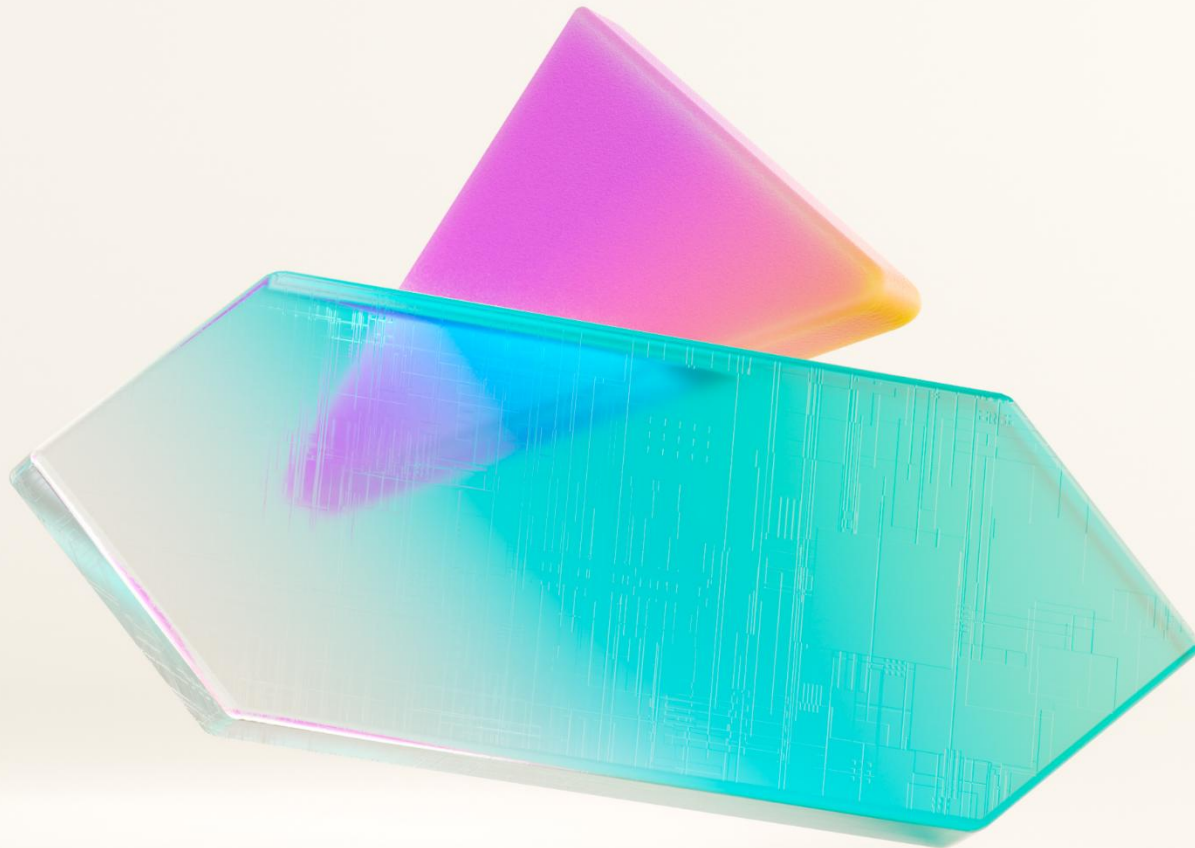


SQL Databases in Fabric

Featured Partners



# Agenda

- ✓ Introducing Fabric Databases
- ✓ Customer pitch
- ✓ Use Cases
- ✓ Demo
- ✓ Become a Featured Partner

Announcing



# Fabric Databases

A new class of cloud databases

Simplified

Autonomous

Optimized for AI

[aka.ms/Fabric](https://aka.ms/Fabric)

