What Is Microsoft Azure?

Beginning this **Azure cheat sheet** with a brief introduction, Microsoft Azure is a cloud computing platform that hosts proprietary solutions and open-source, standards-based technologies from Microsoft and other partner companies.

The billing structure of Microsoft Azure is based on resource consumption and not on reserve capacity. The pricing can also vary with the types of services, storage types, and the physical location from which you are hosting your Azure instances.

For example, in the central US region, the pricing for hot locally redundant block blob storage (LRS-HOT) with three copies in one data center is $0.0184 per GB. The pricing for geographically redundant storage (GRS-HOT) that provides three copies in one data center and three copies in another geographically distant data center is $0.0368 per GB. The pricing for Read-Access GRS (RAGRS-HOT) that enables read access at the second data center is $0.046 per GB.

All **Azure cheat sheets** should focus on the basic services offered by Microsoft Azure. A brief outline of what you can expect from Microsoft Azure is:

- Azure IoT Suite is the best tool to explore diverse options for the connection and monitoring of devices. The Azure IoT suite also provides telemetry and analytics services.
- HDInsight is also a common mention in any new Microsoft **Azure cheat sheet**. It is a custom Hadoop deployment.
- Azure Media Services provide an assortment of services including cloud-based video playing, transcoding, indexing, and services for content protection.
- Azure Redis Cache is one of the most interesting services you can find in an Azure cheat sheet. It is a managed version of the renowned open-source Redis data structure server.
- Azure Search provides an OData-based managed search service.
- Azure Cosmos DB gives a hosted NoSQL database for particular use cases.

In addition to these services, you can also use the Azure Stack application for apps in hybrid cloud developments. Several hardware vendors like HP Enterprise, Lenovo, Dell EMC, and Huawei have collaborated to develop the Azure Stack.

A Brief History

In this **Azure cheat sheet,** we will slightly focus on its history. Microsoft announced its Azure project in 2008, which finally became commercially available in 2010, February. It was named 'Microsoft Azure' in 2015.

The Azure Stack was developed in May 2015, and the first technical preview was available in January 2016. With time, Microsoft kept expanding its services. Another highlight to mention in this **Azure cheat sheet** is the inclusion of support for Linux distributions on the Azure platform. Currently, Microsoft Azure supports Red Hat Enterprise Linux, Clear Linux, CentOS, OpenSUSE, SUSE Linux Enterprise, Ubuntu, CoreOS, and Debian. In addition, Azure also provides support for FreeBSD and Docker images.

The collaboration between Microsoft and SAP is also a worth-mentioning milestone in this **Azure cheat sheet.** In the 2018 Sapphire Now conference, Microsoft presented the common availability of SAP HANA. Microsoft emphasized 26 different SAP HANA offerings by Azure, ranging in capacity from 192 GB to 24 TB. In 2019, the additions of AWS, Google Cloud, and many other global strategic service partners improved the cloud-based delivery of S/4HANA.

The Architecture of Microsoft Azure

It is mandatory to mention the architecture of Microsoft Azure in any **Azure cheat sheet**. All Azure architects need to understand the Azure architecture that emulates computer hardware utilizing virtualization technology. It is simply a virtualized hardware that can function like real hardware by leveraging software.

Microsoft Azure has various data centers that have multiple physical servers to provide the virtualized hardware to customers. It is a colossal grid of networking hardware and servers. It is important to note in this **Azure cheat sheet** that this architecture helps save time and money that could have been spent on maintenance and upgrades of computer hardware.

Components Of Microsoft Azure Architecture

The Microsoft Azure architecture contains three main aspects. The foundation element is the enterprise-level infrastructure on which the AppFabric SDK or the middleware is placed. This middleware is responsible for services like networking, storage, compute, and identity management.

