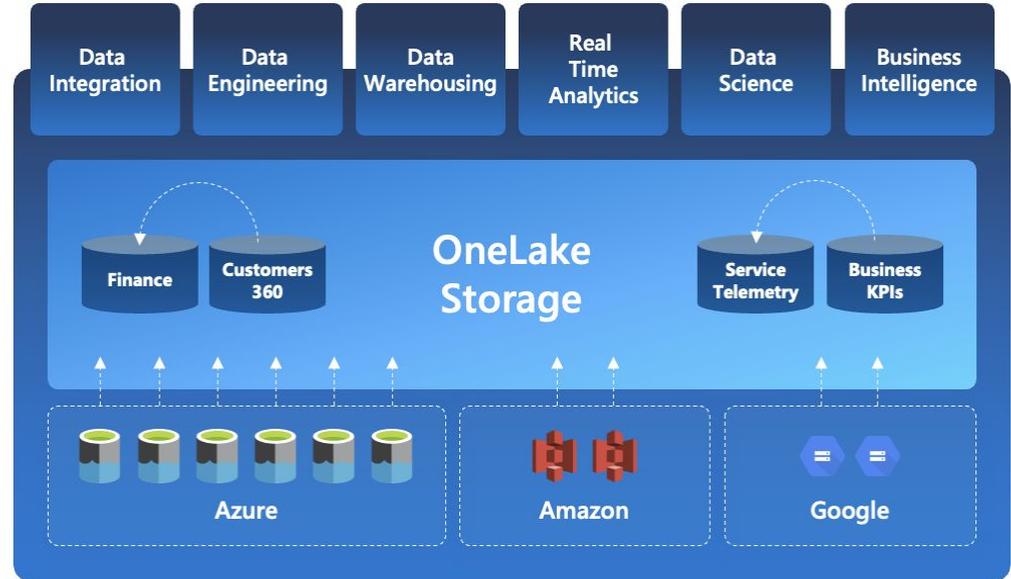
Governance

Unified analytics fabric

End-to-end analytics data fabric
From the data lake to the business user

OneLake for data Storage

- A single SaaS lake for an entire tenant
- All workloads automatically store their data in the OneLake workspace folders
- All the data is organized in an intuitive hierarchical namespace
- **One copy for all workloads, in common Delta-Parquet format**



OneLake Shortcuts

- OneLake allows easy sharing of data between users and applications without having to move and duplicate information unnecessarily.
- Virtualize data lake storage in ADLSg2, Amazon Simple Storage Service (Amazon S3), and Google Storage (coming soon).
- Enables developers to compose and analyze data across clouds.

Powered by AI

- Fabric is infused with Azure Open AI service, allowing users to use generative AI to find insights in their data
- Copilot is built in to every service on Fabric, so users can use conversational language to create dataflows and data pipelines, generate code and entire functions, build machine learning models, or visualize results.
- Ex: “Show me my top customer sales over the past 24 months”

Unified capacities for reduced costs

- Today's analytics systems typically combine products from multiple vendors in a single project resulting in computing capacity provisioned in multiple systems like data integration, data engineering, data warehousing, and business intelligence.
- When one of the systems is idle, its capacity cannot be used by another system causing significant wastage.
- Customers can purchase a single pool of computing that powers all Fabric workloads.
- The universal compute capacities significantly reduce costs, as any unused compute capacity in one workload can be utilized by any of the workloads.

Questions?

References

- <https://azure.microsoft.com/en-us/blog/introducing-microsoft-fabric-data-analytics-for-the-era-of-ai/>
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- <https://view.officeapps.live.com/op/view.aspx?src=https://github.com/microsoft/Fabric-Readiness/raw/main/presentations/01.%20Introducing%20Unified%20Analytics.pptx>
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