Microsoft Ignite 2024



# Microsoft Fabric

The unified data platform for AI transformation

Public Preview



Data  
Factory



Analytics



Databases



Real-Time  
Intelligence



Power BI



AI



OneLake



Purview



Customer pitch for  
SQL Database In Fabric



# Microsoft Fabric

The unified **analytics platform** for the era of AI



Data  
Factory



Synapse Data  
Engineering



Synapse Data  
Science



Synapse Data  
Warehousing



Synapse Real  
Time Analytics



Power BI



Data  
Activator



AI



OneLake

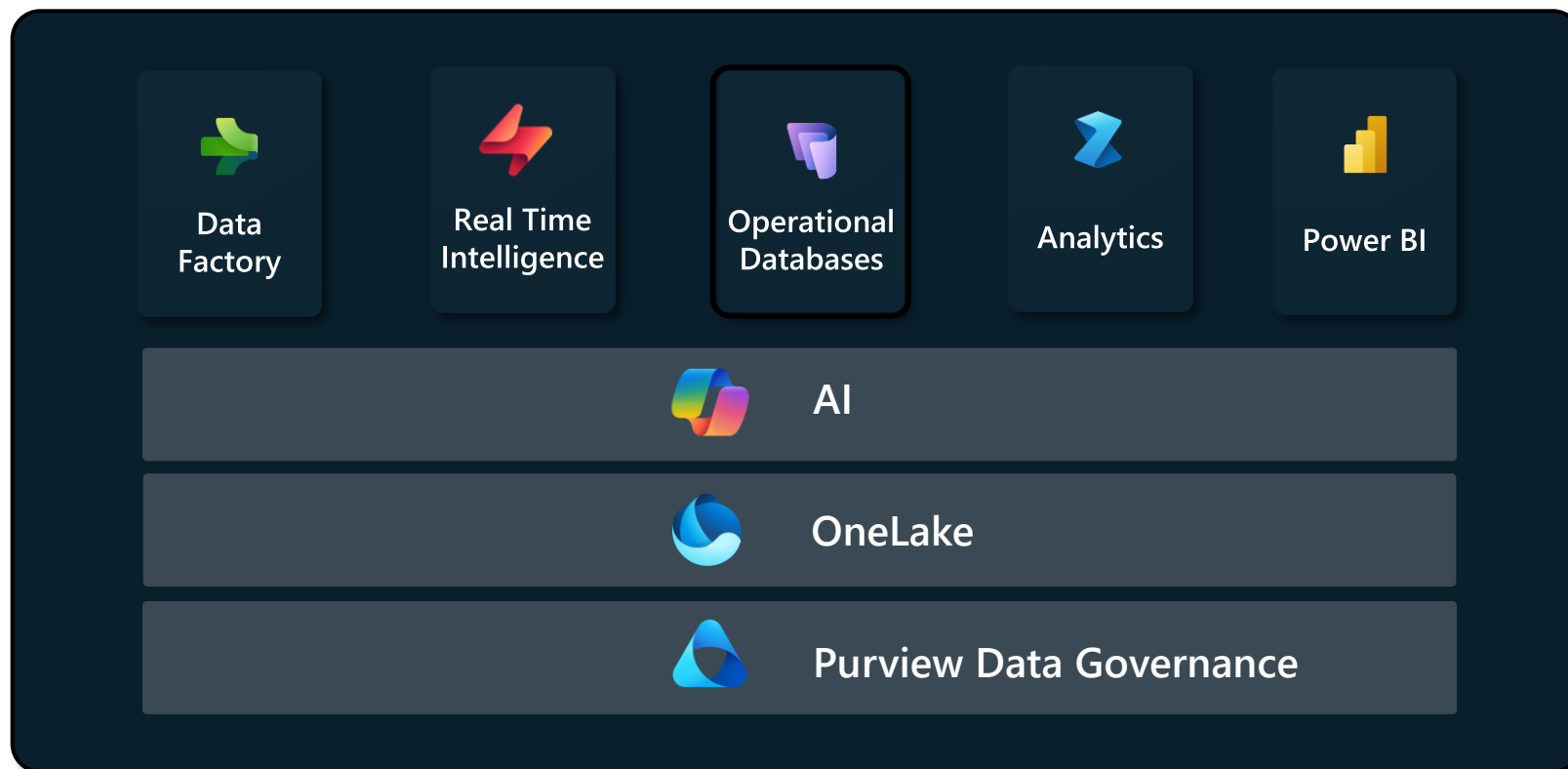


Purview



# Microsoft Fabric

The unified **data platform** for the era of AI



Unified  
architecture

Unified  
experience

Unified  
governance

Unified  
business model

Database users want the same unified, simple SaaS experience offered by Fabric

You want to be able to...



Quickly spin-up databases



Automate database management



Seamlessly integrate with analytics and AI

# SQL Database in Fabric



Autonomous database built on the foundation of Azure SQL Database



## Simple

Integrated with Visual Studio and GitHub  
Developer optimized with GraphQL  
and CI/CD support  
Unify OLAP + OLTP



## Autonomous

Deploy in seconds  
Auto-scaled compute and storage  
Auto-managed HADR  
Auto-optimized performance



## Integrated

Built-in vector and RAG support  
Integration with Azure AI  
Integrated with all Fabric services by  
default  
AI-assisted



Secure by default



Powered by SQL



OneLake integrated



# Simple, Quick and Efficient

HomeReplicationSecurity

Get data

New Query

Templates

Open in

New API for GraphQL

Performance summary

Copilot

SQL database

Explorer

Search

bwoody-supply-chain-db

dbo

SalesLT

Tables

Address

Customer

CustomerAddi

Product

ProductCatego

ProductDescri

ProductModel

ProductModel

SalesOrderDet

SalesOrderHe

Views

Stored Procedu...

Functions

Shortcuts

Queries

Product

Data preview - Product

Showing 1000 rows

Search

	123	ProductID	ABC	Name	ABC	Product...	ABC	Color	12F	Standard...	12F	ListPrice	ABC	Size	12F	Weight	123	ProductC...	123	Product...	
1	680		HL	Road Fram...	FR-R92B-58		Black		1059.3100		1431.5000		58		1016.04		18		6		20
2	706		HL	Road Fram...	FR-R92R-58		Red		1059.3100		1431.5000		58		1016.04		18		6		20
3	707		Sport-100	Hel...	HL-U509-R		Red		13.0863		34.9900		NULL		NULL		35		33		20
4	708		Sport-100	Hel...	HL-U509		Black		13.0863		34.9900		NULL		NULL		35		33		20
5	709		Mountain Bik...		SO-B909-M		White		3.3963		9.5000		M		NULL		27		18		20
6	710		Mountain Bik...		SO-B909-L		White		3.3963		9.5000		L		NULL		27		18		20
7	711		Sport-100	Hel...	HL-U509-B		Blue		13.0863		34.9900		NULL		NULL		35		33		20
8	712		AWC Logo Cap		CA-1098		Multi		6.9223		8.9900		NULL		NULL		23		2		20
9	713		Long-Sleeve L...		LJ-0192-S		Multi		38.4923		49.9900		S		NULL		25		11		20
10	714		Long-Sleeve L...		LJ-0192-M		Multi		38.4923		49.9900		M		NULL		25		11		20
11	715		Long-Sleeve L...		LJ-0192-L		Multi		38.4923		49.9900		L		NULL		25		11		20
12	716		Long-Sleeve L...		LJ-0192-X		Multi		38.4923		49.9900		XL		NULL		25		11		20
13	717		HL	Road Fram...	FR-R92R-62		Red		868.6342		1431.5000		62		1043.26		18		6		20
14	718		HL	Road Fram...	FR-R92R-44		Red		868.6342		1431.5000		44		961.61		18		6		20
15	719		HL	Road Fram...	FR-R92R-48		Red		868.6342		1431.5000		48		979.75		18		6		20
16	720		HL	Road Fram...	FR-R92R-52		Red		868.6342		1431.5000		52		997.90		18		6		20
17	721		HL	Road Fram...	FR-R92R-56		Red		868.6342		1431.5000		56		1016.04		18		6		20
18	722		LL	Road Fram...	FR-R38B-58		Black		204.6251		337.2200		58		1115.83		18		9		20
19	723		LL	Road Fram...	FR-R38B-60		Black		204.6251		337.2200		60		1124.90		18		9		20
20	724		LL	Road Fram...	FR-R38B-62		Black		204.6251		337.2200		62		1133.98		18		9		20
21	725		LL	Road Fram...	FR-R38R-44		Red		187.1571		337.2200		44		1052.33		18		9		20
22	726		LL	Road Fram...	FR-R38R-48		Red		187.1571		337.2200		48		1070.47		18		9		20
23	727		LL	Road Fram...	FR-R38R-52		Red		187.1571		337.2200		52		1088.62		18		9		20
24	728		LL	Road Fram...	FR-R38R-58		Red		187.1571		337.2200		58		1115.83		18		9		20

Succeeded (6 sec 933 ms)

Columns: 17 Rows: 295

Copilot Preview

Let's work with your data

Select a category to get started.

Create a table

Create a table [to store employee data (EmployeeID, full name, hire date)]

Get insights

Retrieve the total number of tables in my database.

Ask a question

What data types are available?

