

Power your AI transformation with the Microsoft Cloud

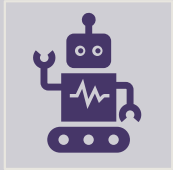
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Agenda



Microsoft Fabric: The data platform for the era of AI



Azure AI: Full-lifecycle tools for designing and managing AI models



AI is only as good as your data.

Every organization is scrambling to bring AI to their data estate.

Analytics today

Analytics have very predictable patterns

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



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Data Integration



Data Engineering



Data Warehousing



Real Time Analytics



Data Science



Business Intelligence



Data Lake



Governance and Administration

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



Microsoft Fabric

The data platform for the era of AI

OneLake

Eliminate data siloes and duplications

Everything SaaS-ified

Easy to use, optimized for the productivity of each persona in business and IT, and “co-pilot accelerated”

AI-Ready

Accelerate AI Applications and AI driven insights

Data Security

Consistent Security and Governance of your data



Microsoft Fabric does it all—in a unified solution



Data
Factory



Data
Engineering



Data
Warehouse



Data
Science



Real-Time
Intelligence



Power BI



Partner &
Industry
workloads



Copilot in Fabric



OneLake



Microsoft Purview

OneLake

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



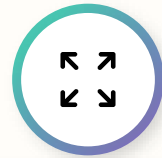
Simplicity of purchasing

Automatically provisioned single storage service for all workloads



Single source of truth

Bring in data from anywhere and reduce costs from data duplication by virtualizing your cross-cloud data in OneLake



Maximize data investments

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



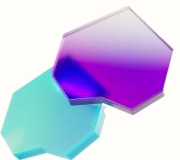
Open access

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

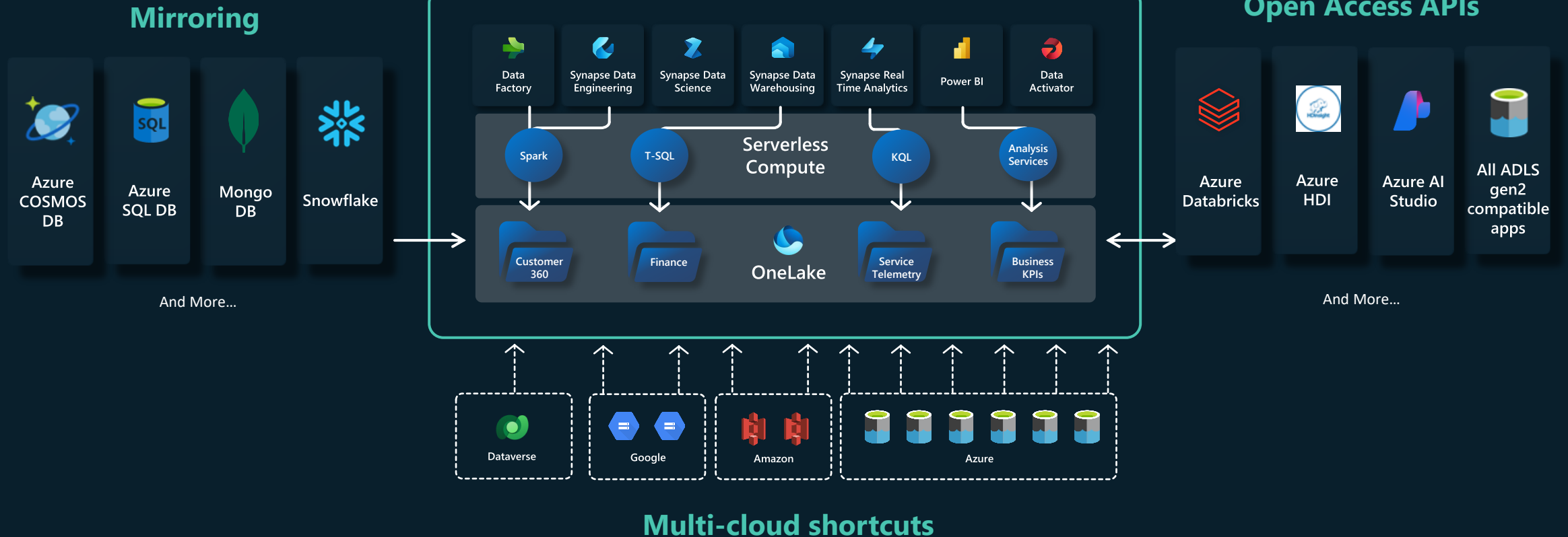


All roads lead OneLake

Creating Data Gravity in OneLake

Fabric compute engines

Microsoft Fabric



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, Power BI, Data Activator, and Copilot.



