



Microsoft Ignite Flash

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#SummitUp



Agenda

- Hybrid and multicloud
- End-to-end data platform
- Cloud native development
- Developer velocity

Microsoft Azure Cloud ☁️

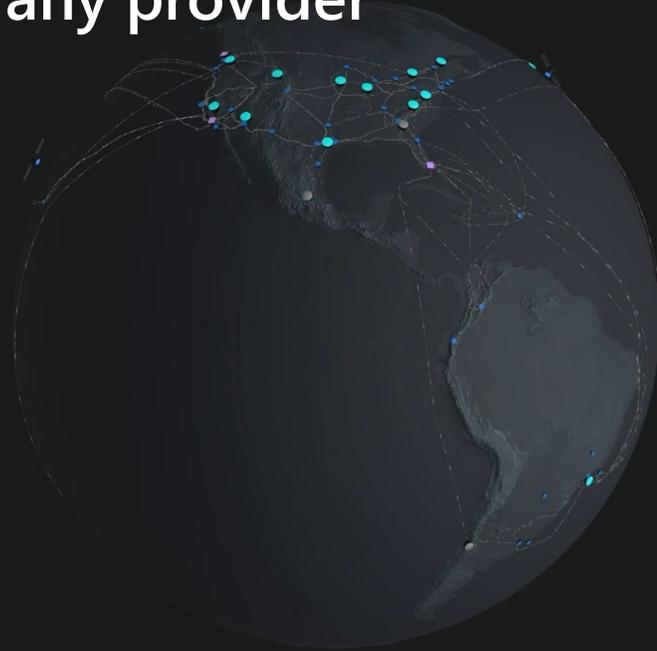
More trusted capability than any provider

60+ datacenter regions

100+ compliance offerings

35 countries with data residency

24 trillion+ daily security signals



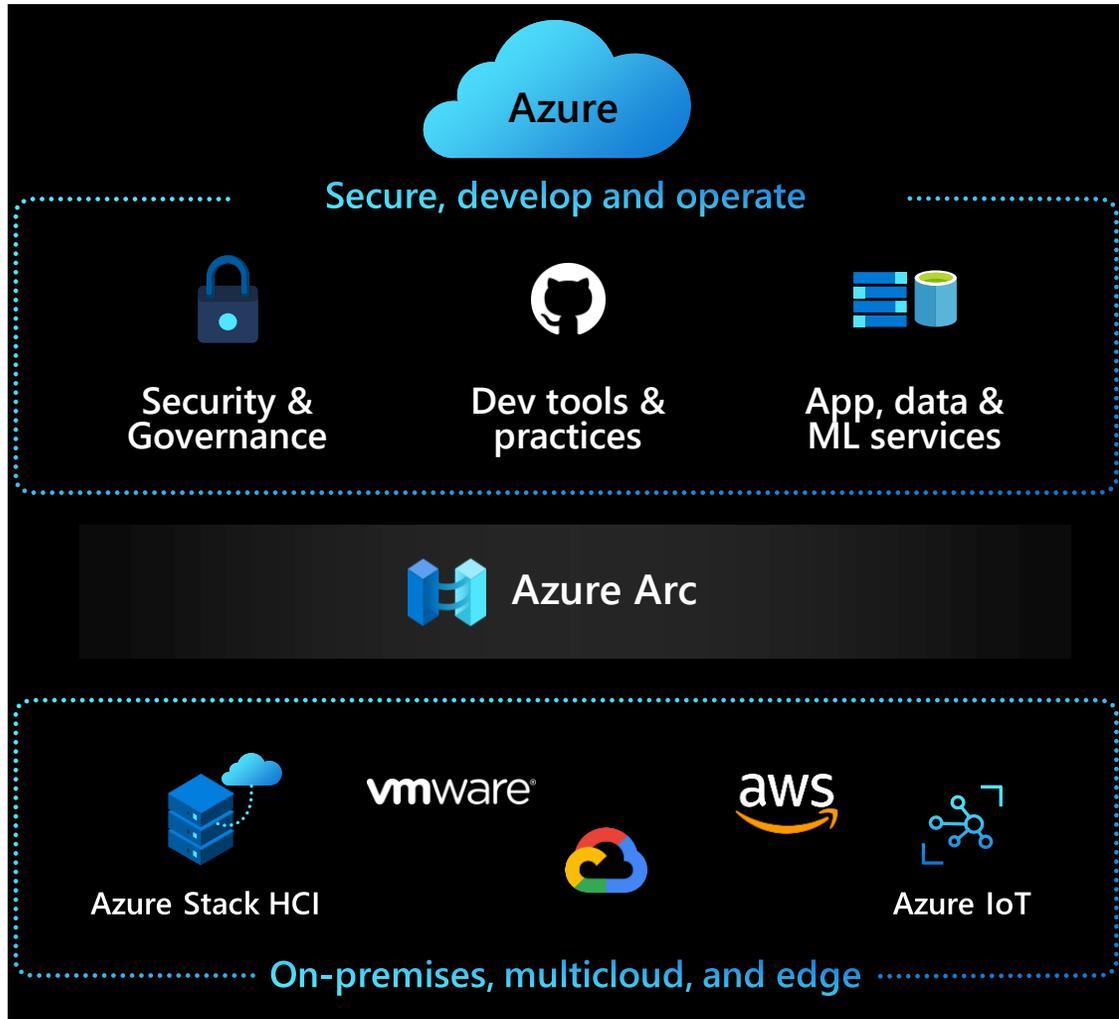
Most comprehensive hybrid and multi cloud platform