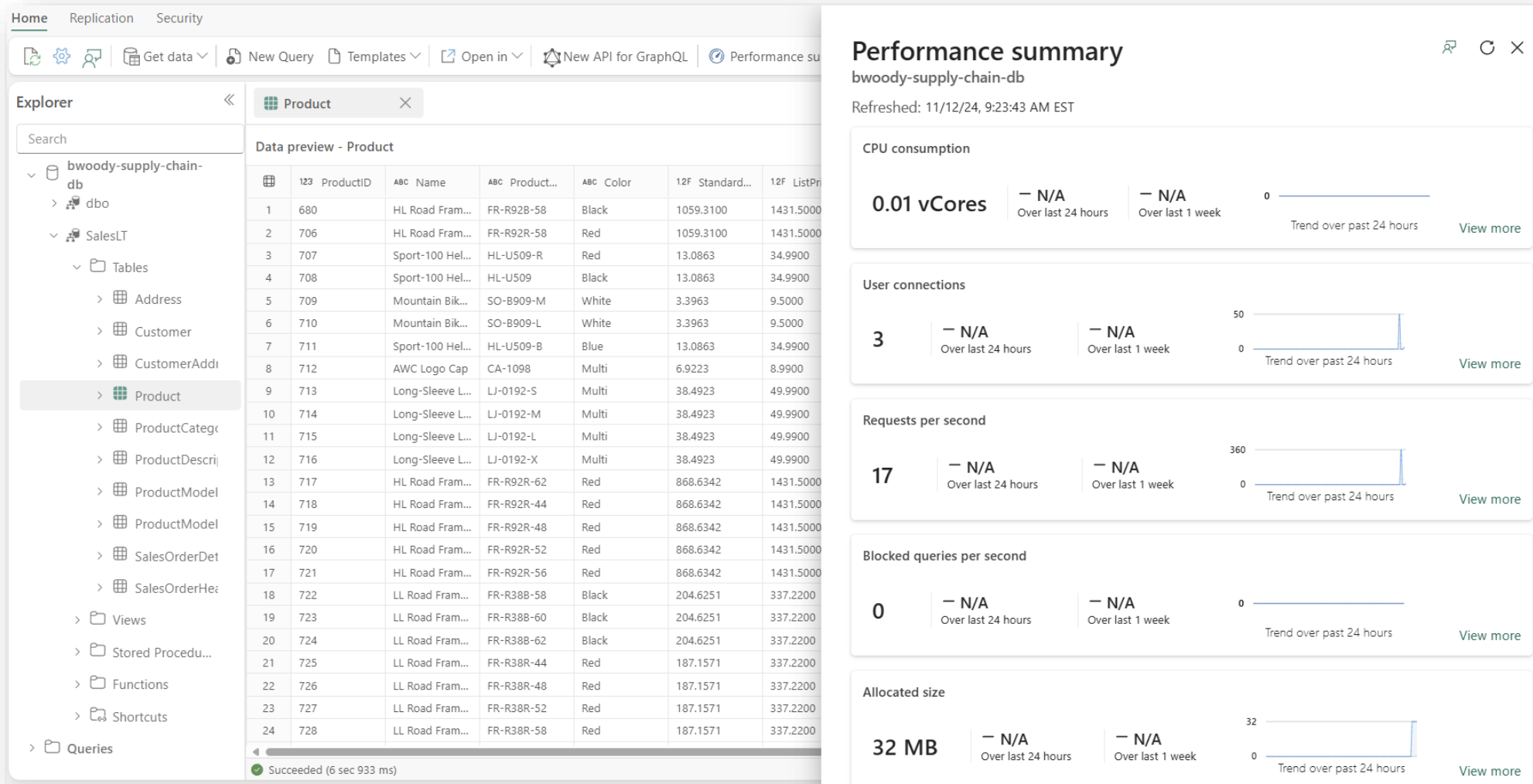
Ask me anything about this database, or tell me how I can help.

0 / 500

AI-generated content can have mistakes. Make sure it's accurate and appropriate before using it. Review terms



# Autonomous and Automated





# Integrated and Unified

## Welcome to Fabric

Create a workspace with a predesigned template called a task flow. Task flows keep your items organized. [Learn more](#)



New workspace



General



Basic data analytics



Data analytics using a SQL ...



Medallion



Event analytics



Lambda



Sensitive data insights



Basic machine learning models

## Learn more about Fabric



### What is Microsoft Fabric?

Watch this 1-minute introductory video



### Ingest data into Fabric

Complete an end-to-end tutorial for Data Factory



### Build a lakehouse

Complete an end-to-end tutorial for Lakehouse



### Build a warehouse

Complete an end-to-end tutorial in Data Warehouse



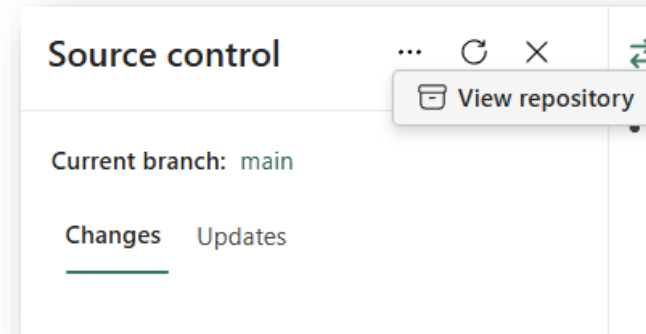
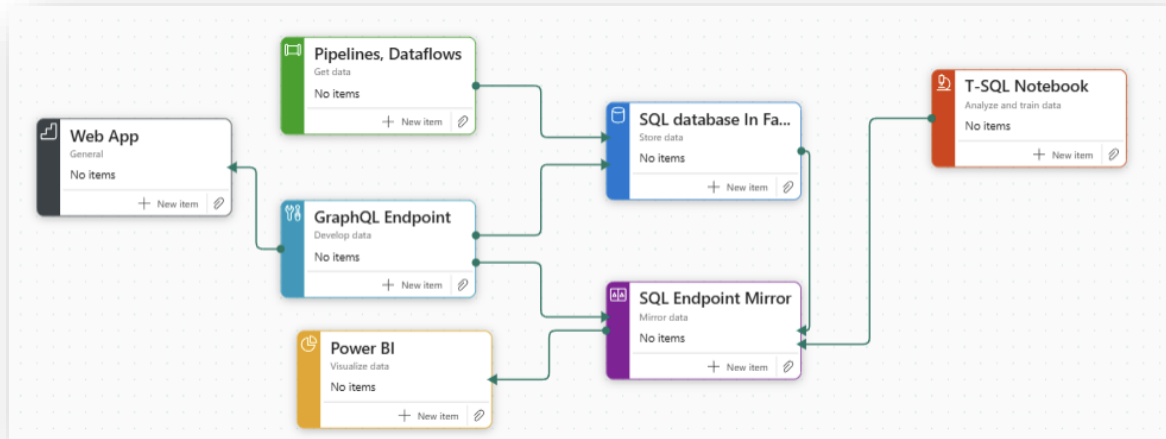
### Build a machine learning model