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Microsoft data centers host Azure, and you can access them through Microsoft Azure Management. Here is an outline of the services in Azure that form its architecture.
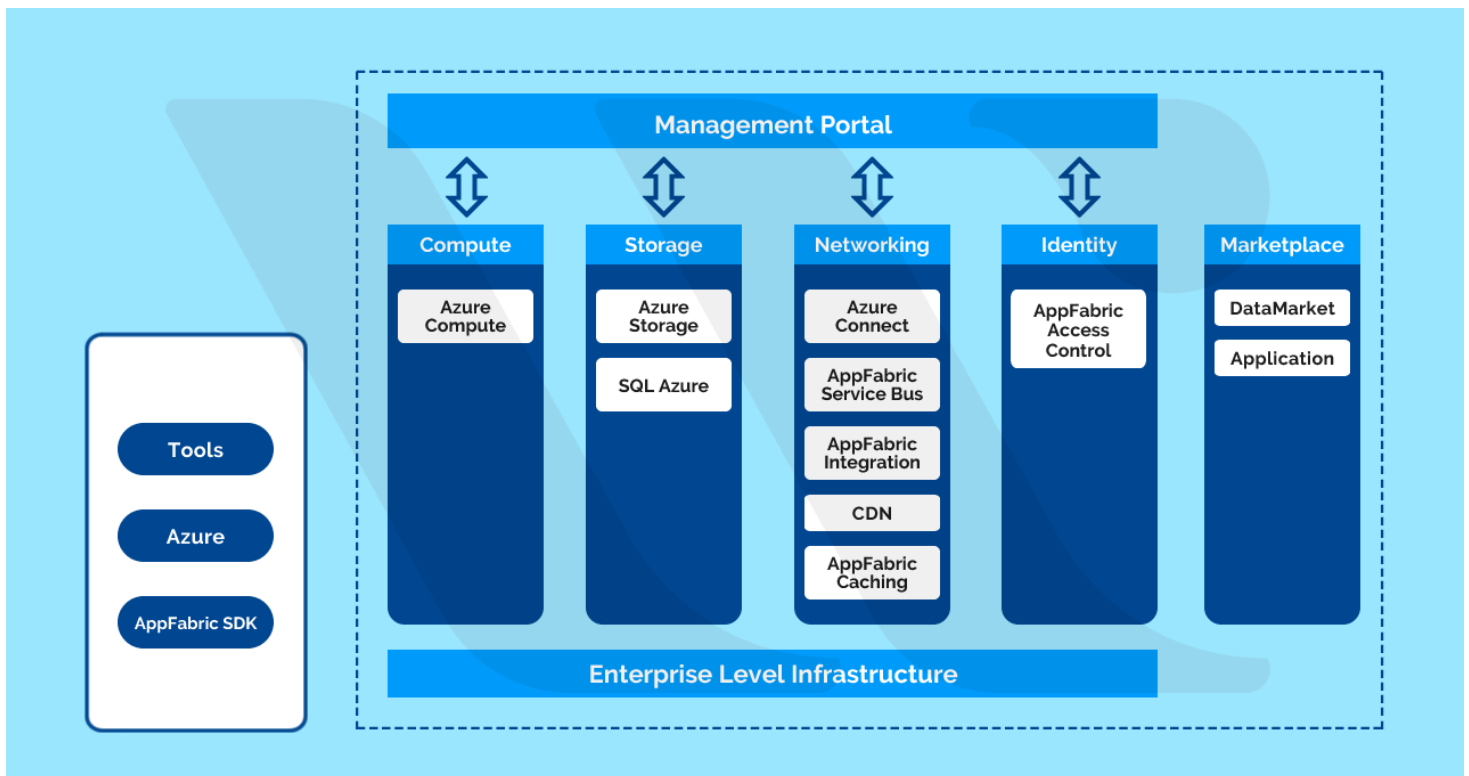
Services Offered by Microsoft Azure

So far, you must have understood that you can avail of various cloud services on Microsoft Azure. However, this **Azure cheat sheet** will be incomplete without mentioning all the services available in the Microsoft Azure architecture. From here, you can easily understand the kind of services they offer, and make their best use for your enterprise.

