

Azure Updates
Quarter 3

Azure updates: Quarterly retrospective

July to September 2019



Contents

Foreword	4
Global availability	4
Compliance	4
TruSight certification	5
Making compliance easier with Azure Blueprints for NIST SP 800-53, CIS, SWIFT, IRS 1075, UK NHS, and Canada Federal PBMM	5
Product Updates	6
AI + Machine Learning	6
Azure Cognitive Services	6
Azure Search	7
Azure Kinect	8
Analytics	8
Azure HDInsight	8
Azure Databricks	9
Data Lake Analytics	9
Azure Stream Analytics	10
Azure Analysis Services	10
SQL Data Warehouse	11
Event Hubs	12
Azure Data Share	12
Blockchain	13
Azure Blockchain Service	13
Compute	14
Virtual Machines and Virtual Machine Scale Sets	14
HPC	16
Azure Disk Storage	17
SAP HANA/M Series	18
Azure Functions	19
Windows Virtual Desktop	19
Containers	20
Azure Container Registry	20
Azure Service Fabric	20
Azure Kubernetes Services (AKS)	21

Databases	23
Azure SQL Database	23
Azure Cosmos DB	24
Azure Cache for Redis.....	25
Data Factory	26
Azure Database for MySQL, PostgreSQL, and MariaDB.....	27
Developer tools	29
Azure Lab Services.....	29
Azure DevTest Labs	30
DevOps.....	31
Azure DevOps	31
Identity.....	32
Azure Active Directory (Azure AD)	32
Multi-Factor Authentication.....	33
Azure Active Directory B2C	33
Integration	34
Azure Logic Apps	34
Azure API Management.....	35
Internet of Things.....	35
Azure IoT Edge.....	35
Azure IoT Hub	36
IoT Plug and Play	37
Azure IoT Central.....	37
Azure Sphere	38
Management and governance	39
Azure Advisor	39
Azure Backup –	39
Azure Site Recovery.....	40
Azure Monitor	41
Network Watcher	43
Cloud Shell.....	43
Azure Blueprints	44
Azure Policy	44
Azure Cost Management.....	45
Azure Lighthouse.....	46
Azure portal.....	46

Media	47
Azure Content Delivery Network.....	47
Media Services	47
Microsoft Azure Stack	48
Microsoft Azure Stack	48
Migration.....	49
Azure Database Migration Service	50
Networking.....	51
ExpressRoute.....	51
Azure Virtual Network.....	51
Azure Bastion	52
Azure Firewall.....	52
Security	53
Key Vault	53
Azure Security Center.....	54
Storage	55
Storage Accounts.....	55
Azure NetApp Files	57
Azure FXT Edge Filer	58
Web.....	58
App Service.....	58
Azure SignalR Service	59
Appendix	60

Information in this document, including URL and other Internet website references, is subject to change without notice. Unless otherwise noted, the companies, organizations, products, domain names, email addresses, logos, people, places, and events depicted in examples herein are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2019 Microsoft Corporation. All rights reserved.

All other trademarks are property of their respective owners.

Foreword

Each quarter, Microsoft Azure delivers hundreds of new capabilities across our platform – from infrastructure and databases, to regional expansion and compliance offerings – to help your organization meet its business challenges. Between July 2019 and September 2019, we have launched over 200 new capabilities and enhancements across our platform. We’re constantly innovating to make it easier, faster, more secure, and more reliable to use our products and services to help you grow your business.

This edition of the Azure Updates Quarterly Retrospective describes all the latest Azure product and service releases, updates, and changes from July 2019 through September 2019. To see all Azure updates, you can browse this [site](#).

Global availability

In the third quarter, we announced availability of Azure services from new cloud regions in Switzerland and Germany. These new regions and our ongoing global expansion are in response to customer demand as more industry leaders choose Microsoft’s cloud services to further their digital transformations. As we enter new markets, we work to address scenarios where data residency is of critical importance, especially for highly regulated industries seeking the compliance standards and extensive security offered by Azure.

All **Global availability** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 28, 2019	Available	Microsoft Azure available from new cloud regions in Switzerland
September 10, 2019	Available	Microsoft Azure available from new cloud regions in Germany

Compliance

Azure became the first cloud solution provider to achieve a certification for TruSight, a third-party risk-assessment utility created by leading US banks for the collective benefit of financial institutions. Additionally, we added more blueprints mapped to important compliance offerings, including NIST SP 800-53, CIS, SWIFT, IRS 1075, UK NHS, and Canada Federal PBMM.

TruSight certification

Microsoft became the first cloud provider to receive a comprehensive cloud assessment from TruSight, an industry-backed, best-practices third-party assessment utility. The on-site assessment of Microsoft Azure, Microsoft 365, and Microsoft Dynamics 365 was conducted using TruSight’s best-practices assessment methodology. The new TruSight report gives financial services organizations a high-quality assessment of Microsoft’s cloud services based on standardized, industry-designed control assessment methodology. Visit the [Microsoft Trust Center](#) to learn more.

Making compliance easier with Azure Blueprints for NIST SP 800-53, CIS, SWIFT, IRS 1075, UK NHS, and Canada Federal PBMM

We continued to build a rich array of Azure Blueprints mapped specifically to important compliance offerings. In the spring quarter, we released ISO 27001, PCI DSS, and UK G-Cloud. Over the summer, we added more blueprints mapped to important compliance offerings, including NIST SP 800-53, CIS, SWIFT, IRS 1075, UK NHS, and Canada Federal PBMM. Azure Blueprints is a free service that enables you to define a repeatable set of Azure resources that implement and adhere to standards, patterns, and requirements. The new blueprints each map a core set of policies to the standard for any Azure deployed architecture, allowing you to quickly create new environments with compliance built into the Azure infrastructure. Use Azure Blueprints to set up governed Azure environments that can scale to support production implementations for large-scale migrations.

Learn more on the [Azure Blueprints documentation page](#).

All Compliance updates from July 2019 to September 2019 are listed below. See all the latest Azure updates.		
Date	Status	Title
September 4, 2019	In preview	Azure Blueprints—NIST SP 800-53 R4 blueprint release is now live
September 23, 2019	Available	Azure achieves TruSight certification

Product Updates

AI + Machine Learning

Azure Cognitive Services

The releases during Q3 2019 reflect continual momentum and improvement in the Cognitive Services portfolio.

With the addition of Azure Active Directory (Azure AD) authentication, customers can authenticate to Cognitive Services using Azure AD or user principals. This capability provides greater flexibility for managing access to Cognitive Services and makes it easier to use existing policies for credential rotation and to enforce custom password standards.

Form Recognizer expanded its feature set to include both prebuilt extraction capabilities to offer customers an option for quick extraction of common document formats (receipts) without having to upload five samples. By expanding the feature, we also added a name change to differentiate it from our custom extraction features, which involve training on a small set of samples.

Text Analytics launched its latest version of its sentiment analysis feature with greater accuracy in detecting sentiment and improved scoring for both an overall document and sentences contained within. It is currently available in English, Japanese, and simplified Chinese. Computer Vision launched its most advanced text extraction feature, 'Read', in Docker containers for customers to run locally. It will eventually replace the RecognizeText feature by offering more robust text extraction.

All **Azure Cognitive Services** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 15, 2019	In preview	Cognitive Services Form Recognizer prebuilt capability
July 26, 2019	Retiring	Cognitive Services Form Recognizer Name Changes
July 10, 2019	In preview	Cognitive Services Text Analytics sentiment v3 available in public preview

August 8, 2019	In preview	Cognitive Services—Azure Active Directory authentication and custom subdomains are now in preview
September 12, 2019	Available	Azure Cognitive Services Text Analytics—New sentiment analysis capability is now available
September 20, 2019	In preview	Computer Vision releasing 'Read' text extraction feature in containers

Back to [table of contents](#)

Azure Search

The releases during this time period reflect continual momentum and improvement in Azure Search, specifically in expanding SKU and region availability.

Storage Optimized editions, L1 & L2, are now generally available-- offering significantly more storage at a reduced price per tier. These editions are ideal for solutions with a large volume of index data and low query demands throughout the day. This is well suited for internal applications searching over large file repositories, searching an archive of many years of business data, or e-discovery.

All **Azure Search** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 1, 2019	Available	Azure Search – New storage optimized service tiers are now available
July 24, 2019	In preview	Azure Search is now integrated with the Azure Government cloud

Back to [table of contents](#)

Azure Kinect

Azure Kinect DK is a developer kit with advanced artificial intelligence (AI) sensors for building sophisticated computer vision and speech models. In the third quarter, this was made generally available in the United States and China.

All **Azure Batch AI** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 15, 2019	Available	Azure Kinect DK is now generally available in the United States and China

Back to [table of contents](#)

Analytics

Azure HDInsight

Azure HDInsight customers have access to the latest and most popular Apache open source analytics frameworks. During Q3 CY2019, Azure HDInsight added support for Apache Spark 2.4 and Apache Kafka 2.1. Developers can use these versions of Spark and Kafka in order to develop higher performance and more resilient batch and stream analytics applications on Azure HDInsight.

Administrators and data engineers can now automate the provisioning, scale up/down, management and monitoring of HDInsight clusters using Azure CLI commands that are now generally available across all regions.

