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

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://aka.ms/fabric-docs