

Azure Services

Microsoft Azure is a comprehensive cloud computing platform that offers a wide range of services across various categories. The key components of Azure can be broadly categorized into the following:

1. Compute:

- **Virtual Machines (VMs):** Allows users to deploy and manage virtualized Windows or Linux servers in the cloud.
- **App Service:** Provides a fully managed platform for building, deploying, and scaling web apps.
- **Azure Kubernetes Service (AKS):** Simplifies the deployment, management, and scaling of containerized applications using Kubernetes.

2. Storage:

- **Blob Storage:** Scalable object storage for unstructured data.
- **File Storage:** Fully managed file shares in the cloud.
- **Table Storage:** NoSQL key-value store for semi-structured data.
- **Queue Storage:** Messaging service for communication between application components.

3. Networking:

- **Virtual Network:** Allows users to create private, isolated networks in Azure.
- **Load Balancer:** Distributes incoming network traffic across multiple servers to ensure no single server is overwhelmed.
- **Azure DNS:** Provides a scalable and secure way to host your domain's DNS records.
- **VPN Gateway:** Enables secure connections between on-premises networks and Azure.

4. Databases:

- **Azure SQL Database:** Fully managed relational database service.

- **Cosmos DB:** Globally distributed, multi-model database service for large-scale applications.
- **Azure Database for MySQL/PostgreSQL:** Managed database services for MySQL and PostgreSQL.

5. Identity and Access Management:

- **Azure Active Directory (AD):** Identity and access management service that enables secure sign-ins and access to cloud resources.
- **Azure AD B2C:** Identity and access management for consumer-facing applications.
- **Azure AD Domain Services:** Provides managed domain services, such as domain join, LDAP, and Kerberos.

6. Developer Tools:

- **Azure DevOps Services:** A set of development tools for planning, tracking, and deploying software.
- **Visual Studio Team Services (VSTS):** Collaborative software development tools.

7. AI and Machine Learning:

- **Azure Machine Learning:** Cloud-based machine learning service for building, training, and deploying models.
- **Cognitive Services:** Pre-built AI models for vision, speech, language, and more.

8. Internet of Things (IoT):

- **Azure IoT Hub:** Managed service for bi-directional communication between IoT applications and devices.

9. Security and Compliance:

- **Azure Security Center:** Centralized security management and advanced threat protection.
- **Azure Policy:** Policy-based service that helps you keep your resources compliant with your corporate standards.