AI + Machine Learning – Dive into the next generation of applications with artificial intelligence capabilities

Service	Description
Anomaly Detector	Easily add anomaly detection capabilities to your apps.
Azure Bot Service	Intelligent, serverless bot services that scale on demand
Azure Cognitive Search	AI-powered cloud search service for mobile and web app development
Azure Databricks	Fast, easy, and collaborative Apache Spark-based analytics platform
Azure Machine Learning	Bring AI to everyone with an end-to-end, scalable, trusted platform with experimentation and model management
Azure Open Datasets	Cloud platform to host and share curated open datasets to accelerate the development of machine learning models
Azure Cognitive Services	Deploy high-quality AI models as APIs
Azure Video Analyzer	An AI service for quickly building video analytics solutions
Computer Vision	Distill actionable information from images
Content Moderator	Automated image, text, and video moderation
Custom Vision	Easily customize your own state-of-the-art computer vision models for your unique use case
Data Science Virtual Machines	Rich pre-configured environment for AI development
Face API	Detect, identify, analyze, organize, and tag faces in photos
Azure Form Recogniser	The AI-powered document extraction service that understands your forms
Azure Immersive Reader	Empower users of all ages and abilities to read and comprehend text
Kinect DK	Build computer vision and speech models using a developer kit with advanced AI sensors

Language Understanding	Teach your apps to understand commands from your users
Microsoft Genomics	Power genome sequencing & research insights
Personalizer	An AI service that delivers a personalized user experience
Project Bonsai	A machine teaching service for creating intelligent industrial control systems using simulations
QnA Maker	Distill information into conversational, easy-to-navigate answers
Speaker Recognition	A Speech service feature that verifies and identifies speakers
Speech to Text	A Speech service feature that accurately converts spoken audio to text
Speech Translation	Easily integrate real-time speech translation intoyour app
Text Analytics	Easily evaluate sentiment and topics to understand what users want
Text to Speech	A Speech service feature that converts text to lifelike speech
Translator	Easily conduct machine translation with a simple REST API call
Azure Metrics Advisor	An AI service that monitors metrics and diagnoses issues
Health Bot	A managed service purpose-built for the development of virtual healthcare assistants
Azure Percept	Accelerate edge intelligence from silicon to service
Azure Applied AI Services	Specialized services that enable organizations to accelerate time to value in applying AI to solve common scenarios

Analytics – Collect, process, store, analyze, and visualize data irrespective of its volume and variety

Service	Description
Azure Analysis Services	Enterprise-grade analytics engine as a service
Azure Data Explorer	Fast and highly scalable data exploration service
Azure Data Lake Storage	Massively scalable, secure data lake functionality built on Azure Blob Storage

Azure Data Share	A simple and safe service for sharing big data with external organizations
Azure Databricks	Fast, easy, and collaborative Apache Spark-based analytics platform
Azure Stream Analytics	Real-time analytics on fast-moving streams of data from applications and devices
Azure Synapse Analytics	Limitless analytics service with unmatched time to insight
Data Catalog	Get more value from your enterprise data assets
Azure Data Factory	Hybrid data integration at enterprise scale made easy
Data Lake Analytics	Distributed analytics service that makes big data easy
Event Hubs	Receive telemetry from millions of devices
HDInsight	Provision cloud Hadoop, Spark, R Server, HBase, and Storm clusters
Power BI Embedded	Embed fully interactive, stunning data visualizations in your applications
R Server for HDInsight	Predictive analytics, machine learning, and statistical modeling for big data
Azure Purview	Maximize business value with unified data governance
Microsoft Graph Data Connect	A secure, high-throughput connector designed to copy select Microsoft 365 productivity datasets into your Azure tenant

Azure Virtual Desktop – The best virtual desktop experience through Azure

Service	Description
Azure Virtual Desktop	The best virtual desktop experience, delivered on Azure
VMware Horizon Cloud on Microsoft Azure	Provision Windows desktops and apps with VMware and Azure Virtual Desktop
Citrix Virtual Apps and Desktops for Azure	Provision Windows desktops and apps on Azure with Citrix and Azure Virtual Desktop

Blockchain – Get integrated tools to build and manage blockchain-based applications

Service	Description
Azure Blockchain Service	Build, govern, and expand consortium blockchain networks
Azure Blockchain Workbench	Easily prototype blockchain apps in the cloud
Azure Cosmos DB	Fast NoSQL database with open APIs for any scale
Azure Logic Apps	Automate the access and use of data across clouds without writing code
Microsoft Azure Confidential Ledger	Easily use a REST API managed service to store your unstructured metadata in a blockchain structure