Complete an end-to-end tutorial in





# Developer Ready



The screenshot shows the Azure Data Studio interface. On the left is the 'Schema explorer' showing a database named 'bwoody-supply-chain-db'. The main area displays a GraphQL query named 'Query1' with the following content:

```
query {
  vProductAnd
    items {
      Name
      Product
      Description
    }
}
```

Below the query, the 'Results' section shows a JSON response:

```
{
  "data": {
    "vProductAnd": {
      "items": [
        {
          "Name": "vProductAnd",
          "Product": "vProductAnd",
          "Description": "vProductAnd"
        }
      ]
    }
  }
}
```

A 'Generate code' dialog box is open, showing Python code for interacting with the GraphQL endpoint. The code includes imports for 'InteractiveBrowserCredential', 'requests', and 'json', and a function to acquire a token and make a request to the GraphQL endpoint.

```
from azure.identity import InteractiveBrowserCredential
import requests
import json

# Acquire a token
# DO NOT USE IN PRODUCTION.
# Below code to acquire token is for development purpose only to test the GraphQL endpoint
# For production, always register an application in a Microsoft Entra ID tenant and use the token
# https://learn.microsoft.com/en-us/fabric/data-engineering/connect-apps-api-graphql#create-a-token

app = InteractiveBrowserCredential()
scp = 'https://analysis.windows.net/powerbi/api/user_impersonation'
result = app.get_token(scp)

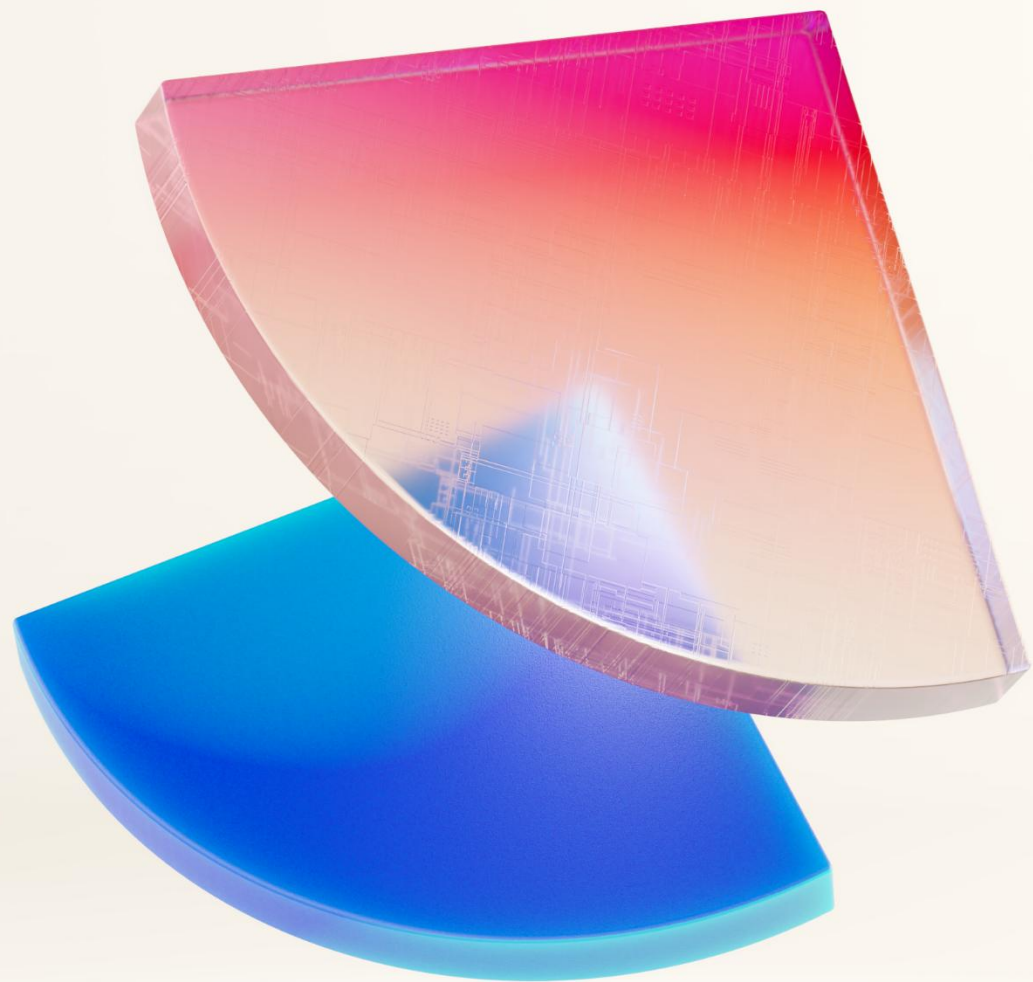
if not result.token:
    print("Error:", "Could not get access token")

# Prepare headers
headers = {
    'Authorization': f'Bearer {result.token}',
    'Content-Type': 'application/json'
}
```

The dialog box also has a 'Copy' button at the bottom right.

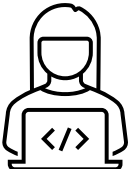
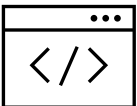
# Resources


- Forum - <https://community.fabric.microsoft.com/t5/Databases-preview-forums/ct-p/databases>
- Announcements - <https://blog.fabric.microsoft.com/en-US/blog/>
- Ideas - <https://ideas.fabric.microsoft.com/>
- Regions - <https://learn.microsoft.com/en-us/azure/reliability/reliability-fabric>
- Roadmap - <https://learn.microsoft.com/en-us/fabric/release-plan/>
- What "Preview" means - <https://learn.microsoft.com/en-us/fabric/get-started/preview>
- Getting Started - <https://learn.microsoft.com/en-us/fabric/database/sql/connect>
- Tutorial - <https://learn.microsoft.com/en-us/fabric/database/sql/tutorial-introduction>
- Documentation - <https://learn.microsoft.com/en-us/fabric/database/sql/overview>
- MS Learn Course - [https://learn.microsoft.com/en-us/training/paths/implement-operational-databases-in-microsoft-fabric/?ocid=fabricdb\\_prodanna\\_blog\\_azdata](https://learn.microsoft.com/en-us/training/paths/implement-operational-databases-in-microsoft-fabric/?ocid=fabricdb_prodanna_blog_azdata)
- Data Exposed - <https://www.youtube.com/watch?v=uYBIBZDHAeg>
- Learn together - [https://developer.microsoft.com/en-us/reactor/series/S-1431?ocid=fabricdb\\_prodanna\\_blog\\_azdata](https://developer.microsoft.com/en-us/reactor/series/S-1431?ocid=fabricdb_prodanna_blog_azdata)
- Mechanics video - <https://www.youtube.com/watch?v=rEyv8pt4l-4>