All **HDInsight** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
September 23, 2019	Available	Azure CLI support for Azure HDInsight is now available
July 8, 2019	Available	Apache Spark 2.4 and Apache Kafka 2.1 support on Azure HDInsight

Back to [table of contents](#)

Azure Databricks

Azure Databricks Unit Pre-purchase plan : Azure Databricks Unit (DBU) pre-purchase plan is now available, helping to make Azure the most cost-effective cloud for your workloads. This new pricing option saves you up to 37 percent compared to pay-as-you-go pricing by pre-paying for your Azure Databricks Units for a one-year or three-year term. Improve your budget forecasting with a single upfront payment, which makes it easy to calculate your investments. All Azure Databricks SKUs—Premium and Standard SKUs for Data Engineering Light, Data Engineering, and Data Analytics—are eligible for DBU pre-purchase.

All **Azure Databricks** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 7, 2019	Available	Azure Databricks Unit pre-purchase plan is now available

Back to [table of contents](#)

Data Lake Analytics

In July this year, we announced the preview for new functionality that will enable customers to manage the same data using either the Blob APIs or ADLS Gen2 APIs. Multi-protocol data access for Azure Data Lake Storage Gen2 will bring features like snapshots, soft delete, data tiering, and logging that are standard in the Blob world to the filesystem world of ADLS Gen2.

For more information on Multi-protocol data access for Azure Data Lake Storage, please read our blog post [here](#). For more information on Multi-protocol data access for Azure Data Lake Storage pricing, please see our pricing page [here](#).

All **Data Lake Analytics** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
------	--------	-------

July 15, 2019	In preview	Multi-protocol Data Access for Azure Data Lake Storage is now in public preview
---------------	------------	---

Back to [table of contents](#)

Azure Stream Analytics

Beginning in July, Stream Analytics now offers native support for Apache Parquet format when writing to Blob storage. Apache Parquet is a columnar storage format tailored for bulk processing and query processing in the big data ecosystems.

All Azure Stream Analytics updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
July 15, 2019	Available	Azure Stream Analytics now offers native support for Apache Parquet format

Back to [table of contents](#)

Azure Analysis Services

Starting in July, Azure Analysis Services has some new features for performance, logging and replica synchronization. We've also added two new SKU's; the S8v2 and the S9v2 – both offer later processor revisions which deliver higher compute capability. We have also added query interleaving which provides optimal query execution ensuring all queries are executed in the shortest timeframe possible.

For customers who have or want to scale-out Analysis Services, we have introduced an improved scale-out experience with improved scale-out logging. Now customers can see QPU and memory utilization across all replicas, auditing, monitoring of server health, and detection of long-running queries using the Kusto language.

All Azure Analysis Services updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title

July 11, 2019	In development	In development: query interleaving for Azure Analysis Services
September 17, 2019	Available	Azure Analysis Services scale-out improvement
September 17, 2019	Available	Azure Analysis Services diagnostic logging improvements for scale-out
September 17, 2019	In development	Improved query replica synchronization in Azure Analysis Services is in development
September 20, 2019	Available	Azure Analysis Services—Two new higher compute SKUs are now available

Back to [table of contents](#)

SQL Data Warehouse

In April 2019, Reserved Capacity pricing went into effect. This allows you to reserve compute power for existing and future clusters. In September 2019, we added this feature to an additional 18 regions.

To enhance performance, we've released Materialized Views, Result-set Caching, and Intelligent Workload Management, so you now have improved query performance and accelerated time-to-insight. Use Intelligent Workload Management to directly influence the run order of queries and provide users with quick results. Additionally, Dynamic Data Masking, which enables administrators and data developers to control access to sensitive data, allowing it to be safer and more restricted, is now available.

All SQL Data Warehouse updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
September 4, 2019	Available	Reserved Capacity for Azure SQL Data Warehouse Now

		Available in Additional 18 Regions
September 6, 2019	In preview	SQL Server Data Tools is now available with Visual Studio 2019 Preview

Back to [table of contents](#)

Event Hubs

In early July, we shared a new set of libraries for working with Azure Storage, Azure Cosmos DB, Azure Key Vault, and Azure Event Hubs in Java, Python, JavaScript or TypeScript, and .NET. These libraries provide access to new service features, and represent the first step towards applying a new set of standards across the Azure SDKs that we believe will make the libraries easier to learn and integrate into your software.

All Event Hubs updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
July 15, 2019	In preview	A new set of Azure SDKs is now available in preview

Back to [table of contents](#)

Azure Data Share

Azure Data Share is now in preview. Azure Data Share is a simple and safe service for sharing big data with other organizations. Data is often at its most powerful when it can be shared and combined with data from business partners and third parties. For customers, sharing this data in a simple and governed way has historically been challenging. Azure Data Share is a fully managed service that allows easy and safe big data sharing in Azure Blob Storage and Azure Data Lake Storage. The intuitive interface makes sharing easy and productive, directly from the Azure portal. With just a few clicks data professionals choose which data to share and who to share it with. With Azure Data Share, data professionals have greater control over each data sharing relationship and can govern use by associating term of use with each data share created. Alongside governance, security is fundamental in Azure Data Share and leverages core Azure security measures to help protect the data.

All **Azure Data Share** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 15, 2019	In preview	Public preview: Azure Data Share

Back to [table of contents](#)

Blockchain

Azure Blockchain Service

Now generally available, our new interactive debugger helps developers work more efficiently with the updated Azure Blockchain Development Kit. While there are some great command line tools (e.g., Truffle Debugger), these tools aren't integrated into integrated development environments (IDE) like Visual Studio Code. Native integration of the Truffle Debugger into Visual Studio Code brings all the standard debugging features that developers have come to rely on, e.g., like breakpoints, step in/over/out, call stacks, watch windows and Intellisense pop ups that let developers quickly identify, debug, and resolve issues. Additionally, this brings all the major components of software development (build, debug, test and deploy) or smart contracts into the popular Visual Studio Code developer environment. Visit the Visual Studio Marketplace to try these new features today.

All **Azure Blockchain Service** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 21, 2019	Available	New Azure Blockchain SDK updates with Truffle

Back to [table of contents](#)

Compute

Virtual Machines and Virtual Machine Scale Sets

We have expanded our portfolio to increase flexibility and choice for our customers and enable the deployment of an ever-increasing number and type of workloads. We have also introduced new offerings that can help you improve the cost-effectiveness of your Azure IaaS deployments while extending the performance capabilities of the underlying infrastructure.

Flexibility and Choice – Infrastructure for every workload

Azure Dedicated Host

We have announced the Preview of Azure Dedicated Host, a new Azure service that enables you to run your organization's Linux and Windows virtual machines on single-tenant physical servers. Azure Dedicated Hosts can help you address corporate compliance and regulatory requirements. We are extending Azure Hybrid Benefit to Azure Dedicated Hosts, so you can save money by using on-premises Windows Server and SQL Server licenses with Software Assurance or qualifying subscription licenses. Azure Dedicated Hosts also provide visibility over the server infrastructure running your Azure Virtual Machines. With an Azure Dedicated Host, you can control all host-level platform maintenance initiated by Azure (e.g., host OS updates). Azure Dedicated Host is in Preview in most Azure regions.

Dv3 and Ev3 Azure VMs for general purpose and memory intensive workloads

We have also brought to market new Azure Virtual Machines as part of the Dv3 and Ev3-series—optimized respectively for general purpose and memory intensive workloads. These new VM sizes feature the latest AMD EPYC™ 7452 processor.

The new general purpose Da_v3 and Das_v3 Azure Virtual Machines provide up to 64 vCPUs, 256 GiBs of RAM, and 1,600 GiBs of SSD-based temporary storage. Additionally, the new memory optimized Ea_v3 and Eas_v3 Azure Virtual Machines provide up to 64 vCPUs, 432 GiBs of RAM, and 1,600 GiBs of SSD-based temporary storage. Both VM series support Premium SSD disk storage.

The new VMs are currently in preview in the East US Azure region and with availability coming soon to other regions.

New 48vCPUs sizes for Dv3, Dsv3, Ev3, Esv3, Fsv2, and Lsv2 VMs

New 48vCPUs sizes for the Dv3, Dsv3, Ev3, Esv3, Fsv2, and Lsv2 Azure Virtual Machines are now available. These new VMs will yield more flexibility for IT organizations that need to gradually scale up their workloads to meet their requirements. The new 48vCPUs VM sizes

give you the opportunity to ‘rightsized’ the vCPU count to better fit workload requirements.

Cost Effectiveness

Ephemeral OS Disks.

We have also announced the general availability of Ephemeral OS Disks. This feature is suitable for stateless workloads and enables the creation of thousands of VMs at scale with Shared Image Gallery. This new capability also lets you reimage your VMs to its original state. The new writes to Ephemeral OS disk are only cached locally on the VM; as a result, Ephemeral OS Disks work well for stateless workloads, where applications are tolerant of individual VM failures and the writes to the OS disk to persist only while the VM is running. Ephemeral OS Disks are offered at no charge (i.e., you incur no storage cost for the OS disk.) This functionality is available in all Azure regions, including Azure China and Gov regions.