Compute – Avail cloud computing services and scale at your wish while paying only for the resources that you use

Service	Description
API Apps	Easily build and consume Cloud APIs
App Service	Quickly create powerful cloud apps for web and mobile
Azure CycleCloud	Create, manage, operate, and optimize HPC and big compute clusters of any scale
Azure Functions	Process events with serverless code
Azure Kubernetes Service (AKS)	Simplify the deployment, management, and operations of Kubernetes
Azure Quantum	Experience quantum impact today on Azure
Azure Spot Virtual Machines	Provision unused compute capacity at deep discounts to run interruptible workloads
Azure Spring Cloud	A fully managed Spring Cloud service, jointly built and operated with VMware
Azure VMware Solution	Run your VMware workloads natively on Azure
Batch	Cloud-scale job scheduling and compute management

Cloud Services	Create highly available, infinitely-scalable cloud applications and APIs
Container Instances	Easily run containers on Azure without managing servers
Linux Virtual Machines	Provision virtual machines for Ubuntu, Red Hat, and more
Mobile Apps	Build and host the backend for any mobile app
Service Fabric	Develop microservices and orchestrate containers on Windows or Linux
SQL Server on Virtual Machines	Host enterprise SQL Server apps in the cloud
Static Web Apps	A modern web app service that offers streamlined full-stack development from source code to global high availability
Virtual Machine Scale Sets	Manage and scale up to thousands of Linux and Windows virtual machines
Virtual Machines	Provision Windows and Linux virtual machines in seconds
Web Apps	Quickly create and deploy mission-critical web apps at scale
Azure Virtual Desktop	The best virtual desktop experience, delivered on Azure
Azure Dedicated Host	A dedicated physical server to host your Azure VMs for Windows and Linux
Azure VM Image Builder	Simplify your image building process with easy to use tool

Containers – Integrated tools to develop and manage all the applications faster within a container

Service	Description
API Apps	Easily build and consume Cloud APIs
Azure Functions	Process events with serverless code
Azure Kubernetes Service (AKS)	Simplify the deployment, management, and operations of Kubernetes
Azure Red Hat OpenShift	Fully managed OpenShift service, jointly operated with Red Hat
Container Instances	Easily run containers on Azure without managing servers
Container Registry	Store and manage container images across all types of Azure

	deployments
Mobile Apps	Build and host the backend for any mobile app
Service Fabric	Develop microservices and orchestrate containers on Windows or Linux
Web App for Containers	Easily deploy and run containerized web apps that scale with your business
Web Apps	Quickly create and deploy mission-critical web apps at scale

Databases – With fully managed and secure database services, innovate faster and grow rapidly

Service	Description
Azure API for FHIR	Easily create and deploy an FHIR service for health data solutions and interoperability
Azure Cache for Redis	Accelerate applications with high-throughput, low-latency data caching
Azure Cosmos DB	Fast NoSQL database with open APIs for any scale
Azure Database for MariaDB	Managed MariaDB database service for app developers
Azure Database for MySQL	Fully managed, scalable MySQL Database
Azure Database for PostgreSQL	Fully managed, intelligent, and scalable PostgreSQL
Azure Database Migration Service	Simplify on-premises database migration to the cloud
Azure SQL	Managed, always up-to-date SQL instance in the cloud
Azure SQL Database	Managed, intelligent SQL in the cloud
Azure SQL Edge	Consume Services privately on Azure Platform
Azure SQL Managed Instance	Managed, always up-to-date SQL instance in the cloud
SQL Server on Virtual Machines	Host enterprise SQL Server apps in the cloud
Table Storage	NoSQL key-value store using semi-structured datasets
Azure Managed Instance for Apache Cassandra	Cloud Cassandra with flexibility, control, and scale

Developer Tools – Tools to create and manage cloud applications on any platform and in any language