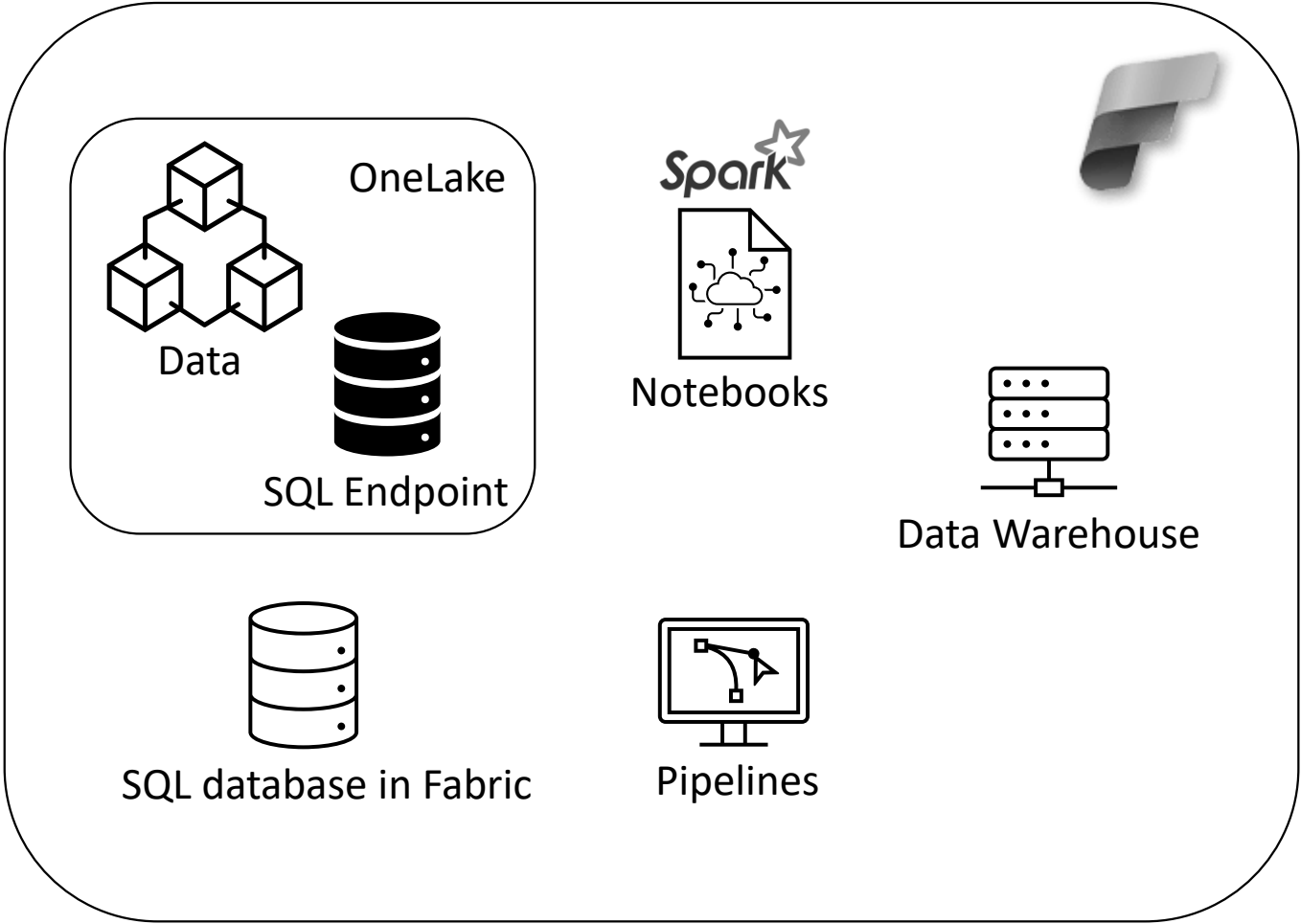
Use Cases

GraphQL <...>

  
  
Application

  
DevOps

  
Analysis (Power BI, Code, Notebooks)