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. [Smoothing](#) on compute usage also allows you to size capacity closer to the average usage than the peaks



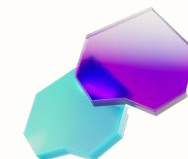
Value optimization

Adjust compute capacity by scaling up and down



Transparent monitoring

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





Simplistic Pricing

Compute

A shared pool of capacity that powers all capabilities in Microsoft Fabric

Reserved Instance model with deep discounts

Pay-as-you-go model (per second billing)

Storage

OneLake is a single place to store all data

Pay-as-you-go (\$ per GB / month)

Applicable data transfer network charges

[Microsoft Fabric - Pricing | Microsoft Azure](#)

Explore the Fabric Roadmap

Rapid pace of innovation

Jul 2023

Aug 2023

Sep 2023

aka.ms/FabricRoadmap

Microsoft | Fabric | Blog | Community | Support

Microsoft Fabric Blog

Blog > Announcements > Microsoft Fabric July 2023 Update

Microsoft Fabric July 2023 Update

Announcements | Apache Spark | Core | Data Activator | Data Factory | Data Science

Data Warehouse | Monthly Update | OneLake | Real-time Analytics | Synapse

August 9, 2023 by Ryan Majidimehr

Welcome to the July 2023 update. We have features in Core, Synapse, Data Factory, Community, and Power BI.



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Microsoft | Fabric | Blog | Community | Support

Microsoft Fabric Blog

Blog > June 2023 > Microsoft Fabric August 2023 update

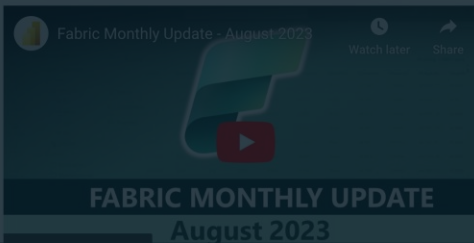
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Microsoft Fabric Blog

Blog > All > Microsoft Fabric September 2023 update

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- Core
 - [Monitoring hub - column options](#)
- [OneLake](#)
 - [OneLake file explorer \(v.1.0.10\) - Menu Option to View Workspaces and Items Online](#)
- [Power BI](#)
 - [General](#)
 - [Upgrade Power BI Desktop .NET Framework to 4.7.2 or newer](#)
 - [Reporting](#)

Azure AI

Best-in-class AI foundation models



Azure AI Services

Pre-trained, turnkey solutions
for intelligent applications



Azure Machine Learning

Full-lifecycle tools for designing
and managing AI models



Responsible AI Tooling

Build and manage apps that
are trustworthy by design



A comprehensive platform to develop and deploy custom copilots

Best Friends



Ensure that artificial general intelligence (AGI) benefits humanity



Empower every person and organization on the planet to achieve more

Azure OpenAI Service

Language

**GPT-4,
4-Turbo
3.5-Turbo**

On Your Data GA

Multi-Modal

**GPT-4o
GPT-4-Turbo
with Vision**

Azure AI Studio GA

Fine Tuning

**GPT-4
GPT-3.5-Turbo**

Assistants API Preview

Images

DALL·E 3

Transcription & Translation

Whisper

Provisioned Throughput

You can have confidence when using Azure OpenAI Service

When you use Azure OpenAI Service, your prompts (inputs) and completions (outputs), your embeddings, and your training data

Are NOT available to other customers.

ARE NOT available to OpenAI.

Are NOT used to improve OpenAI models.