New B-series VM sizes

We have also introduced new larger B-series VM sizes with flexible CPU usage (B12, B16 & B20). These larger B-series VMs will be able to provide lower cost VMs with flexible CPU usage. As with other B-series offerings, workloads that have ‘peaks and valleys’ usage patterns can take full advantage of the cost savings that these new sizes can offer. For example, workloads like build servers require 100% CPU utilization when the build is running, and for the rest of the time, the servers typically experience much lower CPU utilization rates. Other workloads include Dev and Test environments and web servers with customer engagement patterns that are subject to burst.

Performance

Proximity Placement Groups

The performance of your applications is central to the success of your IT organization. Application performance can directly impact your ability to increase customer satisfaction and ultimately grow your business. As we continuously improve the performance of Azure IaaS, we have announced the preview of proximity placement groups. Azure proximity placement groups represent a new logical grouping capability for your Azure Virtual Machines. When you assign your virtual machines to a proximity placement group, the virtual machines are placed in the same data center, resulting in lower and deterministic latency for your applications. Proximity placement groups improve the overall application performance by reducing the network latency among virtual machines. You should consider using proximity placement groups for multi-tiered, IaaS-based deployments where application tiers are deployed using multiple virtual machines, availability sets and/or virtual machine scale sets.

All **Virtual Machines & Virtual Machine Scale Sets** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 1, 2019	Available	Introducing B12, B16 & B20 - new larger B-series VM sizes with flexible CPU usage
July 11, 2019	Available	Azure Ephemeral OS Disk is now Generally Available
July 15, 2019	In preview	Proximity placement groups are now in preview
July 15, 2019	Available	New 48vCPUs Azure Virtual Machine sizes are now available
August 1, 2019	In preview	Azure Dedicated Host in Preview
August 7, 2019	Available	M-series virtual machines (VMs) are now generally available in the Brazil South Region
September 4, 2019	Available	M-series virtual machines (VMs) are now generally available in the France Central region
September 24, 2019	Available	Register your SQL Server on Azure VMs self-installations with Resource Provider

Back to [table of contents](#)

HPC

Two new HPC VMs designed to provide supercomputer-grade performance and scalability with the best price-performance on the public cloud are now available. The HC-series VMs are optimized for applications driven by dense computation, where the HB-

series VMs are optimized for HPC applications driven by memory bandwidth requirements.

NVv3, which is architected to support remote visualization workloads and other graphics intensive applications, is now generally available.

Microsoft and Cray jointly released three new offerings. Two of the offerings focus on industry-specific scenarios (manufacturing and EDA), while the third features Cray ClusterStor as an HPC high performance file system option both for Cray deployments in Azure as well as for usage with your H-series VMs.

Back to [table of contents](#)

Azure Disk Storage

New functionalities are coming to managed disks – cost -effective incremental snapshots of managed disks and direct upload to managed disks goes to public preview.

Incremental snapshots will enable customers and independent solution vendors (ISV) to build backup and disaster recovery solutions for Managed Disks by allowing to get the changes between two snapshots of the same disk, thus copying only changed data between two snapshots across regions, reducing time and cost for backup and disaster recovery.

Direct upload to managed disks help simplify the upload of an on-premises VHD or restore of a VHD to Azure Disks by removing the need to stage data in a storage account.

Recently, Larger managed disks sizes (8 TiB, 16 TiB, and 32 TiB) supporting up to 20,000 IOPS and 900 Mbps on a single disk recently became available. This helps to scale the disk capacity up to eight times over previous sizes, and triples the performance of Premium SSDs, Standard SSDs, and Standard HDDs. In addition, disk sizes up to 64 TiB on Ultra Disks is supported now.

Ultra Disks are now generally available. This service offers extremely scalable performance that can enable customer workloads to get up to 160K IOPS and 2 Gbps B/W at sub-millisecond latency, all with a single disk with no caching. Ultra Disks are designed for business critical, data-intensive workloads such as SAP HANA, NoSQL databases like Mongo DB, and real time OLTP workloads.

Back to [table of contents](#)

SAP HANA/M Series

M-series virtual machines are hyper-threaded and feature Intel® Xeon® E7-8890 v3 2.5GHz (Haswell) processors and provide up to 128 cores and 4 TB of Memory for unparalleled computational performance to support large in-memory workloads. In Q3 2019, we expanded M-series (v1) Virtual Machine availability up to 4TB in Brazil, South Africa, France, Switzerland and Germany regions. In addition, we made Mv2 VMs featuring Intel® Xeon® Platinum 8180M 2.5GHz (Skylake) processors that provides up to 208 vCPU and 6 TB VMs available in US East, US East 2 and US West 2 region.

All **HPC, SAP HANA/M Series, and Disk Storage** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 24, 2019	Available	Azure Mv2-series virtual machines (VMs) offering up to 6 TB of memory are now available for the US West 2 region
August 7, 2019	Available	M-series virtual machines (VMs) are now generally available in the Brazil South Region
August 15, 2019	Available	Microsoft Azure Ultra Disks now generally available
September 18, 2019	Available	M-series virtual machines (VMs) are now available in the Germany North region
September 18, 2019	Available	M-series virtual machines (VMs) are now available in the Germany West region
September 18, 2019	Available	M-series virtual machines VMs are now available in the Switzerland West and Switzerland North regions
September 18, 2019	In preview	Azure HPC Cache is now in preview

[Back to table of contents](#)

Azure Functions

Python support for [Azure Functions](#) is now generally available and ready to host your production workloads across additional scenarios, such as data science and machine learning, automated resource management, and more. These applications can now be published to a Linux-based serverless hosting platform in Azure, by bringing either your code or your Docker containers running the cross-platform, open-source Azure Functions runtime.

All **Azure Functions** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 24, 2019	In preview	Linux support on Azure Functions Premium plan
August 21, 2019	Available	Python support in Azure Functions is now available
August 21, 2019	Available	Azure Functions Consumption plan for Linux is now available

[Back to table of contents](#)

Windows Virtual Desktop

Windows Virtual Desktop is now generally available worldwide. Over the coming months we will continue to expand the Windows Virtual Desktop service to increase performance and reduce latency. Windows Virtual Desktop has also [integrated FSLogix technologies](#) and native Office improvements for virtualized environments. Profile container technology and specific investments for Office 365 ProPlus in virtualized environments, will be available to provide smooth performance for users.

All **Windows Virtual Desktop** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
------	--------	-------

September 30, 2019	Available	Windows Virtual Desktop is now generally available worldwide
--------------------	-----------	--

Back to [table of contents](#)

Containers

Azure Container Registry

Container Registry added capabilities to simplify routine tasks and support for self-diagnostics. ACR Tasks now support automated scheduling to support jobs such as auto-purging old images or automated testing. ACR Buildpacks, available in public preview, simplify building containers from code. Self-diagnostic health check support enables customers to test the most common connectivity issues and get information about the health of the Azure Container Registry environment.

All Container Registry updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
July 15, 2019	Available	Azure Container Registry—Self diagnostic health check support in the Azure CLI
July 15, 2019	Available	Azure Container Registry—Support for scheduling in Container Registry Tasks
July 24, 2019	In preview	Azure Container Registry—Buildpacks support in Tasks is now in preview

Back to [table of contents](#)

Azure Service Fabric

Azure Service Fabric released several new features and two 6.5 Refresh releases focused on bug fixes and performance enhancements.

Preview of Managed Identity for Azure Service Fabric applications allows access to other Azure resources without requiring management of service principal credentials.

Service Fabric Application Resource Model, now generally available, enables the deployment of Service Fabric applications as resources via Azure Resource Manager. You can now describe applications and services in JSON and deploy them in the same Resource Manager template as your cluster.

Service Fabric Azure Files volume driver, now generally available, provides Azure Files based volumes for other Service Fabric container applications that are deployed to the cluster.

All **Service Fabric** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 3, 2019	Available	Azure Service Fabric 6.5 Refresh Release is now available
August 13, 2019	In preview	Public Preview of Managed Identity for Azure Service Fabric applications
August 14, 2019	Available	Service Fabric Azure Resource Manager (ARM) application and service deployment is now generally available
August 14, 2019	Available	Azure Service Fabric 6.5 Second Refresh Release is Now Available
August 26, 2019	Available	Service Fabric Azure Files Volume Driver is now generally available

Back to [table of contents](#)

Azure Kubernetes Services (AKS)

Azure Kubernetes Services (AKS) updates were primarily focused on providing additional enterprise-grade capabilities.

Egress Lockdown, available in preview, provide additional security to AKS cluster by restricting egress (outgoing) traffic. e.g. deny access to harmful resources outside the network.

Control plane audit logs, now generally available, facilitate investigation of suspicious API requests, collection of statistics, and creation of monitoring alerts.

Availability Zones, available in preview, enable AKS users to protect against datacenter failures and achieve higher availability and resiliency for worker nodes.

Additionally, AKS is now generally available to Azure Government (US federal, state, local and tribal governments, and their partners), bringing the total worldwide AKS availability to 29 regions.