Data Sources

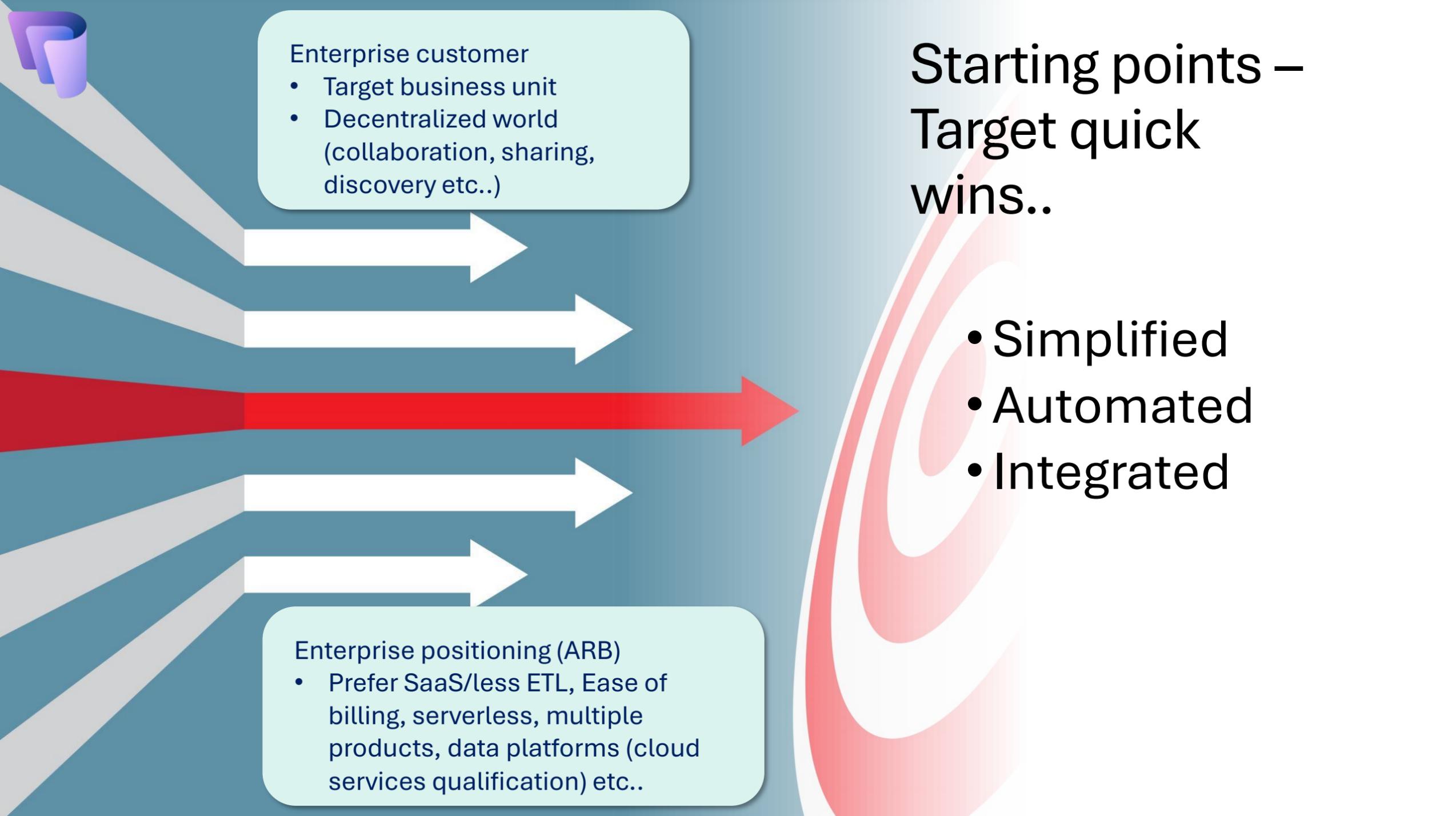


This complete analytics solution view leverages the new SQL database in Fabric, providing a simplified and integrated experience for developers. The use of GraphQL, Fabric Notebooks, and Power BI ensures that developers can easily ingest, process, analyze, and visualize data, enabling the company to gain valuable insights and make informed decisions.



# Use Cases

- **Building AI apps – RAG and Vector support, call any model via APIs**
- DevOps / SRE team - Automate performance tuning, day-to-day database management
- **Metadata driven ingestion framework**
- Configs or repository workloads
- ISV – Embedded workloads
- .NET applications for operational data
- Accelerating Productivity with Copilot for SQL Database
- Cloud migrations / serving layers
  - Phase 1 (replicate existing operational data to cloud relational database engine)
  - Phase 2 – plan migration
- **Unified Data Culture - Advanced Analytics and Transactional (Translytical)**
  - Reverse ETL
  - Write back feature
  - Data already replicating to OneLake (Mirroring automatically enabled - *storage cost is free up to a certain limit*).
  - SQL Analytics Endpoint (read-only data copy in your OneLake) – Create reports, Write cross database queries etc..
  - PowerBI DirectLake



Enterprise customer

- Target business unit
- Decentralized world (collaboration, sharing, discovery etc..)

## Starting points – Target quick wins..

- Simplified
- Automated
- Integrated

Enterprise positioning (ARB)

- Prefer SaaS/less ETL, Ease of billing, serverless, multiple products, data platforms (cloud services qualification) etc..

# Pub Preview to GA Journey – Decision Guide

## Key Considerations

- Advanced-HA Active geo-replication, geo-replicated backups (**Roadmap**)
- Customer-managed keys (**Roadmap**)
- Hyper scale workloads (**Roadmap**)
- Change event streaming (**Roadmap**)
- Private links - Tenant-level PL – few weeks in public preview, Workspace level PL public preview in May
- Extensive *customizations* for database settings or optimizations (Azure SQL DB)
- Elastic pools (Azure SQL DB)
- >7 days of backup retention
- Granular auditing
- Filesystem access
- >32 vCores

## Quick Wins (Phase 1)

- Automated DB management  
(*\*\*Co-Managed vs Fully Managed Autonomous*)
- Open for having less control
- Medium to large scale workloads (*up to 4TB*)
- Auto scale
- Net new workloads
  - (*next phase migration*)
- Multi-model (*relational, vector, graph, json, key-value*)
- Performance tuning (*auto create / drop indexes*)
- Join operational application data with other data in Fabric
- Active collaboration (Data, Analytics, AI practices)
- Avoid complex ETL processes
- Rapid Time-to-Value (*faster project kick-offs*)
- Standalone Relational DB vs Unified Data Platform
- Cost – *no cost until Feb 1<sup>st</sup>, 2025*
- Features are same at any *Fabric capacity*

# Mostly asked

- 
- **Connectors** – Data flow gen2, Data pipeline
  - **Mirrored data use Direct lake** – Yes, since tables are all v-ordered delta tables.
  - **V-order optimization** – Yes, when it replicates, tables are all v-ordered delta tables
  - **Schema (deploy / incremental updates)** - SQL Package
  - **SLA** – For previews, no SLA. At GA, SQL DB will be listed under Fabric section.
  - **Capacity** – It's available on F2 onwards
  - **AI integrations with Semantic kernel** – Yes
  - **.net 9 compatibility** – Yes
  - **Migrations** – import/export with sqlpackage, data pipelines, DMA (not pursuing as key scenario)
  - **Override autonomous tuning features** – No
  - **Notebook (SparkSQL) to write SQL DB** – Yes
  - **Region availability** - <https://learn.microsoft.com/en-us/fabric/admin/region-availability>

# AI Considerations

---

- **Vector support** - SQL Server, Azure SQL and Fabric SQL will all have DiskANN index support (**will land early in 2025**).
- MSSQL Engine can also take advantage of query optimizer to improve query performance of complex queries when a mix of predicates are specified, which is very common in real-world scenarios. For example, having a query with **vector, geospatial, JSON and relational** filters all at once.
- RAG and Beyond RAG (Agentic RAG, RAG+NL2SQL) solutions are also covered end-to-end.
- **Semantic Caching** is also possible in MSSQL.