Service	Description
App Configuration	Fast, scalable parameter storage for app configuration
Azure DevOps	Services for teams to share code, track work, and ship software
Azure DevTest Labs	Quickly create environments using reusable templates and artifacts
Azure Lab Services	Set up labs for classrooms, trials, development and testing, and other scenarios
Azure Pipelines	Continuously build, test, and deploy to any platform and cloud
SDKs	Get the SDKs and command-line tools you need
Visual Studio	The powerful and flexible environment for developing applications in the cloud
Visual Studio Code	A powerful, lightweight code editor for cloud development

DevOps – Innovative tools for faster and reliable tools

Service	Description
Azure Artifacts	Create, host, and share packages with your team
Azure Boards	Plan, track, and discuss work across your teams
Azure DevOps	Services for teams to share code, track work, and ship software
Azure DevTest Labs	Quickly create environments using reusable templates and artifacts
Azure Monitor	Full observability into your applications, infrastructure, and network
Azure Pipelines	Continuously build, test, and deploy to any platform and cloud
Azure Repos	Get unlimited, cloud-hosted private Git repos for your project
Azure Test Plans	Test and ship with confidence with a manual and exploratory testing toolkit
DevOps tool integrations	Use your favorite DevOps tools with Azure

Hybrid + Multicloud – Incorporate the Azure agility of cloud computing into the operations at your workplace

Service	Description
Azure Active Directory	Synchronize on-premises directories and enable single sign-on
Azure Arc	Extend Azure management and services anywhere
Azure Database for PostgreSQL	Fully managed, intelligent, and scalable PostgreSQL
Azure DevOps	Services for teams to share code, track work, and ship software
Azure ExpressRoute	Dedicated private network fiber connections to Azure
Azure IoT Edge	Extend cloud intelligence and analytics to edge devices managed by Azure IoT Hub
Azure Sentinel	Put cloud-native SIEM and intelligent security analytics to work to help protect your enterprise
Azure SQL Database	Managed, intelligent SQL in the cloud
Azure SQL Edge	Consume Services privately on Azure Platform
Azure Stack	Build and run innovative hybrid applications across cloud boundaries
Security Center	Unify security management and enable advanced threat protection across hybrid cloud workloads
Azure Stack HCI	Run your production workloads on hybrid, familiar hyper-converged infrastructure
Azure Stack Hub	Azure Stack Hub is sold as an integrated hardware system, with software pre-installed on validated hardware
Azure Stack Edge	An Azure managed device that brings the compute, storage, and intelligence of Azure to the edge
Azure Modular Datacenter	A complete, rugged data center solution

Identity – Increase security by managing user identities and protecting them against advanced threats across applications, data, infrastructure, and devices

Service	Description
Azure Active Directory	Synchronize on-premises directories and enable single sign-on
Azure Active Directory Domain Services	Join Azure virtual machines to a domain without domain controllers
Azure Information Protection	Better protect your sensitive information—anytime, anywhere
Azure Active Directory External Identities	Consumer identity and access management in the cloud

Integration – Seamless integration between cloud-based applications and on-premise software across the enterprise

Service	Description
API Management	Publish APIs to developers, partners, and employees securely and at scale
Azure API for FHIR	Easily create and deploy an FHIR service for health data solutions and interoperability
Event Grid	Reliable event delivery at a massive scale
Azure Logic Apps	Automate the access and use of data across clouds without writing code
Service Bus	Connect across private and public cloud environments
Azure Web PubSub	Easily build real-time messaging web applications using WebSockets and the publish-subscribe pattern

Internet of Things – Without changing your infrastructure, enjoy the perks of IoT on all applications