Hybrid and multi-cloud

Bring comprehensive Azure capabilities to hybrid and multi-cloud environments with Azure Arc

Innovate anywhere with Azure Arc



Azure Arc on VMware vSphere and Azure Stack HCI:

- Customers migrating their on-premises deployment to Azure VMware Solutions can also do lifecycle management of VMs from the Azure Portal.

Azure Arc-enabled Machine Learning capabilities update:

- Customers can train their machine learning models anywhere using Azure Machine Learning enabled by Azure Arc.

Hybrid and multi-cloud environments with Azure Arc

Azure Virtual Desktop for Azure Stack HCI:

- On-Premises Cloud-based desktop and app virtualization solution.

Azure Arc-enabled SQL Managed Instance update:

- Directly connected mode through Azure Arc generally available.

Microsoft Defender for multicloud scenarios:

- Multi-cloud Cloud Security Posture Management (CSPM) and Workload Protection capabilities

Azure Migration and Modernization Program (AMMP)

- Jetzt auch für Azure Arc

Azure Migration and Modernization Program (AMMP)



Infrastructure and database migration

Move your workloads to Azure to enhance IT resiliency, operational efficiency, and optimize costs.

[for Windows Server, SQL Server, VMware, Linux, OSS-databases, DevTest]



Virtual desktop infrastructure

Quickly migrate Windows desktops and apps to Azure with Azure Virtual Desktop and access your desktop and applications from virtually anywhere.

[for Windows 10 based virtual desktops, incl. VMware and Citrix solutions]



App and data modernization

Modernize your web apps on a highly productive platform with fully managed services.

[for all application languages and frameworks (.NET, Java, PHP, etc.) and supporting database backends]



SAP

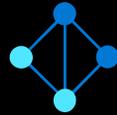
NEW

Migrate SAP landscapes to Azure and add complementary cloud services to accelerate innovation.

[for lift-and-shift, SAP HANA migration, and greenfield deployments]

Azure Migration and Modernization Program (AMMP)

expanded program support in AMMP



SAP

SAP lift & shift
SAP HANA



Security

Azure Security Center *
Azure Defender *



Hybrid

Azure Arc*



App modernization

Azure Red Hat OpenShift*
Build New/Cloud-native apps*



End-to-end data platform

Transform business and prepare for the future with comprehensive Azure data features

Azure data features

Introducing SQL Server 2022 (gated preview):

- SQL Server 2022, the most flexible, scalable, cloud-connected SQL Server release yet
- It offers **easier cloud integration than ever before** and comes with choice and flexibility across language and platform, including Linux, Windows, and Kubernetes.