# Industry data points..

Industry	Use Cases	Key Benefits
Retail and E-Commerce	<ul style="list-style-type: none"><li>- Personalized customer insights</li><li>- Inventory management</li><li>- Sales performance dashboards</li></ul>	<ul style="list-style-type: none"><li>- Improved customer experience</li><li>- Reduced stockouts/overstocking</li><li>- Real-time sales trends</li></ul>
Financial Services	<ul style="list-style-type: none"><li>- Fraud detection</li><li>- Regulatory compliance</li><li>- Operational reporting</li></ul>	<ul style="list-style-type: none"><li>- Enhanced security</li><li>- Meet compliance needs</li><li>- Quick decision-making</li></ul>
Healthcare and Life Sciences	<ul style="list-style-type: none"><li>- Patient data analytics</li><li>- Regulatory alignment</li><li>- Operational efficiency</li></ul>	<ul style="list-style-type: none"><li>- Better patient care</li><li>- Compliance with HIPAA/GDPR</li><li>- Optimized resource use</li></ul>
Manufacturing	<ul style="list-style-type: none"><li>- Supply chain optimization</li><li>- Predictive maintenance</li><li>- Product quality analysis</li></ul>	<ul style="list-style-type: none"><li>- Cost savings</li><li>- Prevent downtime</li><li>- Improved product standards</li></ul>
Technology and SaaS	<ul style="list-style-type: none"><li>- Usage analytics</li><li>- Scalable architecture</li><li>- Operational insights</li></ul>	<ul style="list-style-type: none"><li>- Better user experience</li><li>- Efficient scaling</li><li>- Streamlined operations</li></ul>
Energy and Utilities	<ul style="list-style-type: none"><li>- Smart grid analytics</li><li>- Environmental compliance</li><li>- Asset management</li></ul>	<ul style="list-style-type: none"><li>- Energy optimization</li><li>- Meet regulatory goals</li><li>- Extend asset lifespan</li></ul>
Education	<ul style="list-style-type: none"><li>- Student performance analytics</li><li>- Resource optimization</li><li>- Compliance reporting</li></ul>	<ul style="list-style-type: none"><li>- Personalized learning</li><li>- Efficient resource use</li><li>- Data privacy compliance</li></ul>
Retail Banking	<ul style="list-style-type: none"><li>- 360° customer view</li><li>- Branch performance analysis</li><li>- Risk analysis</li></ul>	<ul style="list-style-type: none"><li>- Improved customer retention</li><li>- Branch-level insights</li><li>- Reduced financial risks</li></ul>
Government and Public Sector	<ul style="list-style-type: none"><li>- Citizen data management</li><li>- Real-time decision support</li><li>- Budget allocation insights</li></ul>	<ul style="list-style-type: none"><li>- Better citizen services</li><li>- Faster emergency responses</li><li>- Transparent budget tracking</li></ul>
Media and Entertainment	<ul style="list-style-type: none"><li>- Content performance analytics</li><li>- Personalized recommendations</li><li>- Ad performance tracking</li></ul>	<ul style="list-style-type: none"><li>- Increased user engagement</li><li>- Targeted content delivery</li><li>- Effective ad campaigns</li></ul>

# Retail & E-Commerce: Enhancing Customer Experience



## Scenario:

A growing e-commerce business struggles with delivering **personalized product recommendations** due to **data silos** across transactional systems and analytics platforms. **Inventory updates** are delayed, leading to stockouts and dissatisfied customers.



## How SQL Database in Fabric Solves It:

With SQL Database in Microsoft Fabric, the business can integrate transactional and operational data into a single platform. Real-time queries enable personalized recommendations during user interactions, while up-to-date inventory tracking ensures accurate product availability.



## Outcome:

Increased customer satisfaction through real-time personalization.

Reduced stockouts and improved inventory turnover.

Unified platform reduces operational complexity.

# Healthcare: Improving Patient Outcomes

## Scenario:

A healthcare provider needs to analyze structured patient data to identify high-risk individuals and allocate resources efficiently. Current systems **are siloed**, delaying insights.



## How SQL Database in Fabric Solves It:

SQL Database integrates patient records with operational data in a compliant and secure environment. Data scientists can use familiar SQL to run ad hoc queries and identify at-risk patients while respecting HIPAA and GDPR regulations.