Service	Description

API Management	Publish APIs to developers, partners, and employees securely and at scale
Azure Cosmos DB	Fast NoSQL database with open APIs for any scale
Azure Digital Twins	Build next-generation IoT solutions that model entire environments in real-time
Azure Functions	Process events with serverless code
Azure IoT Central	Accelerate the creation of IoT solutions
Azure IoT Edge	Extend cloud intelligence and analytics to edge devices managed by Azure IoT Hub
Azure IoT Hub	Connect, monitor, and manage IoT assets with a scalable platform
Azure IoT solution accelerators	Create fully customizable solutions with templates for common IoT scenarios
Azure Machine Learning	Bring AI to everyone with an end-to-end, scalable, trusted platform with experimentation and model management
Azure Maps	Simple and secure location APIs provide geospatial context to data
Azure RTOS	Making embedded IoT development and connectivity easy
Azure Sphere	Securely connect embedded MCU-powered devices from silicon to cloud
Azure SQL Edge	Consume Services privately on Azure Platform
Azure Stream Analytics	Real-time analytics on fast-moving streams of data from applications and devices
Azure Time Series Insights	Monitor, analyze, and visualize your industrial IoT data at scale
Event Grid	Reliable event delivery at a massive scale
Kinect DK	Build computer vision and speech models using a developer kit with advanced AI sensors
Azure Logic Apps	Automate the access and use of data across clouds without writing code
Notification Hubs	Send push notifications to any platform from any back end
Windows 10 IoT Core Services	Long-term OS support and services to manage device updates and assess device health
Azure Defender for IoT	Monitor and detect security threats to both managed and unmanaged IoT assets
Azure Percept	Accelerate edge intelligence from silicon to service

Windows IoT Enterprise	Build intelligent edge solutions with world-class developer tools, long-term support, and enterprise-grade security.

Management and Governance – Automate and optimize all your cloud resources with simplified management and compliance

Service	Description
Automation	Simplify cloud management with process automation
Azure Advisor	Your personalized Azure best practices recommendation engine
Azure Backup	Simplify data protection and protect against ransomware
Azure Blueprints	Enabling quick, repeatable creation of governed environments
Azure Lighthouse	Empowering service providers to manage customers at scale and with precision
Azure Managed Applications	Simplify management of cloud offerings
Azure Migrate	Easily discover, assess, right-size, and migrate your on-premises VMs to Azure
Azure mobile app	Stay connected to your Azure resources—anytime, anywhere
Azure Monitor	Full observability into your applications, infrastructure, and network
Azure Policy	Implement corporate governance and standards at scale for Azure resources
Azure Resource Manager	Simplify how you manage your app resources
Azure Resource Manager templates	Deliver infrastructure as code for all your Azure resources using Resource Manager
Azure Service Health	Personalized guidance and support for when issues in Azure services affect you
Azure Site Recovery	Keep your business running with built-in disaster recovery service
Cloud Shell	Streamline Azure administration with a browser-based shell
Azure Cost Management and Billing	Manage your cloud spending with confidence

Microsoft Azure portal	Build, manage, and monitor all Azure products in a single, unified console
Network Watcher	Network performance monitoring and diagnostics solution
Traffic Manager	Route incoming traffic for high performance and availability
Azure Automanage	Simplify and optimize IT management with automated operations
Azure Resource Mover	Simplify how you move multiple resources between Azure regions
Azure Purview	Maximize business value with unified data governance

Media – High-quality video content available across devices at any time

Service	Description
Azure Media Player	A single-player for all your playback needs
Content Delivery Network	Ensure secure, reliable content delivery with a broad global reach
Content Protection	Securely deliver content using AES, PlayReady, Widevine, and Fairplay
Encoding	Studio-grade encoding at cloud scale
Live and On-Demand Streaming	Deliver content to virtually all devices with scale to meet business needs
Media Services	Encode, store, and stream video and audio at scale

Migration – Easily migrate all your application data to the cloud with required tools, resources, and guide

Service	Description
Azure Database Migration Service	Simplify on-premises database migration to the cloud
Azure Migrate	Easily discover, assess, right-size, and migrate your on-premises

VMs to Azure

Azure Site Recovery	Keep your business running with built-in disaster recovery service
Azure Cost Management and Billing	Manage your cloud spending with confidence
Azure Data Box	Appliances and solutions for offline data transfer to Azure

Mixed Reality – Create immersive and collaborative experience by blending both the digital and physical worlds

Service	Description
Azure Digital Twins	Build next-generation IoT solutions that model entire environments in real-time
Kinect DK	Build computer vision and speech models using a developer kit with advanced AI sensors
Azure Remote Rendering	Render high-quality, interactive 3D content, and stream it to your devices in real-time
Spatial Anchors	Create multi-user, spatially aware mixed reality experiences
Object Anchors	Automatically align and anchor 3D content to objects in the physical world