All **Azure Kubernetes Service (AKS)** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 15, 2019	In preview	Availability Zones support is now available for Azure Kubernetes Service (AKS) in preview
August 7, 2019	In preview	Azure Kubernetes Service (AKS) for Azure Government in preview
August 7, 2019	Available	Audit logging in Azure Kubernetes Service (AKS) is now generally available
September 18, 2019	Available	Egress lockdown in Azure Kubernetes Service (AKS) is now generally available
September 18, 2019	Available	Azure Kubernetes Service (AKS) is now available in Azure Government

Back to [table of contents](#)

Databases

Azure SQL Database

Azure SQL Database has a strong track record of innovation for mission critical workloads. Our most recent investments demonstrate our commitment to maintaining the highest degree of reliability and helping ensure customers' most sensitive data is protected. New features and experiences provide even more ways for customers to manage SQL databases and virtual machines more efficiently and optimize price on intermittent workloads.

Ensuring customers' data is safe and the apps and processes they rely upon continue running in the face of a disruptive event is critical. SQL Database provides enterprise-grade reliability and protection with industry-leading availability guarantees, up to 99.995%, and the industry's only 100% business continuity SLA for a relational database service. Auto-failover groups, now available for managed instances, further promote business continuity by enabling replication and failover to another region after a catastrophic failure. Sensitive data is identified and labeled via data discovery and classification, which regularly scans your databases and recommends persistent classification labels which can be used for advanced sensitivity-based auditing and protection scenarios.

We're helping customers reduce the complexity and costs of their managing their SQL data. Now, customers can create and efficiently manage SQL Server-based apps at scale through a unified experience that spans a wide array of deployment options across PaaS and IaaS, provisioned and serverless. An update to the serverless compute tier (in preview) provides even greater potential for price optimization by reducing the auto-pause delay to one hour. This update lowers the threshold at which database activity is paused, representing potential savings opportunities on compute resources.

All **Azure SQL Database** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 9, 2019	In preview	Update to Azure SQL Database serverless provides even greater price optimization
July 11, 2019	Available	Azure SQL Database published the first in the industry business continuity

		SLA for a relational database service
July 16, 2019	In preview	Introducing UTF-8 support for Azure SQL Database
August 21, 2019	Available	SQL data discovery and classification for Azure SQL Database is now available
August 21, 2019	In preview	Azure SQL provides a unified management experience
September 18, 2019	Available	Auto-failover for managed instances in Azure SQL Database is now available

Back to [table of contents](#)

Azure Cosmos DB

Azure Cosmos DB continues to enhance the developer experience and has recently introduced a more intuitive programming model for its SDKs and new recommendations through the Azure portal. Version 3 of the Java, .NET, and Javascript SDKs are now generally available, and it was announced that v1.x of the Javascript SDK will be retired next year. In addition, a new Cassandra driver for the Java SDK is now in preview. To help customers optimize performance of their Azure Cosmos DB accounts and stay on top of service enhancements, new recommendation notifications have been introduced through the Azure portal and Azure Advisor.

All **Azure Cosmos DB** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 1, 2019	Available	Azure Cosmos DB ExpressRoute BGP Community now available

July 15, 2019	In preview	Driver extension for Cassandra in Azure Cosmos DB is now in preview
July 15, 2019	Available	Azure Cosmos DB JavaScript V3 SDK is now available
July 15, 2019	Available	Azure Cosmos DB Java V3 SDK now available
July 15, 2019	Available	Azure Cosmos DB .NET V3 SDK now generally available
July 15, 2019	In preview	A new set of Azure SDKs is now available in preview
August 7, 2019	In preview	Azure Cosmos DB Python SDK Version 4 is now in preview
September 4, 2019	Available	Monthly payment options are now available for Azure reservations
September 25, 2019	Available	Azure Cosmos DB recommendations keep you on the right track

Back to [table of contents](#)

Azure Cache for Redis

Azure Cache for Redis is rolling out Redis version 4.0 to all instances as an automatic update. With this update, Azure Cache for Redis customers will enjoy enhancements and improvements to performance, memory usage and more.

All Azure Cache for Redis updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
August 7, 2019	Available	Azure Cache for Redis 4.0 upgrade is now generally available

Back to [table of contents](#)

Data Factory

We have expanded features of Mapping Data Flows in Azure Data Factory, a capability which enables code-free data transformation at scale and transforms Data Factory into a comprehensive ETL (Extract-Transform-Load) offering. New built-in capabilities simplify handling complex data scenarios like flexible schemas and schema drift. The "Quick Actions" feature enables you to easily transform your big data at scale without writing any code or expressions. New parameter support makes it easy to build configurable data transformation logic in a code-free design environment, even when your logic is based on frequently changing attributes like time, date, or price.

Data Factory offers a growing portfolio of more than 85 natively built connectors for data integration that address on-premises, cloud, and multi-cloud settings. The connectors are maintenance free and provided as part of the fully managed service at no additional cost. New connectors and sink destinations this quarter include Netezza, Azure Database for PostgreSQL, and Azure Database for MySQL. To further speed up data integration, take advantage of new capabilities like the option to execute custom SQL scripts from your SQL sink transformation, and auto-creating a destination table where one does not exist while copying data.

All Data Factory updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
July 3, 2019	Available	Azure Data Factory upgrades Teradata connector to enable new features and enhancement
July 4, 2019	In preview	Azure Data Factory Mapping Data Flows public preview adds parameter support
July 29, 2019	In preview	New features added to Data Factory Mapping Data Flows making schema drift handling easy
August 17, 2019	In preview	New Quick Action Transformations Added to

		Data Factory Mapping Data Flows
August 28, 2019	Available	Azure Data Factory mapping data flows adds SQL scripts to sink transformation
September 9, 2019	Available	Copy data from Netezza to Azure with Azure Data Factory
September 18, 2019	Available	Azure Data Factory now supports copying data into Azure Database for MySQL
September 18, 2019	Available	Copy Activity in Azure Data Factory supports creating a destination table automatically
September 23, 2019	Available	Data Factory supports copying data into Azure Database for PostgreSQL

Back to [table of contents](#)

Azure Database for MySQL, PostgreSQL, and MariaDB

New built-in intelligence features for Azure Database for MySQL and MariaDB optimize your database performance and extend data security with Advanced Threat Protection. In addition, we've optimized our offer for high performance and read-intensive workloads by extending our performance capabilities with 16 TB storage and 20 IOPs, as well as by adding read replica to enhance the ability to scale out reads. We also announced support preview support of MySQL 8.0.

Easily migrate your existing MySQL or MariaDB instances or build new on Azure using the languages and frameworks of your choice like PHP, .Net, and Java. Tight integration with Azure App Services allows for seamless deployment of WordPress, Drupal, and other popular apps.

We have also announced the general availability of our support for PostgreSQL 11.0, which will bring our service up to date with the latest versions of PostgreSQL.

All **Azure Database for PostgreSQL, MariaDB, MySQL** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 9, 2019	In preview	Large storage for Azure Database for PostgreSQL now in preview
July 9, 2019	In preview	Large storage for Azure Database for MySQL now in preview
July 15, 2019	In preview	Read replica across regions for Azure Database for MariaDB
July 24, 2019	Available	PostgreSQL 11 is now generally available in Azure Database for PostgreSQL
July 24, 2019	In preview	Azure Database for MySQL support for MySQL 8.0 is in preview
August 21, 2019	Available	Same region read replica is now available for Azure Database for MariaDB
September 4, 2019	Available	Cross-region read replicas in Azure Database for MySQL are now available
September 4, 2019	Available	Cross-region read replicas in Azure Database for PostgreSQL are now available
September 18, 2019	In preview	Audit logging on Azure Database for PostgreSQL is now in preview

Back to [table of contents](#)

Developer tools

Azure Lab Services

Azure Lab Services enables you to quickly set up a classroom lab environment in the cloud. An educator creates a classroom lab, provisions Windows, or Linux virtual machines, installs the necessary software needed for the class, and makes them available to students. The students in the class connect to virtual machines (VMs) in the lab, and use them for their projects, assignments, classroom exercises.

This quarter, Azure Lab Services team removed unlimited quota option. Unlimited quota was the default option and if left as is, students got unlimited quota for their labs thus increasing the cost of the lab. There was strong feedback from customers to remove unlimited option and change quota into fixed number of hours and default to a small number so that professors can increase it only if needed.

We also added the ability to reset password so that professors and students can change password if needed. We introduced small GPU sizes to enable creation of Data Science/AI/ML/Graphics labs, Medium size that supports nested virtualization for small workloads that only require 2-3 nested machines inside the host.

All **Azure Lab Services** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 24, 2019	Available	Azure Lab Services—Ability to reset passwords and support for Ubuntu Images has been added
July 24, 2019	Available	Azure Lab Services has removed the unlimited option from quota per user to help save on costs
July 24, 2019	Available	Azure Lab Services now has a new instance size available—Medium (nested virtualization)
September 4, 2019	Available	Azure Lab Services has an updated UI experience for students

September 18, 2019	Available	Azure Lab Services now supports new GPU Virtual Machine sizes
--------------------	-----------	---

Back to [table of contents](#)

Azure DevTest Labs

Our focus for DevTest Labs continues in making the service a central place for development teams to use and configure all relevant Azure services. Over the past quarter, we enhanced our shared image gallery integration by enabling users select an older version of the shared image if the latest one does not work for any reason. We also added integration with Azure Bastion in Labs to enable lab users to connect to their VMs through a browser. Azure Bastion provides secure and seamless RDP/SSH connectivity to virtual machines directly in the Azure portal over SSL which can now be leveraged for lab machines as well. In addition, we released DevTest Labs in the South Africa North region to enable users in that region to create and use labs for dev, test, training scenarios; this release also includes support for compute auto shutdown schedules in the South Africa North region. This quarter we also released a preview upgrade of our DevTest Labs DevOps tasks that support cross-platform agents (Linux, macOS, or Windows), new tasks to delete custom images automatically and enhance the create VM task by adding support for parameter files from the DevOps source control. Lastly, added integration with the Remote Desktop gateway where lab owners can connect an existing remote desktop gateway to their lab to ensure secure access to the virtual machines without having to expose the RDP port. This approach is more secure because the user authenticates directly to the gateway machine or can use company credentials on a domain-joined gateway machine to connect to their machines.