Azure database services

SQL CosmosDB PostgreSQL MySQL Azure Database for Redis

Limitless scale and performance

Serverless: pay only for what you use

Real-time analytics on operational data

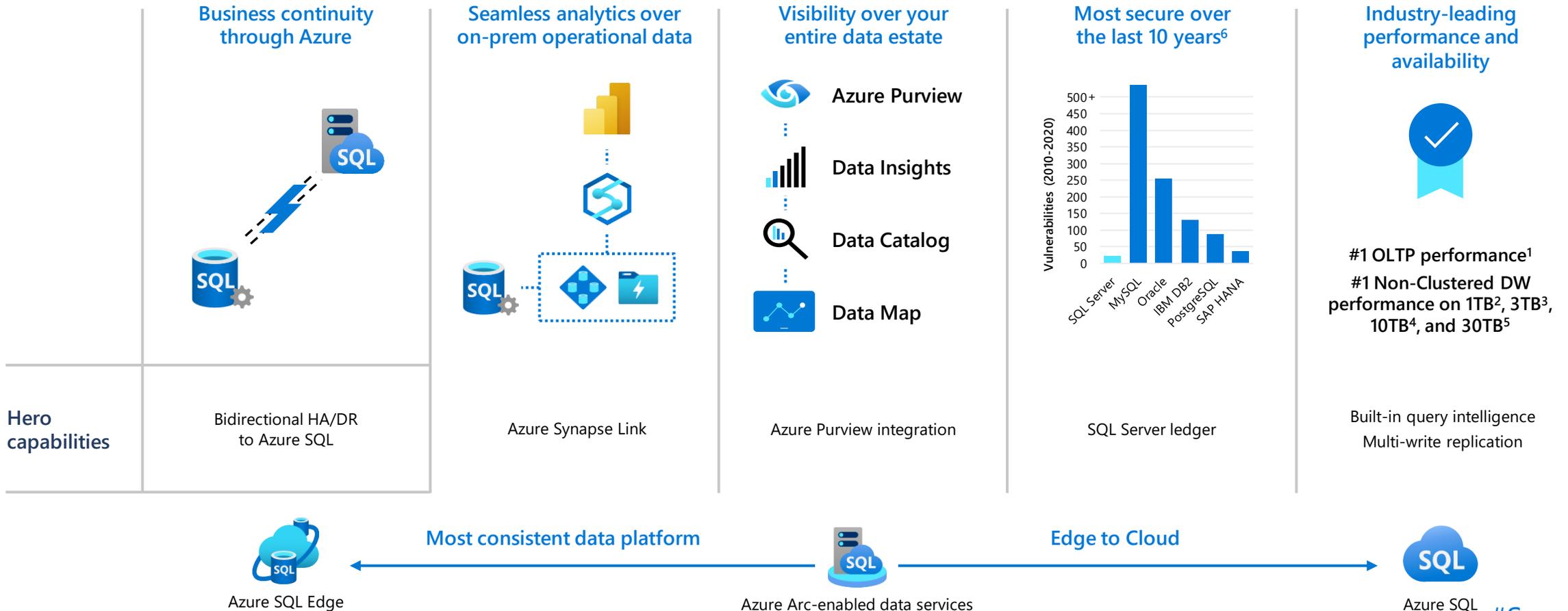
The graphic features a dark background with the title 'Azure database services' at the top. Below the title is a horizontal row of six database service icons: SQL, CosmosDB, PostgreSQL, MySQL, Azure Database for Redis, and another Redis icon. A blue downward-pointing arrow is centered below the icons. Below the arrow are three lines of text: 'Limitless scale and performance', 'Serverless: pay only for what you use', and 'Real-time analytics on operational data'.

SQL Server 2022

Microsoft Azure enablement

Performance, security, availability

Initially private preview, public preview spring, GA next year



#SummiTup

All TPC Claims as of 10/06/2021.

¹ <http://www.tpc.org/4087>; ² <http://www.tpc.org/3374>; ³ <http://www.tpc.org/3380>; ⁴ <http://www.tpc.org/3362>; ⁵ <http://www.tpc.org/3364>; ⁶ National Institute of Standards and Technology Comprehensive Vulnerability Database

Azure data features

Azure Purview for unified data governance:

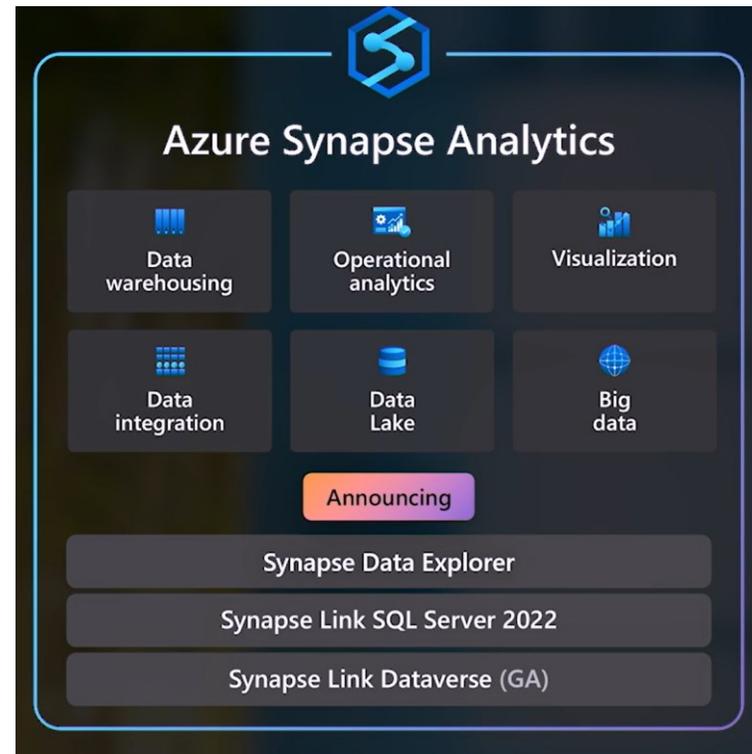
- To meet the increasing need for a comprehensive data governance service, Azure Purview helps organizations achieve a complete understanding of their data, wherever it's located.



Azure data features

Enhanced capabilities within Azure Synapse (preview):

- [Azure Synapse Data Explorer](#) is now part of Azure Synapse's unified analytics platform, so customers can easily access machine and user data to help improve business decisions.



Azure data features

What' new in NoSQL databases

Azure Cosmos DB introduces developer-friendly features:

- make it easier for developers to build and maintain cost-effective application databases
- significant developer productivity benefits alongside programming flexibility

Easy migration of Apache Cassandra data to the cloud to enable hybrid data to run in the cloud and on-premises to benefit from cloud elasticity and infrastructure management

Build and migrate Cassandra workloads to cloud with flexible deployment, elastic scaling, and robust security options

Managed and secure



Built in hybrid flexibility and control



Limitless and elastic scaling



Fully compatible Cassandra



Azure data features

What' new in relational databases

New investments in Azure SQL Managed Instance boost performance and security:

- Link feature in Azure SQL Managed Instance, providing hybrid flexibility and database mobility
- enable disaster recovery and bi-directional migration between SQL Server 2022 and fully managed SQL Managed Instance
- Premium-series, memory-optimized hardware
- Increased storage capacity to 16TB
- Windows authentication

Azure Cognitive Services

Azure OpenAI Service

- enterprise capabilities such as security, compliance and scale requirements that are available only on Azure, e.g. for summarization to content and code generation, can be applied to most mission-critical apps. (invitation only)

Use case	Cognitive Services for Language	OpenAI Service
Named entity recognition	✓	●
Key phrase extraction	✓	●
Sentiment analysis	✓	●
Q&A based on knowledge base	✓	●
Extractive summarization	✓	●
Content classification	✓	●
Translation	✓	●
Abstractive summarization	●	✓
Semantic search	●	✓
Language generation	✗	✓
Code generation	✗	✓