Mobile – Build and deploy cross-platform and apps for all mobile devices

Service	Description
API Management	Publish APIs to developers, partners, and employees securely and at scale
App Service	Quickly create powerful cloud apps for web and mobile
Azure Cognitive Search	AI-powered cloud search service for mobile and web app development
Azure Maps	Simple and secure location APIs provide geospatial context to data
Azure Cognitive Services	Deploy high-quality AI models as APIs
Notification Hubs	Send push notifications to any platform from any back end

Spatial Anchors	Create multi-user, spatially aware mixed reality experiences
Visual Studio App Centre	Continuously build, test, release, and monitor your mobile and desktop apps
Xamarin	Create cloud-powered mobile apps faster
Azure Communication Services	Build rich communication experiences with the same secure CPaaS platform used by Microsoft Teams

Networking – Bring the best user experience to your customers by connecting on-premise and cloud infrastructure

Service	Description
Application Gateway	Build secure, scalable, and highly available web front ends in Azure
Azure Bastion	Private and fully managed RDP and SSH access to your virtual machines
Azure DDoS Protection	Protect your applications from Distributed Denial of Service (DDoS) attacks
Azure DNS	Host your DNS domain in Azure
Azure ExpressRoute	Dedicated private network fiber connections to Azure
Azure Firewall	Native firewalling capabilities with built-in high availability, unrestricted cloud scalability, and zero maintenance
Load Balancing	Explore Azure load balancing services and find the best solution for your workloads using an easy-to-use service selection tool
Azure Firewall Manager	Central network security policy and route management for globally distributed, software-defined perimeters
Azure Front Door	Secure, fast, and reliable cloud CDN with intelligent threat protection
Azure Internet Analyzer	Test how networking infrastructure changes will impact your customers' performance.
Azure Private Link	Private access to services hosted on the Azure platform, keeping your data on the Microsoft network
Content Delivery Network	Ensure secure, reliable content delivery with a broad global reach
Network Watcher	Network performance monitoring and diagnostics solution

Traffic Manager	Route incoming traffic for high performance and availability
Virtual Network	Provision private networks, optionally connect to on-premises datacenters
Virtual WAN	Optimize and automate branch to branch connectivity through Azure
VPN Gateway	Establish secure, cross-premises connectivity
Web Application Firewall	A cloud-native web application firewall (WAF) service that provides powerful protection for web apps
Azure Orbital	Satellite ground station and scheduling service connected to Azure for fast downlinking of data
Azure Route Server	Enable network appliances to exchange routes dynamically with virtual networks in Azure

Security – Keep your enterprise safe from advanced threats across hybrid cloud workloads

Service	Description
Application Gateway	Build secure, scalable, and highly available web front ends in Azure
Azure Active Directory	Synchronize on-premises directories and enable single sign-on
Azure Active Directory Domain Services	Join Azure virtual machines to a domain without domain controllers
Azure Defender	Protect hybrid cloud workloads
Azure DDoS Protection	Protect your applications from Distributed Denial of Service (DDoS) attacks
Azure Dedicated HSM	Manage hardware security modules that you use in the cloud
Azure Front Door	Secure, fast, and reliable cloud CDN with intelligent threat protection
Azure Information Protection	Better protect your sensitive information—anytime, anywhere
Azure Sentinel	Put cloud-native SIEM and intelligent security analytics to work to help protect your enterprise
Key Vault	Safeguard and maintain control of keys and other secrets

Security Center	Unify security management and enable advanced threat protection across hybrid cloud workloads
VPN Gateway	Establish secure, cross-premises connectivity
Web Application Firewall	A cloud-native web application firewall (WAF) service that provides powerful protection for web apps
Azure Defender for IoT	Monitor and detect security threats to both managed and unmanaged IoT assets
Microsoft Azure Attestation	A unified solution for remotely verifying the trustworthiness of a platform and integrity of the binaries running inside it
Microsoft Azure Confidential Ledger	Easily use a REST API managed service to store your unstructured metadata in a blockchain structure

Storage – Get a large and highly scalable cloud data storage to keep your apps and workloads