All Azure DevTest Labs updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
July 15, 2019	Available	Azure DevTest Labs—Configure your lab to use a remote desktop gateway
August 7, 2019	Available	Create virtual machines (VMs) using an earlier shared image version

September 18, 2019	In preview	A preview upgrade for Azure DevTest Labs Tasks extension is now available
--------------------	------------	---

Back to [table of contents](#)

DevOps

Azure DevOps

In Q3 of 2019, in July, we added new capabilities at an unprecedented pace for Azure DevOps, including support for multi-stage YAML pipelines, Pipeline environments and Kubernetes integration, support for authenticating with GitHub identities, Python and Universal packages and public feeds in Azure Artifacts, as well as new and updated integrations with Jira Software, Slack and Microsoft Teams, along with other additions. We also announced the Sprint 155 update of Azure DevOps introducing new Azure Boards reports as well as the Azure Boards app for Slack.

In September, we announced Sprint 157 update of Azure DevOps, adding rollup columns to backlogs that let you track progress across work item hierarchies (for example, epics/features/user stories). We also added multiple improvements for deploying Azure App Service apps. Look for additional services to reach availability through the end of 2019.

All **Azure DevOps** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 26, 2019	Available	New Analytics reports and Azure Boards app available for Slack
July 31, 2019	In development	Azure DevOps Roadmap update for Q3 of 2019
September 6, 2019	Available	Updates to Azure DevOps and App Service improvements

Back to [table of contents](#)

Identity

Azure Active Directory (Azure AD)

Recent Azure AD innovation focused on delivering the final pillar of end-user passwordless solutions and making it easier for IT to manage and secure access to apps. With FIDO2 support, customers now have the choice between security keys, Microsoft Authenticator, and Windows Hello log in options to enable passwordless sign-in to Azure AD. In addition, IT now has insight into adoption of self-service password reset and Multi-Factor Authentication (MFA) in their organization to help better scale these security measures. Our investments in app security and management now allow more secure options for access to on-premises legacy apps as well as these already connected through partner infrastructure like SAP or F5 Networks. Finally, we're also allowing easier collaboration with partners through new direct federation identity provider options in Azure AD B2B.

All **Azure Active Directory** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 8, 2019	In preview	Azure AD B2B collaboration direct federation with SAML and WS-Fed providers
July 10, 2019	In preview	Azure AD support for FIDO2-based passwordless sign-in
July 11, 2019	In preview	Authentication method usage and insight reporting in Azure AD
July 23, 2019	Available	Azure AD Application Proxy support for single sign-on to SAML-based applications
August 8, 2019	In preview	Custom roles for app registration management
August 14, 2019	Available	Azure AD Application Proxy integration with the Power BI Mobile application

September 26, 2019	Available	Configure Azure AD as the trusted corporate identity provider in SAP Identity Authentication Service
September 30, 2019	Available	Secure hybrid access to apps behind existing F5 infrastructure

Back to [table of contents](#)

Multi-Factor Authentication

Multi-Factor Authentication (MFA) investments have primarily been behind the scenes to increase service reliability, but we've also expanded device support in our native MFA app. For customers that use the Microsoft Authenticator application as their MFA solution, they can now extend cloud backup and recovery of their account to end-users who prefer Android devices.

All Multi-Factor Authentication updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
September 12, 2019	Available	Cloud backup and recovery for the Microsoft Authenticator app on Android

Back to [table of contents](#)

Azure Active Directory B2C

Recent Azure AD B2C investments have centered around increasing identity provider flexibility for user flows and access tokens, allowing customers to pick convenient and relevant options to their environment. Azure AD B2C now allows any OpenID Connect identity provider in app user flows for greater flexibility to customers, and to support social identity providers, access tokens issued by these providers can also be passed through in Azure AD B2C tokens.

All **Azure Active Directory B2C** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 15, 2019	Available	Custom OpenID Connect identity providers for user flows in Azure AD B2C
August 15, 2019	Available	Pass through an identity provider's access token in Azure AD B2C

Back to [table of contents](#)

Integration

Azure Logic Apps

New updates to Logic Apps focus on improving existing capabilities around integration service environment, connectors, and core functionality. Some key improvements were made to the SAP connector. Supporting high value integration scenarios related to services such as procurement, supply chain, and financial services continues to be a key area of activity.

Additional capabilities have been added to integration service environment, including the addition of inline code capabilities. A wide variety of new connectors have entered preview and hit general availability.

All **Logic Apps** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 24, 2019	Available	New developer pricing tier for integration service environment
September 6, 2019	Available	Azure Logic Apps updates for July and August 2019

Back to [table of contents](#)

Azure API Management

New updates to API Management have been focused on improving core capabilities, integrating more broadly with other Azure services, and monitoring. Our core focus has been around providing customers with access to API Management and will continue to be our focus heading into the future.

All **API Management** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 8, 2019	Available	Azure API Management updates for August
September 26, 2019	Available	Azure API Management update—September 2019

Back to [table of contents](#)

Internet of Things

Azure IoT Edge

Azure IoT Edge is a fully managed service built on Azure IoT Hub. Deploy your cloud workloads—artificial intelligence, Azure and third-party services, or your own business logic—to run on Internet of Things (IoT) edge devices via standard containers. By moving certain workloads to the edge of the network, your devices spend less time communicating with the cloud, react more quickly to local changes, and operate reliably even in extended offline periods.

Azure Blob Storage on IoT Edge provides a block blob storage solution at the edge. A blob storage module on your IoT Edge device behaves like an Azure block blob service, except the block blobs are stored locally on your IoT Edge device. You can access your blobs using the same Azure storage SDK methods or block blob API calls that you're already used to. This article explains the concepts related to Azure Blob Storage on IoT Edge container that runs a blob service on your IoT Edge device.

This module is useful in scenarios where data needs to be stored locally until it can be processed or transferred to the cloud, when devices are located in a place with limited

connectivity, when you want to efficiently process the data locally to get low latency access to the data, such that you can respond to emergencies as quickly as possible, and when you want to reduce bandwidth costs and avoid transferring terabytes of data to the cloud. You can process the data locally and send only the processed data to the cloud.

All **Azure IoT Edge** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 8, 2019	Available	Azure Blob Storage on IoT Edge is now generally available

Back to [table of contents](#)

Azure IoT Hub

IoT Hub is a managed service, hosted in the cloud, that acts as a cloud gateway to connect, manage and monitor IoT devices at scale and in a secure manner.

Azure Security Center for IoT allows customers to protect their end-to-end IoT deployment by identifying and responding to emerging threats, as well as finding issues in configurations before attackers can use them to compromise IoT deployments. Benefits include threat protection and security posture management.

Azure IoT Hub manual failover is a feature that allows customers to failover their hub's operations from a primary region to the corresponding Azure geo-paired region. Manual failover can be done in the event of a regional disaster or an extended service outage.

All **Azure IoT Hub** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 29, 2019	Available	Azure Security Center for IoT now available
August 21, 2019	Available	Azure IoT Hub manual failover now available

Back to [table of contents](#)

IoT Plug and Play

IoT Plug and Play enables solution developers to integrate IoT devices with their solutions without writing any embedded code. At the core of IoT Plug and Play is a device capability model schema that describes device capabilities. This schema is a JSON document that's structured as a set of interfaces that include definitions of properties that represent the read-only and read/write state of a device or other entity, telemetry that is the data emitted by a device, and commands that describe a function or operation that can be done on a device.

Customers can find IoT Plug and Play enable devices on [Azure Certified for IoT device catalog](#).

All **IoT Plug and Play** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 21, 2019	In preview	IoT Plug and Play Preview is now available

Back to [table of contents](#)

Azure IoT Central

There have been multiple assumed blockers to the platform's adoption, including the current pricing structure, feature support for device and data scale, and application extensibility & repeatability. At this milestone we hope to reposition IoT Central as a platform for solution builders (SIs, ISVs, OEMs), to build with across their POCs as well as in full-scale deployments. We are also seeking to counter the misperception that this is a complete SaaS offering, which has led to much confusion and hesitation from partners, who have expressed concerns that this is a competing offering to their applications.

All **Azure IoT Central** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
------	--------	-------

July 23, 2019	Available	Location telemetry support in IoT Central is now available
August 21, 2019	In preview	IoT Plug and Play Preview is now available

Back to [table of contents](#)

Azure Sphere

Azure Sphere continues the theme of unlocking new features and extending networking support to help device manufacturers navigate more complex environments common in large enterprises. For example, changes to Wi-Fi enable brownfield guardian modules to connect in congested Wi-Fi environments.