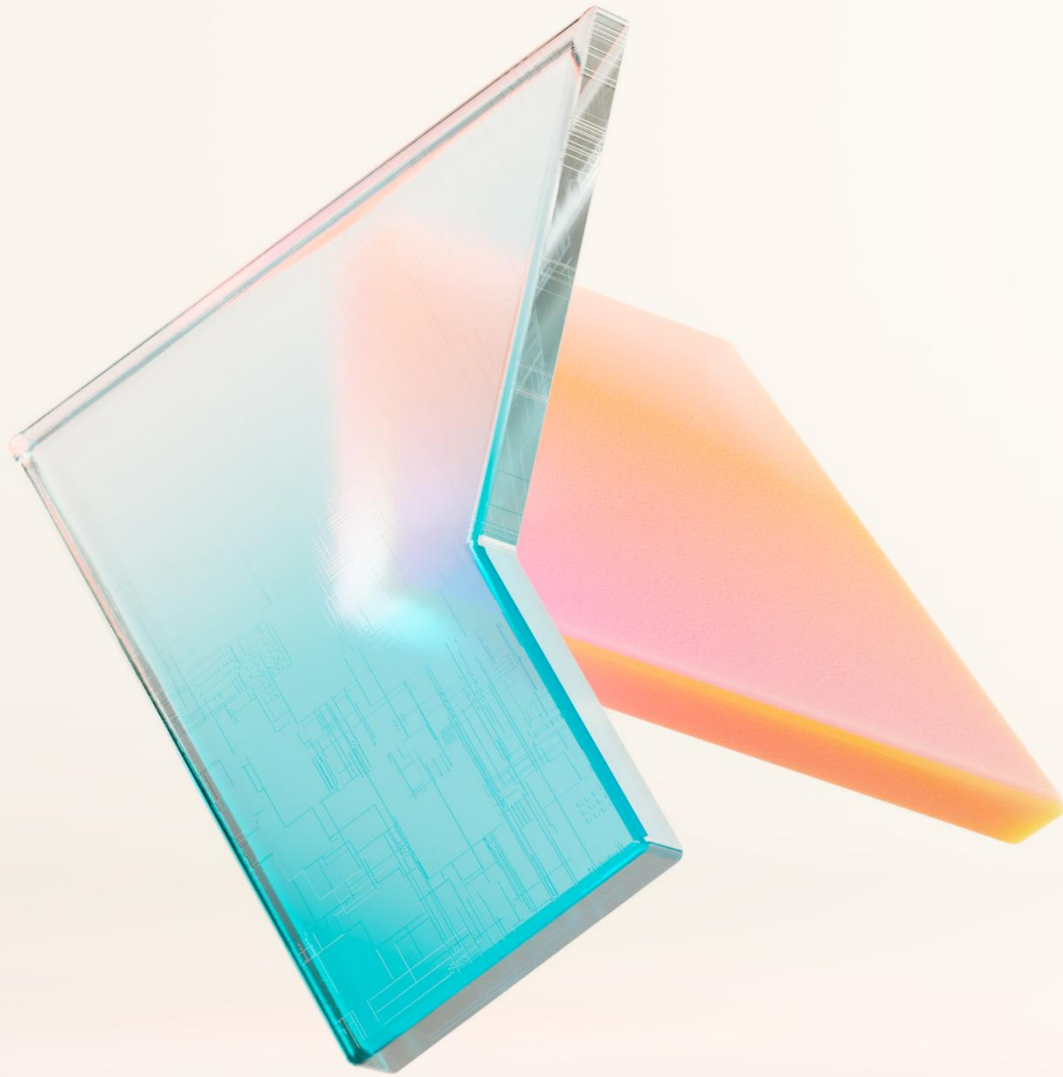


## Outcome:

Proactive identification of high-risk patients.

Efficient allocation of healthcare resources.

Improved patient care and reduced costs.

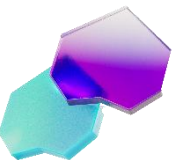


Fabric Databases  
Featured Partner

# Fabric DB Featured Partners

## Drive Partner Success in first few Fabric DB implementations

- Work with a small group of Analytics partners on their first few Fabric DB Implementations
- Provide partners with all the resources they need to get enabled, pitch, pilot, and implement successfully
- Capture feedback, learning and best practices from those implementations
- Feature the Partners in Winwires, Livewires, on AppSource and at Microsoft key events



# Fabric Databases: Partner gives and gets

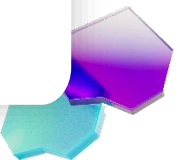
## Partner gets

- Partner enablement:
  - Access to early training material
  - Priority spots in training bootcamps and workshops
- Sales collateral: Pitch decks, demos and demo videos
- Pre-sales and post-sales funding through Azure Innovate and AMM \*
- Joint account team planning
- **A dedicated Microsoft's Partner Solution Architect(PSA)** with direct access to engineering who can provide:
  - Validation of key assumptions
  - Access to engineering support for the first few implementations
  - A direct line to ask questions and report bugs during the first few implementations
- Bi-Weekly connect to review status and unblock any blockers
- Getting featured following first successful implementation

## Partner gives

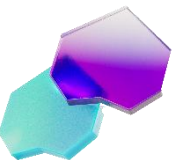
- **Identify a champ to work with Microsoft**
  - Someone who is not only deep technically but also a community leader in their org, so they can land the information they receive broadly and funnel questions from their community to Microsoft's PSA
- Commit to train x consultants using Microsoft learn modules and workshops (to become available in early 2025)
- Identify a list of at least 5 qualified customers to jointly target
- **Attend bi-weekly meetings** and provide status updates
  - Progress per customer (Connect with MS Account team → Deliver SQL Database in Fabric Pitch → Identify Executive Sponsor → Select project for Pilot → Execute Pilot → Deploy SQL Database in Fabric in production → Create and publish success story)
  - Feedback on engagement with Microsoft account teams
  - Feedback on pre-sales content
  - Feedback on product

\* Azure Innovate and AMM funding is dependent on fulfilling offering requirements

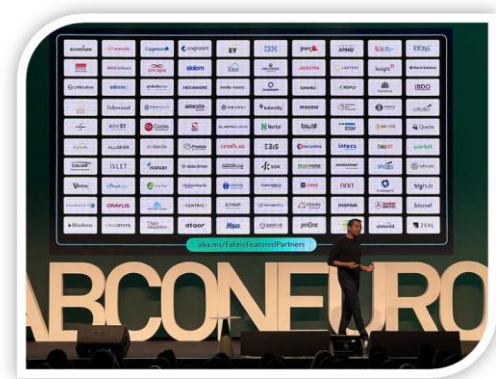


# Requirements for Fabric Databases Featured Partner

- Analytics Specialization
  - Analytics on Azure (and/or)
  - Infra and Database Migration
- 5+ individuals completing Fabric Databases Learn Module ([https://learn.microsoft.com/en-us/training/paths/implement-operational-databases-in-microsoft-fabric/?ocid=fabricdb\\_prodanna\\_blog\\_azdata](https://learn.microsoft.com/en-us/training/paths/implement-operational-databases-in-microsoft-fabric/?ocid=fabricdb_prodanna_blog_azdata))
- 1+ verifiable customer implementation on Fabric Databases on paid SKUs



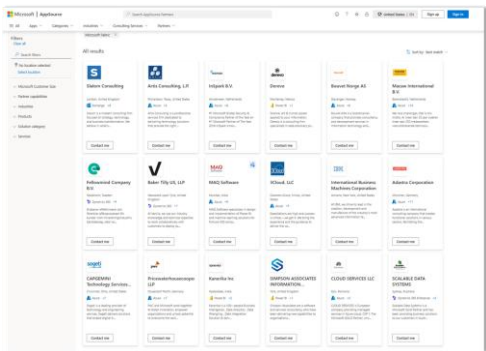
# Benefits of Fabric Databases Featured Partner



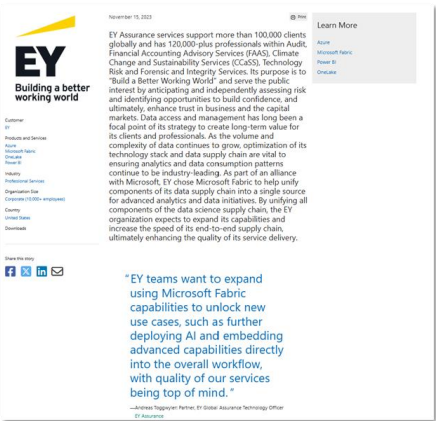
Partner promotion at major Microsoft events



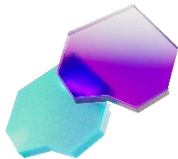
Win emails sent across Microsoft sellers



Partner profile showcase in Microsoft AppSource



Nominate for public facing case studies





MGM GRAND, Las Vegas, NV

**March 31 -  
April 2, 2025**

Workshops: March 29, 30, and April 3  
Partner Pre-Day: March 30<sup>th</sup>

Join us at the second annual Microsoft Fabric Community Conference and get up close with the latest data, analytics, and AI developments—plus network with community leaders and other technical experts from around the world. Use code **Partner200** to save **extra \$200!**



Register now: [aka.ms/fabcon25/partner](https://aka.ms/fabcon25/partner)



Thank You