Service	Description
Archive Storage	An industry-leading price point for storing rarely accessed data
Avere vFXT for Azure	Run high-performance, file-based workloads in the cloud
Azure Backup	Simplify data protection and protect against ransomware
Azure Data Lake Storage	Massively scalable, secure data lake functionality built on Azure Blob Storage
Azure Data Share	A simple and safe service for sharing big data with external organizations
Azure Files	Simple, secure, and serverless enterprise-grade cloud file shares
Azure FXT Edge Filer	Hybrid storage optimization solution for HPC environments
Azure HPC Cache	File caching for high-performance computing (HPC)
Azure NetApp Files	Enterprise-grade Azure file shares, powered by NetApp
Azure Blob Storage	Massively scalable and secure object storage
Azure Data Box	Appliances and solutions for offline data transfer to Azure
Azure Disk Storage	High-performance, highly durable block storage for Azure Virtual Machines

Queue Storage	Effectively scale apps according to traffic
Storage Accounts	Durable, highly available, and massively scalable cloud storage
Storage Explorer	View and interact with Azure Storage resources
StorSimple	Lower costs with an enterprise hybrid cloud storage solution
Microsoft Azure Confidential Ledger	Easily use a REST API managed service to store your unstructured metadata in a blockchain structure

Web – Quick build and deploy web applications

Service	Description
API Apps	Easily build and consume Cloud APIs
API Management	Publish APIs to developers, partners, and employees securely and at scale
App Service	Quickly create powerful cloud apps for web and mobile
Azure Cognitive Search	AI-powered cloud search service for mobile and web app development
Azure Maps	Simple and secure location APIs provide geospatial context to data
Azure SignalR Service	Add real-time web functionalities easily
Azure Spring Cloud	A fully managed Spring Cloud service, jointly built and operated with VMware
Content Delivery Network	Ensure secure, reliable content delivery with a broad global reach
Mobile Apps	Build and host the backend for any mobile app
Notification Hubs	Send push notifications to any platform from any back end
Static Web Apps	A modern web app service that offers streamlined full-stack development from source code to global high availability
Web App for Containers	Easily deploy and run containerized web apps that scale with your business
Web Apps	Quickly create and deploy mission-critical web apps at scale
Azure Communication Services	Build rich communication experiences with the same secure CPaaS platform used by Microsoft Teams
Azure Web PubSub	Easily build real-time messaging web applications using WebSockets and the

Azure Command-Line Interface (CLI)

It is very important to mention Microsoft Azure commands in any **Azure cheat sheet.** The Azure command-line is the cross-platform command-line tool that can help you manage your resources. You can also develop custom automation with this tool.

You can approach Azure CLI through a selection of Azure Cloud Shell environments in your browser. After installing Azure CLI by following the given instructions, you should also check the version of your Azure CLI by using 'az version' command. Once you are done, you need to sign in with 'az login' to use the CLI commands with the local install.

Common Commands

As you start using Microsoft Azure, you will come across several common commands to be implemented in the CLI. Here is an outline of the common command groups:

- 'az group' deals with resource groups.
- 'az VM' deals with virtual machines.
- 'az storage account' deals with storage accounts.
- 'az keyvault' deals with the Key Vault.
- 'az webapp' deals with Web applications.
- 'az sql server' deals with SQL databases.
- 'az cosmosdb' command relates to functions of CosmosDB

This organization of CLI commands into groups is also an important part of every **Azure cheat sheet**. You can choose 'az find' to look for more command names.

Arguments Available Globally

The next component of this **Azure cheat sheet** is the discussion on globally available arguments, that can be used with every command.

- The '- -output' argument helps in changing the output format. The different formats available in this argument include JSON, tsv (tab-separated values), YAML, jsonc (colorized JSON) and table (human-readable ASCII tables).
- The '- -query' argument helps in filtering the output from Azure services. This argument utilizes the JMESPath query language.
- '- -verbose' argument helps in printing information regarding resources created in Azure in the course of an operation. This argument also provides additional useful information.
- '- -debug' argument is ideal for printing additional information about CLI operations. As the name of the command implies directly, it is ideal for debugging objectives. When users find a bug, they should provide output with '- -debug' tag activated during submission of the bug report.