To build applications that take advantage of this new functionality, users can download and install the latest Azure Sphere SDK Preview for Visual Studio. All Wi-Fi and Ethernet-connected devices will automatically receive an updated Azure Sphere operating system that contains support for these new features.

All Azure Sphere updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
July 8, 2019	In preview	Update 19.06 for Azure Sphere public preview now available in Retail feed
July 17, 2019	In preview	Update 19.07 for Azure Sphere public preview now available for evaluation
July 31, 2019	In preview	The latest update to Azure Sphere (in preview) is now available in the retail feed
September 25, 2019	In preview	Azure Sphere Preview— Update 19.09 is now available for evaluation

Back to [table of contents](#)

Management and governance

Azure Advisor

Azure Advisor helps you optimize your Azure workloads for high availability, security, performance, and cost by providing you with personalized best practice recommendations based on your usage and configurations. Recently, we launched user-configurable alerts so you can get notified about your Azure best practice recommendations as soon as they become available. You can alert on a recommendation category (high availability, performance, or cost), impact level (high, medium, or low), or specific recommendation type (such as right-size or shutdown underutilized VMs, use availability sets to improve fault tolerance, and more).

Advisor alerts will help you more quickly remediate your Advisor recommendations and get more out of your Azure investment. Learn more from the Advisor alerts documentation [here](#).

All **Azure Advisor** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
September 18, 2019	In preview	Azure Advisor alerts are now in preview

Back to [table of contents](#)

Azure Backup –

During July through September 2019, Azure Backup released several critical updates for backups of Azure Virtual machines and Azure File Shares. We announced preview support for backup of Azure VMs with disk sizes up to 30 TB each. This helps customers extend protection to large VMs running workloads like file servers and large databases. We also extended 'enhanced security' of backups to Azure Virtual Machines by introducing Soft-Delete for virtual machine backups. Customers are now protected from accidental or malicious deletion of their virtual machine backups in Azure, at no additional cost, and get a built-in option to "undelete" backups up to 14 days after deletion. Extending built-in protection to secured storage accounts, we announced support for backing up Azure File Shares in VNET/Firewall enabled Storage accounts, allowing customers to backup secured file-data without punching holes in their network infrastructure.

When it comes to Azure Backup enhancements for on-premises workloads, the latest Microsoft Azure Recovery Services (MARS) Agent carries a key enhancement that allows specification of an expiry time for ad-hoc backups. This also comes with several improvements that make for faster individual file-restores with the MARS Agent.

All of this comes with extended region availability announcements that ensure that Azure Backup is available in all Azure regions.

All **Azure Backup** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 7, 2019	Available	Azure Backup is available in new Azure regions
August 13, 2019	In preview	Announcing Azure Backup limited public preview support for large disks up to 30TB size
August 29, 2019	Available	Soft delete for virtual machines in Azure Backup
September 12, 2019	In preview	Azure Backup support for large disks up to 30 TB is now in public preview

Back to [table of contents](#)

Azure Site Recovery

Azure Site Recovery (ASR) now makes it easier to manage your disks and to perform disaster recovery of applications at scale. Our customers protect multiple mission-critical applications with Azure Site Recovery. In response to customer requesting larger disks, we have released support for large disks up to 8TB, single pass Azure Disk Encryption, and General Purpose v2 storage accounts to allow our customers to scale their usage and also improve their disk security posture. For disaster recovery of applications using Azure VMs through recovery plans, customers had to go through to pain of creating and adding scripts in order to attach pre-created Load Balancers, Public IP address, and Network Security Groups. These pre-created resources can now be automatically attached to the failed-over VMs, thus reducing the overhead of writing and managing additional scripts. Azure Site Recovery has improved the reliability and ease of conducting test drills and actual failovers. ASR has added multiple validators that surface any configuration issues

and has created a way to allow easy customization of test failover network settings for quick disaster recovery drills of VMs.

Azure Site Recovery supports releases of all major Linux distributions within 30 days. We have worked closely with leading Linux distributors to bring down the time to ASR support for all major and minor kernel releases to under 30 days to allow customers to move to more recent Linux versions without worrying about whether ASR supports these new kernel releases.

All **Azure Site Recovery** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 23, 2019	Available	Azure Site Recovery: Support released for large disks (up to 8 TB)
July 31, 2019	Available	Azure Site Recovery update rollup 38 (July 2019)
August 9, 2019	Available	Disaster recovery of Azure Disk Encryption-enabled virtual machines
August 21, 2019	Available	Help protect large data disks Azure Site Recovery
August 26, 2019	Available	Azure Site Recovery update rollup 39—August 2019
September 17, 2019	Available	Azure Site Recovery Update Rollup 40 (September 2019)

Back to [table of contents](#)

Azure Monitor

Azure Monitor helps you maximize performance and availability of your applications and proactively identify problems in seconds. Over the last 3 months, we announced several improvements to container monitoring including support for Prometheus metrics and better filtering and searching of data. Similarly, we made improvements to our Log Analytics capability including UI changes and integration with the resource menu for number of Azure services so you can analyze logs directly if you ever want to

troubleshoot any issue. Finally, we added more onboarding options and tooling for Application Insights capability and we continue to expand to more regions.

All **Azure Monitor** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 1, 2019	Available	Azure Monitor for Containers: Enhanced search on live data and other updates available
July 3, 2019	Available	Azure Monitor Log now supports log search on multiple Azure resources
July 23, 2019	Available	Azure Monitor Log Analytics UI updates – June 2019
July 24, 2019	In preview	Azure Monitor for containers—Prometheus integration is now in preview
August 8, 2019	In preview	Azure Monitor for Containers with Prometheus support for AKS engines is now in preview
August 12, 2019	Available	Azure Monitor Application Insights Status Monitor v2 is now generally available
August 13, 2019	Available	New PowerShell scripts to streamline Azure Monitor Logs query and data collection
August 26, 2019	In preview	Azure Monitor Application Insights variable retention is now available in preview
September 18, 2019	Available	Service Map feature of Azure Monitor is now available in additional regions

September 18, 2019	Available	Azure Monitor for Azure Virtual Machines is now available in additional regions
--------------------	-----------	---

Back to [table of contents](#)

Network Watcher

Network Watcher provides visibility and helps you diagnose and fix issues with your network. We are seeing increasing demand for more regions and have now added support for South Africa North region.

All Network Watcher updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
July 12, 2019	Available	Network Watcher is now Generally Available in South Africa North

Back to [table of contents](#)

Cloud Shell

Azure Cloud Shell is a browser-based shell experience running in the cloud to help manage your Azure resources and gives you the flexibility to choose the shell experience that best suits the way you work. In addition to being able to choose between PowerShell and Bash, Cloud Shell includes support for popular command-line tools and programming languages that Microsoft curates and updates such as container and database tools, support for .NET Core and Python etc.

Persist your data across sessions by attaching Azure File storage. When used alongside Azure portal's familiar GUI experience, Cloud Shell adds the power of an authenticated shell experience for greater flexibility. Cloud Shell saves you the trouble of configuring and maintaining your own admin machine by providing a clean, ready-to-use shell experience every time. In addition, it is available virtually anywhere.

All **Cloud Shell** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 6, 2019	Available	New Tools are now available in Azure Cloud Shell

Back to [table of contents](#)

Azure Blueprints

Azure Blueprints allow you to create fully governed subscriptions in a repeatable manner, by allowing you to create blueprints that contain resources (Azure Resource Manager templates), policies and roles. You can manage environments deployed through blueprints and use features like versioning and resource locks so not even subscription owners can tamper with it. In addition, Microsoft has the most comprehensive compliance offerings, and we are bringing that expertise to blueprints with built-in blueprints, which are fully Microsoft-vetted blueprints for the most common scenarios and compliance regulations like NIST and ISO27001 which are now live. You can expect more built-in blueprints releases in the upcoming months.

All **Azure Blueprints** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
September 4, 2019	In preview	Azure Blueprints—NIST SP 800-53 R4 blueprint release is now live

Back to [table of contents](#)

Azure Policy

Azure Policy allows you to audit or enforce resource configurations at an Azure Resource Manager level. Azure policy now has remediation capabilities for tags, meaning that you can apply tags as per your policy to resource that are not compliant. Tagging limit has also been increased to 50, which is one of the most asked features by our customers.

All **Azure Policy** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
September 19, 2019	In preview	Azure provides at-scale tags management through Azure Policy

Back to [table of contents](#)

Azure Cost Management

Azure Cost Management was released in 2018, bringing the Cloudyn functionality into the Azure portal and improving user experience and performance. We also recently released Cost Management for AWS (in preview) to help customers manage cloud spend across their multi-cloud environment, as well as many new features like forecasting and pinning dashboards.