Simpler, straightforward to use

More accurate and broader language reach



Developer velocity & cloud native

Azure Container Apps

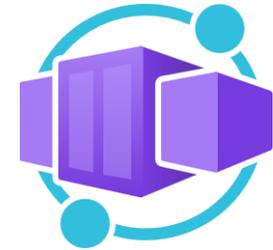
Public preview

Serverless containers for microservices

Build modern apps on open source

Focus on apps, not infrastructure

Seamlessly upgrade to Kubernetes



Kubernetes

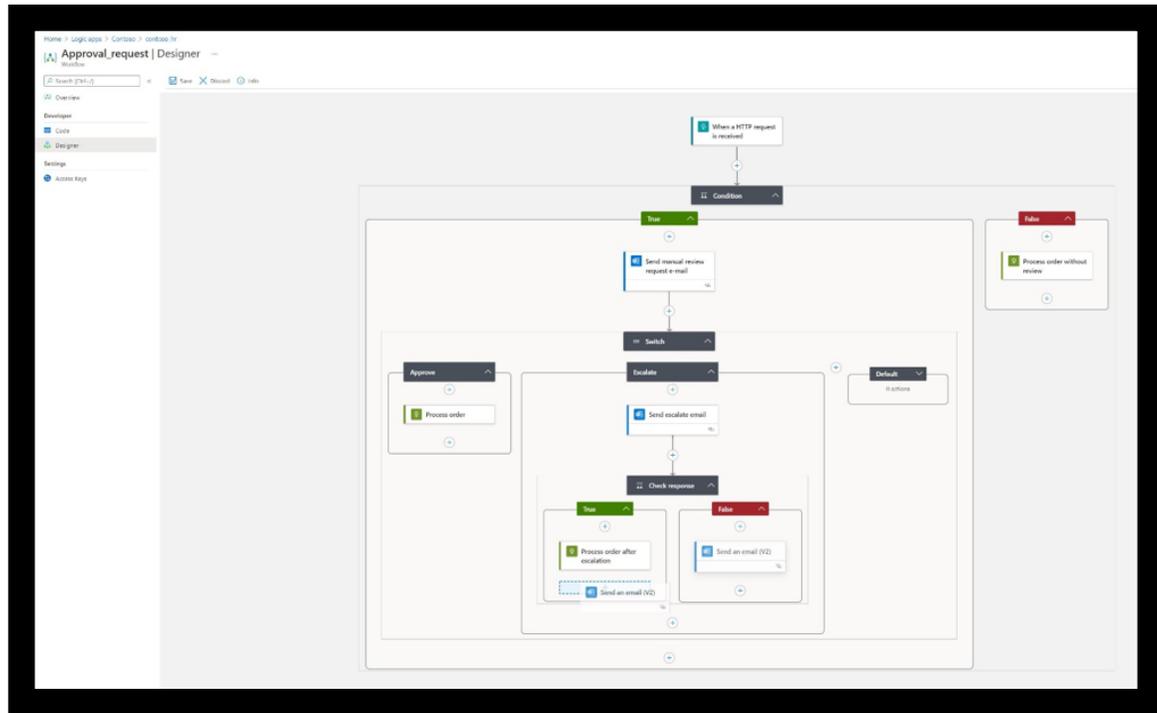


KEDA

DAPR

Envoy

Azure Logic Apps



- Help enterprise integration between mission critical systems in the cloud, on-premises and in a hybrid way with runtime available on Azure, Azure Arc and locally
- Better designer performance
- Managed identity support

Azure Communication Services

Azure Communication Services

General availability

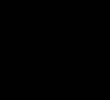
Interoperability with Microsoft Teams (Global)
GA slated for early December



External (BYOD)
Authentication



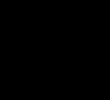
M365 / AAD
Authenticated



Contoso App



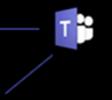
Contoso Service



Azure Communication
Services



Microsoft Teams



Teams User



Graph API / AAD
Meeting Context
Presence
Identity



Tech Community Blog:
[New releases for Azure
Communication Services](#)

Enabling developers to streamline voice, video and chat interactions between users on a custom-built app or website and Teams users.

Azure Chaos Studio

Azure Chaos Studio:

- Fully managed experimentation platform
- Helps simulate Real-World Outages



Subject your Azure applications to real or simulated faults



Observe how your applications respond to real-world disruptions



Integrate chaos experiments into any phase of quality validation



Use the same tools as Microsoft engineers to build resilience of cloud services

GitHub News

GitHub Copilot

Your AI pair programmer

- AI powered, context aware, code suggestions
- Convert comments into code
- Assists with whole lines or entire functions

```
sentiment.ts
1 #!/usr/bin/env ts-node
2
3 import { fetch } from "fetch-h2";
4
5 // Determine whether the sentiment of text is positive
6 // Use a web service
7 async function isPositive(text: string): Promise<boolean> {
8   const response = await fetch(`http://text-processing.com/api/sentiment/`, {
9     method: "POST",
10    body: `text=${text}`,
11    headers: {
12      "Content-Type": "application/x-www-form-urlencoded",
13    },
14  });
15  const json = await response.json();
16  return json.label === "pos";
17 }
```

 Copilot

GitHub Codespaces

Cloud developer environments

- Provision developer environments in <15 seconds
- Blazing fast with up to 32 cores + 64GB RAM
- Powered by Visual Studio Code with full terminal access
- Automated cost control

Wrap up

Updates that you need to remember

Hybrid and multi-cloud

- Azure Arc
- Microsoft Defender
- Azure Virtual Desktop for Azure Stack HCI

End-to-end data platform

- SQL Server 2022
- Azure Purview
- Azure Synapse Analytics
- Azure OpenAI

Cloud native development & Developer velocity

- GitHub
- Azure Container Apps
- Azure Logic Apps
- Azure Communication Services
- Azure Chaos Studio



All Updates - Book of News Ignite



Thank you