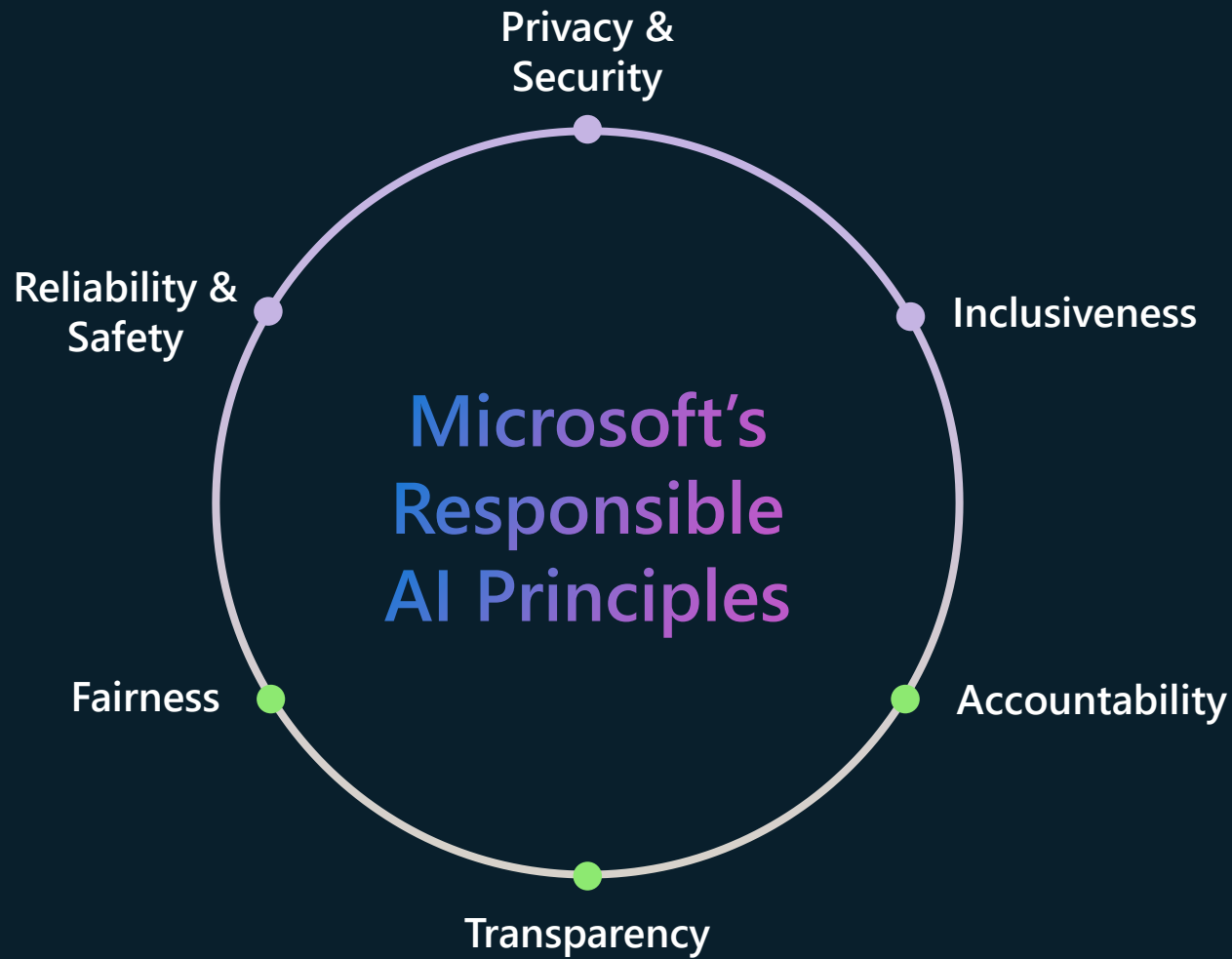
Are NOT used to improve any Microsoft or 3rd party products or services.

Are NOT used for automatically improving Azure OpenAI models for your use in your resource (The models are stateless, unless you explicitly fine-tune models with your training data).

Your fine-tuned Azure OpenAI models are available exclusively for your use.

The Azure OpenAI Service is fully controlled by Microsoft; Microsoft hosts the OpenAI models in Microsoft's Azure environment and the Service does NOT interact with any services operated by OpenAI (e.g., ChatGPT, or the OpenAI API).

Microsoft's Responsible AI Principles



Building blocks to enact principles



Tools and processes



Training and practices



Rules



Governance

Introducing Azure AI Content Safety

Azure AI Content Safety uses AI to help you create safer online spaces.