All **Cost Management** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 29, 2019	In preview	Azure marketplace charges are now available in Azure Cost Management for Pay-As-You-Go customers!
August 2, 2019	Available	Azure Cost Management updates—July 2019
August 8, 2019	Available	New budgets creation experience is now available
August 26, 2019	Available	Azure Cost Management – Save and share customized views
August 26, 2019	Available	It's now easier to share customized views in Azure Cost Management

Back to [table of contents](#)

Azure Lighthouse

Azure Lighthouse provides capabilities for cross-customer or tenant management that enable partners to deliver differentiated managed services, with increases governance. Azure Lighthouse was announced at Microsoft Inspire to the partner community as generally available. Partners now get a single control plane to manage Azure across customers at scale. Customers can delegate their Azure environment at a granular level to precise roles and user groups of their partner, having greater control and visibility of partner activity within their environment. Azure Lighthouse is available through all ARM enabled services, across licensing models and even for 3rd party integration

All **Azure Lighthouse** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 11, 2019	Available	Introducing Azure Lighthouse

Back to [table of contents](#)

Azure portal

We're constantly working on user experience improvements in the Azure portal. Our goal is to offer a productive and easy-to-use platform so you can build, manage, and monitor your service from a single pane of glass.

All **Azure portal** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 23, 2019	Available	Azure portal July 2019 feature update
August 20, 2019	Available	Azure portal August 2019 feature update
September 23, 2019	Available	Azure portal September 2019 feature update

Back to [table of contents](#)

Media

Azure Content Delivery Network

Azure Content Delivery Network is a global content delivery network (CDN) solution for delivering high-bandwidth content. Azure Content Delivery Network is a true multi-CDN service, offering choice and the ability to mix CDN networks from Verizon, Akamai, and Microsoft. In addition to its tight integration with sister services, such as Azure storage and Media Services, it continues to benefit from the continuous evolution of our global reach, massive investments in new edge sites, and cache capabilities both within our own global network and also through our partner CDN offerings.

Enhancing the capabilities, feature set, and ability to customize routing behavior and SSL dependencies in Azure Content Delivery Network is critical to our customers. Recent enhancements include the ability to use and manage own SSL certs, along with a new custom rules engine.

All **Content Delivery Network** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
September 12, 2019	Available	Azure CDN feature updates
September 13, 2019	Available	Data transfer from Azure Origins to Azure CDN from Microsoft is now free of charge

Back to [table of contents](#)

Media Services

Video Indexer continues its fast pace of service updates. Azure Media Services is available in the South Africa region, and Live Encoder feature set has been improved. We continued our innovation with preview announcements of two new Video Indexer features: Animated Character Detection and Multilingual transcription.

All **Media Services** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
August 6, 2019	Available	Media Services is now available in both South Africa regions
September 18, 2019	In preview	Public Preview - Video Indexer Animated Character Detection
September 18, 2019	In preview	Public Preview - Video Indexer Multilingual identification and transcription

Back to [table of contents](#)

Microsoft Azure Stack

Microsoft Azure Stack

Azure Stack integration with Azure Government secret cloud enables Azure Stack operators to connect their systems to Azure Government Secret for identity, marketplace syndication and hybrid deployments. This is important for Microsoft given that Azure Stack is popular with government entities.

Retail solution patterns is a set of guidance and code that helps customers build their intelligent retail solution faster using AI and Azure Stack.

The Azure Stack diagnostic log collection service provides a simplified way for Azure Stack operators to collect and share diagnostic logs with Microsoft Customer Support Services (CSS).

All **Microsoft Azure Stack** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
------	--------	-------

September 4, 2019	In development	Azure Stack integration with Azure Government Secret cloud
September 4, 2019	In development	Retail solution patterns for hybrid applications
September 4, 2019	Available	Diagnostic log collection is now generally available for Azure Stack

Back to [table of contents](#)

Migration

Azure Migrate

Azure Migrate streamlines the journey to the cloud with an integrated experience across data center discovery, assessment and migration.

The general availability launch of Azure Migrate in July 2019 delivers customers new capabilities for server, database and web application migrations, all in one place. Microsoft has further simplified the steps with agentless options for assessment and migration, and through integration with partner tools that provide customers choice for their migration journey. Scalability has also been a big focus for Azure Migrate tooling with customers now able to discover and assess 35,000 virtual machines (VMs). This is a tremendous scale improvement from the previous limit of 1,500 VMs.

Today, Azure Migrate is available in Asia Pacific, Australia, Canada, Europe, India, Japan, United Kingdom, and United States. Customers can start by creating an Azure Migrate project in the geography of choice and we ensure that metadata associated with the project is retained in an Azure datacenter in the geography selected.

All Azure Migrate updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
July 11, 2019	Available	Azure Migrate is now a central hub to start, execute and track your migration journey
July 15, 2019	Available	Announcing Azure Migration Program

August 9, 2019	Available	Azure Migrate is now available in Australia, Canada, India, and Japan
----------------	-----------	---

Back to [table of contents](#)

Azure Database Migration Service

Azure Database Migration Service enables seamless migrations from multiple database sources to Azure Data platforms with minimal downtime. The service uses the Data Migration Assistant to generate assessment reports that provide recommendations to guide you through the changes required prior to performing a migration. When you're ready to begin the migration process, the Azure Database Migration Service performs all the required steps.

Now you can use Azure Database Migration Service to migrate from on-premises or cloud implementations of MongoDB to Azure Cosmos DB with minimal downtime. Perform resilient migrations of MongoDB data at scale and with high reliability. Provision an instance of Database Migration Service from the Azure portal or via Azure CLI and create a migration project.

The integration of Azure data migration tools with the Azure Migrate hub is now in preview. This is a first step towards a unified Azure migration experience across data and infrastructure. In this release, Data Migration Assistant for database assessments and Azure Data Migration Service are integrated with Azure Migrate. Doing so provides a single view of the server and database migration progress and offers details on the relative readiness of the servers and databases migrating to the cloud.

All **Azure Database Migration Service** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 15, 2019	Available	MongoDB to Azure Cosmos DB online and offline migrations are now available
July 24, 2019	In preview	Azure Database Migration Service—Integration with Azure Migrate v2

Back to [table of contents](#)

Networking

ExpressRoute

ExpressRoute is the preferred way for enterprises and many other customers to connect their datacenters to Azure. ExpressRoute extends on-premises networks into the Microsoft cloud over a private dedicated connection, provided by a connectivity provider such as an ISP or Telco. As Azure grows our global footprint, our network follows, meaning that ExpressRoute sites providing POP (point of presence) for customers to connect to Azure is a constantly growing portion of our global infrastructure. Several new sites have recently been added, providing geo expansion but also increased redundancy in several large metro areas. With customers rapidly growing use of Azure, hybrid and cloud-centric networking and security drives a need for integrated monitoring and tooling to help retain network visibility across the infrastructure. ExpressRoute Monitor, as part of Network Performance Monitor, enable monitoring of ExpressRoute connections across multiple types of peers.

All **ExpressRoute** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
September 12, 2019	Available	New Azure ExpressRoute sites now available
September 19, 2019	Available	Monitor bandwidth usage for all peered Azure virtual networks with ExpressRoute

Back to [table of contents](#)

Azure Virtual Network

Azure Virtual Network (VNet) is the primary and foundational building block for your private network in Azure. It enables Azure resources, such as Azure Virtual Machines to securely communicate with each other, the Internet, and on-premises networks.

Azure Private Link, recently announced in preview, enables organizations or 3rd party service providers to deliver services privately and directly in the end-users Virtual Network. Private Link supports services hosted in a VM, PaaS as well as 3rd party SaaS services hosted in Azure. With the addition of Private Link, we are addressing a very

consistent request from our customers and partners, to add a private service delivery model across VNets.

All **Virtual Network** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
September 16, 2019	In preview	Azure Private Link is now available in preview
September 18, 2019	In preview	Interface endpoints for SQL DB

Back to [table of contents](#)

Azure Bastion

The Azure Bastion service was recently launched in preview. This is a new, fully platform-managed PaaS service that you provision inside your virtual network. Azure Bastion provides an integrated and simple way to create scalable bastion hosts. It provides secure and seamless RDP/SSH connectivity to your virtual machines directly in the Azure portal over SSL. When you connect via Azure Bastion, your virtual machines no longer require exposure of a public IP address.

All **Azure Bastion** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
September 4, 2019	In preview	Connect to your virtual machine (VM) through a web browser

Back to [table of contents](#)

Azure Firewall

Azure Firewall is a cloud native firewall-as-a-service offering which enables customers to centrally govern and log all their traffic flows using a DevOps approach. The service supports both application and network level filtering rules and is integrated with the Microsoft Threat Intelligence feed for filtering known malicious IP addresses and

domains. Azure Firewall is highly available with built-in auto scaling. In July 2019, Azure Firewall has made several key capabilities as well as updates into generally available (GA) and preview.

In Sept 2019, Azure Firewall service became generally available in China. This is an important step in our geo-expansion of the service to local markets. Azure Firewall continues to expand compliance certification and is now Payment Card Industry (PCI), Service Organization Controls (SOC), and International Organization for Standardization (ISO) compliant.

All **Azure Firewall** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 10, 2019	Available	What's new in Azure Firewall
September 17, 2019	Available	Azure Firewall updates—September 2019

Back to [table of contents](#)

Security

Key Vault

A new set of libraries for working with Azure Storage, Azure Cosmos DB, Azure Key Vault, and Azure Event Hubs in Java, Python, JavaScript or TypeScript, and .NET are available for you. These libraries provide access to new service features, and represent the first step towards applying a new [set of standards](#) across the Azure SDKs that we believe will make the libraries easier to learn and integrate into your software. You can get these libraries today from your favorite package manager, and we would love to hear your feedback on [GitHub](#).

All **Key Vault** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 15, 2019	In preview	A new set of Azure SDKs is now available in preview

Back to [table of contents](#)

Azure Security Center

Security Center continued to expand its recommendations to cover new networking recommendations, introduced single click remediation in preview to simplify remediation process and removed the recommendation and policy to enable encryption of storage account since Azure Storage is encrypted by default.

On threat protection, Just-In-Time VM for Azure firewall was made generally available: reducing exposure to network volumetric attacks by providing controlled access to VMs only when needed, using your Network Security Group and Azure Firewall rules.

Besides the Standard offerings, you can now have Security Center send you email notifications when an Azure Government alert is generated. Also, Security Center now supports cross-tenant management scenarios as part of Azure Lighthouse. This enables you to gain visibility and manage the security posture of multiple tenants in Security Center.

All Azure **Security Center** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 19, 2019	Available	Updates to network recommendations in Azure Security Center
July 23, 2019	Available	The recommendation and policy to enable encryption of storage account have been removed
August 2, 2019	Available	Cross-tenant management is now supported in Azure Security Center
August 13, 2019	Available	Email notifications available for Azure Government alerts
August 21, 2019	In preview	Security Center now has single click remediation to boost your security posture (in preview)

August 21, 2019	Available	Just-in-time (JIT) VM access for Azure Firewall is now generally available
September 26, 2019	Available	Azure Security Center—1-click remediation for security recommendations is now available
September 26, 2019	Available	Azure Security Center—Control container security recommendation using Azure Policy
September 30, 2019	Available	Managing rules with adaptive application controls in Azure Security Center has improved

Back to [table of contents](#)

Storage

Storage Accounts

Azure Data Lake Storage Gen2 integration with Azure Event Grid is in preview since early July. This means that Azure Data Lake Storage Gen2 can now generate events that can be consumed by Event Grid and routed to subscribers with webhooks, Azure Event Hubs, Azure Functions, and Logic Apps as endpoints. With this capability, individual changes to files and directories in Azure Data Lake Storage Gen2 can automatically be captured and made available to data engineers for creating rich big data analytics platforms that use event-driven architectures.

Azure Geo and Zone Redundant Storage (GZRS) helps customers achieve higher data resiliency by synchronously writing three replicas of your data across multiple Availability Zones (like ZRS today) and asynchronously replicating the data to another region within the same geo into a single zone (like LRS today). In the event of a regional failure you can use Read Access Geo and Zone Redundant Storage (RAGZRS) to continue having read access. For read and write access you can failover to the secondary region.

The preview of a larger and higher scale standard tier for Azure Files, now available to all Azure customers, improves your experience by increasing standard file shares' capacity and performance limits. Azure Files premium tier offers zonal redundant storage (ZRS) replication that enables high performing, highly available file services, that are built on

solid-state drives (SSD). Azure Files Active Directory (AD) authentication with Azure AD domain services enables “lift and shift” applications to the cloud while maintaining the same security model used on-premises.

Azure Blob lifecycle management can now automatically delete objects in Premium Blob Storage accounts. Policies can be defined to automatically delete objects that has been unmodified for a certain number of days and can be scoped to specific container or for the entire storage account. This helps simplify and management of data footprint for workloads that needs high performance access to data for a limited time, such as diagnostics data and generated reports.

All **Storage Accounts** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 2, 2019	In preview	Event Grid integration for Azure Data Lake Storage accounts is now in public preview
July 8, 2019	In Preview	Larger, more powerful standard file shares for Azure Files now in preview
July 15, 2019	In preview	Multi-protocol Data Access for Azure Data Lake Storage is now in public preview
July 23, 2019	Available	Premium Blob now supports Blob Lifecycle Management
July 25, 2019	Available	Azure Blob lifecycle management is now available in all Azure regions
August 7, 2019	Available	Azure Files Active Directory (Azure AD) authentication with Azure AD domain services is now generally available
August 7, 2019	In preview	Azure Geo and Zone Redundant Storage in public preview

August 20, 2019	Available	Announcing new lower pricing for Azure Archive Storage
September 16, 2019	In preview	Azure Private Link is now available in preview
September 19, 2019	Available	Azure Files premium tier gets zone redundant storage

Back to [table of contents](#)

Azure NetApp Files

Azure NetApp Files, a result of deep collaboration with NetApp, has continued to roll-out in 9 new regions following general availability in May 2019 - East US, East US 2, West US 2, South Central US, Central US | West Europe, North Europe | East Australia, South East Asia

Azure NetApp Files is a powerful file storage service to run the most demanding file workloads in Azure, without the need for any code modification. It's an Azure first-party service, built on NetApp's ONTAP technology, and is sold and supported by Microsoft. Taking only minutes to set up, NetApp Files enables both Linux and Windows applications to seamlessly migrate and run in the cloud with an on-premises-like experience and performance. NetApp Files is no different from any other Azure first-party service—it can be provisioned and consumed against customers' existing Azure agreement(s), without the need for any term commitments. Additionally, it allows increasingly complex enterprise workloads to run in Azure. While Azure NetApp Files is useful for any performance & latency sensitive Linux or Windows file-based application, early customers in Oil & Gas, and Electronic Design & Automation (EDA) are seeing the most benefits – especially in High Performance Computing (HPC) scenarios.

All Azure NetApp Files updates from July 2019 to September 2019 are listed below. See all the latest Azure updates .		
Date	Status	Title
August 7, 2019	Available	Azure NetApp Files is now available in three new regions

Back to [table of contents](#)

Azure FXT Edge Filer

Azure FXT Edge Filers, hardware appliances that came to Microsoft from Avere Systems, were redesigned for Microsoft and introduced into the storage portfolio. The Avere appliances are highly desired and widely adopted in visual effects studios. The new Microsoft appliances will be offered as a path to forge new customer relationships with an already trusted product.

Two models allow you to select an appliance right for the workload, as both provide high-performance, low-latency access to file-based data supporting NFS and SMB as well as NAS solutions from NetApp and Dell EMC. The Azure FXT Edge Filers can also sit on-premises and access Azure Blob.

All **Azure FXT Edge Filer** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 15, 2019	Available	Azure FXT Edge Filer Now available

Back to [table of contents](#)

Web

App Service

Azure App Service enables you to build and host web apps, mobile back ends, and RESTful APIs in the programming language of your choice without managing infrastructure. It offers autoscaling and high availability, supports both Windows and Linux, and enables automated deployments from GitHub, Azure DevOps, or any Git repo.

App Service introduced promotional pricing on the Basic app service plan for Linux, which depending on regional meters in datacenter of choice, leads to a 66 percent price drop.

App Service also reduced pricing by an average of 35% for Linux App Service on the Premium v2 plan.

Expanded to Linux the support for managed identity from Azure Active Directory to allow apps to easily access other AAD-protected resources such as Azure Key Vault. App Service and Azure Functions have had generally available support for Windows plans previously.

Added Navigator to App Service Diagnostics for Windows web apps. Navigator provides a centralized view of an app and its dependencies along with changes made over time. Navigator automatically renders a dependency map of an app and its dependencies in the same subscription and display the changes made to each resource.

All **App Service** updates from July 2019 to September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
July 19, 2019	Available	Introducing promotional pricing for the Basic Linux App Service Plan
August 2, 2019	Retiring	Easy tables and easy APIs will be removed from Azure App Service on November 11, 2019
August 8, 2019	Available	Navigator now provides dependency mapping and change analysis in App Service Diagnostics
August 19, 2019	Available	General availability of Managed Identity for Linux in App Service and Functions
August 21, 2019	Available	Announcing pricing decrease for Azure App Service on the Premium plan

[Back to table of contents](#)

Azure SignalR Service

Azure SignalR Service's Event Grid feature enables the service to publish client events to Event Grid that SignalR applications can subscribe and respond to these events in serverless use cases.

All **Azure SignalR Service** updates from July 2019 – September 2019 are listed below. See all the latest [Azure updates](#).

Date	Status	Title
------	--------	-------

August 13, 2019	Available	Azure SignalR Service introduces Event Grid integration feature
-----------------	-----------	---

Back to [table of contents](#)

Appendix

Definitions	
Service	A stand-alone, consumable resource that's available for Azure subscribers in the portal and is defined as a service in the service tree. Once generally available, it will have its own dedicated SLA, metering (if not free), and status reporting.
Feature	A feature or capability of an Azure service that's surfaced in the portal only once the parent Azure service is selected. Service features come in many forms, including APIs, app types, features, or capabilities of a service.
Preview	A feature or service that's been publicly disclosed, and available to all of our customers. Feature and documentation complete. Suitable for limited production use cases, not backed by SLA guarantees, no technical support.
General availability (GA)	GA features/services are open to all customers. Pricing determined and announced. Starting to roll-out to various Azure regions all over the world. Considered stable and fully qualified for production use, backed by SLA guarantees.
Retirement	An Azure service or feature that's being decommissioned and is no longer available for new customers.
Region	A set of datacenters deployed within a latency-defined perimeter and connected through a dedicated regional low-latency network.