- With cutting edge AI models, it can detect hateful, violent, sexual, and self-harm content and assign it a **severity score**, allowing businesses to prioritize what content moderators review.
- **Azure AI Content Safety can handle nuance and context**, which eases the load on human content moderator teams.
- Azure AI Content Safety isn't one-size-fits-all—it can be **customized to help businesses implement their policies**. Plus, its multi-lingual models enable it to **understand many languages simultaneously**.

● Azure AI Content Safety classifies harmful content into four categories:



Hate



Sexual



Self-harm



Violence

● Next, it returns a four or eight severity level for each category:

Hate: 0 – 2 – 4 – 6 or 0-1-2-3-4-5-6-7
Sexual: 0 – 2 – 4 – 6 or 0-1-2-3-4-5-6-7
Self-harm: 0 – 2 – 4 – 6 or 0-1-2-3-4-5-6-7
Violence: 0 – 2 – 4 – 6 or 0-1-2-3-4-5-6-7

● Then, users take actions based on the severity levels:

Auto allowed
Auto rejected
Send to human moderator

Wiersholm

"Vi forsto tidlig at dette er en teknologi som gjør oss enda bedre på det vi er gode på"

- Simen Kjelsrud, CTO, Wiersholm

Build 2024 announcements in Azure AI

General availability

Azure AI Studio

General availability

GPT-4o with global deployments

General availability

PHI-3 SLMs

General availability

GPT-4 Turbo with Vision, DALL·E 3, Whisper

Generally Available (Refresh)

On your data

Preview (Refresh)

Assistants API

Preview

Fine Tuning for GPT-4

Preview

Batch API

Preview

Configurable Content Filters for Dall-E and GPT-4-Turbo

Preview

Integration with Azure Communication Services for WhatsApp

Preview

Video Translation



Azure OpenAI Service

New

General availability

GPT-4o

General availability

GPT-4 Turbo with Vision, DALL·E 3, Whisper

Preview (New Features)

Assistants API

Preview

Fine Tuning for GPT-4

Preview

Batch API

Generally Available (Refresh)

On your data

Preview

Configurable Content Filters for Dall-E and GPT-4-Turbo

Preview

Integration with Azure Communication Services for WhatsApp

Top use cases for Azure OpenAI Service

Business Needs

Increase Productivity

Internal Virtual Assistant
Developer Efficiency
Document Creation and Analysis
Business Analytics
Learning

Automate Process

Workflow Management/RPA
Document Processing
Fraud, Security & Threat Detection
Digital Inspection & Comparison
Supply Chain Optimization
Compliance

Improve Customer Experience

Personalized Customer Experience
Intelligent Contact Center
Accessibility

Build Creative Content

Marketing, Advertising & Sales Content Generation
Digital Asset Management
Personalized Content Generation
Product Design & Development
Digital Art (including branded content)

Business Use Case – Technical Pattern

What can Generative AI do?

Generate New Revenue Streams

Deliver Differentiated Customer Experiences

Modernize Internal Processes

Generally Available



Azure AI Studio

A comprehensive platform to develop and deploy custom copilots

API and Model
Choice

Complete AI
Toolchain

Responsible AI
Tools

Enterprise-grade
Production at Scale

[AI.Azure.com](https://ai.azure.com)

Generally available

GPT-4o available in Azure OpenAI Service

The most advanced multimodal API

Text, audio
and vision

2x faster,
5x throughput

50%
lower cost

Announcing

Fine-tuning

Fine-tuning now in
Azure AI Studio

Fine-tuning for
GPT-4

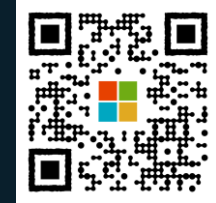
New Capabilities

Azure AI on *your* data

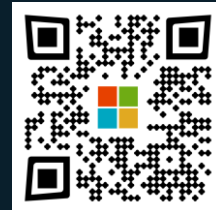


Resources

Bookmark the What's New in Azure OpenAI Service Page:
aka.ms/AOAI-Newsfeed



Read thought leadership
aka.ms/AI-Blog



Check out the latest customer stories:
aka.ms/AOAIstories

