



# Cloud - Azure

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# Agenda:

- What is cloud?
- Cloud Models
- Pros And Cons Of Cloud Computing
- Cloud Providers
- Market Share of Cloud Providers
- Microsoft Azure
- Azure Services
- Azure Data Services
- Azure Certifications
- Resources

# What is the cloud?



"THE CLOUD" REFERS TO SERVERS THAT ARE ACCESSED OVER THE INTERNET, AND THE SOFTWARE AND DATABASES THAT RUN ON THOSE SERVERS.



CLOUD SERVERS ARE LOCATED IN DATA CENTRES ALL OVER THE WORLD. BY USING CLOUD COMPUTING, USERS AND COMPANIES DO NOT HAVE TO MANAGE PHYSICAL SERVERS THEMSELVES OR RUN SOFTWARE APPLICATIONS ON THEIR OWN MACHINES.

# Cloud Models

## Deployment model

- **Public Cloud:**
  - Cloud computing that's delivered via the internet and shared across organizations.
- **Private Cloud:**
  - Cloud computing that is dedicated solely to your organization.
- **Hybrid Cloud:**
  - Any environment that uses both public and private clouds.

## Service model

- IAAS: Infrastructure as a Service
- PAAS: Platform as a Service
- SAAS: Software as a Service
- AIAAS; AI as a Service

# Pros And Cons Of Cloud Computing

## Pros

- Scalability: Scale when Needed
- Cost savings: Auto-scaling
- Disaster Recovery.
- Accessibility
- Resilience
- Business Focus

## Cons

- Risk of data confidentiality.
- The level of security.
- Internet access is mandatory
- Compliance.
- Weak in the event of an attack.
- Data Mobility.
- Technical problem.

# Cloud Providers

AWS

Microsoft  
Azure

Google Cloud  
Platform

Huawei  
Cloud

Alibaba  
Cloud

Oracle Cloud

Teradata  
Cloud

IBM Cloud

# Market Share of Cloud Providers



AWS:

32% Market Share



Azure:

20.5% Market Share



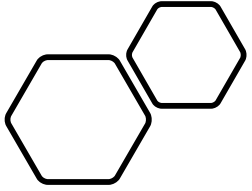
GCP:

9% Market Share



Huawei Cloud:

2.8% Market Share



# Microsoft Azure



# What is Azure?

- Microsoft Azure is Microsoft's public cloud computing platform.
- It provides a range of cloud services, including compute, analytics, storage and networking.
- Users can pick and choose from these services to develop and scale new applications or run existing applications in the public cloud.



# Azure Services

- Compute:
  - Virtual Machine: Create an instance of Linux or Windows
  - Cloud Service:
  - Service Fabric: Microservice development
  - Functions: Serverless Functions
- Network:
  - Azure CDN; Content Delivery System.
  - Express Route:
  - Virtual Network
  - Azure DNS: Hosting Service
- Storage:
  - Disk Storage:
  - Blob Storage: Optimized storage for storing large data
  - File Storage: Managed File Storage MFS.
  - Queue Storage:
- Security:
  - Azure Security Center: A cloud workload protection solution that provides security management and advanced threat protection across hybrid cloud workloads.
  - Azure Key Vault: A secure secrets store for the passwords, connection strings, and other information you need to keep your apps working.
  - Azure Monitor logs: A monitoring service that collects telemetry and other data and provides a query language and analytics engine to deliver operational insights for your apps and resources. Can be used alone or with other services such as Security Center.
  - Azure Dev/Test Labs: A service that helps developers and testers quickly create environments in Azure while minimizing waste and controlling cost.
- Azure Devops:
  - Azure Boards
  - Azure Repos
  - Azure Pipelines
  - Azure Test Plans
  - Azure Artifacts
  - Azure Devops Server

# Azure Data Services

Azure Synapse  
Analytics

Azure Data  
factory

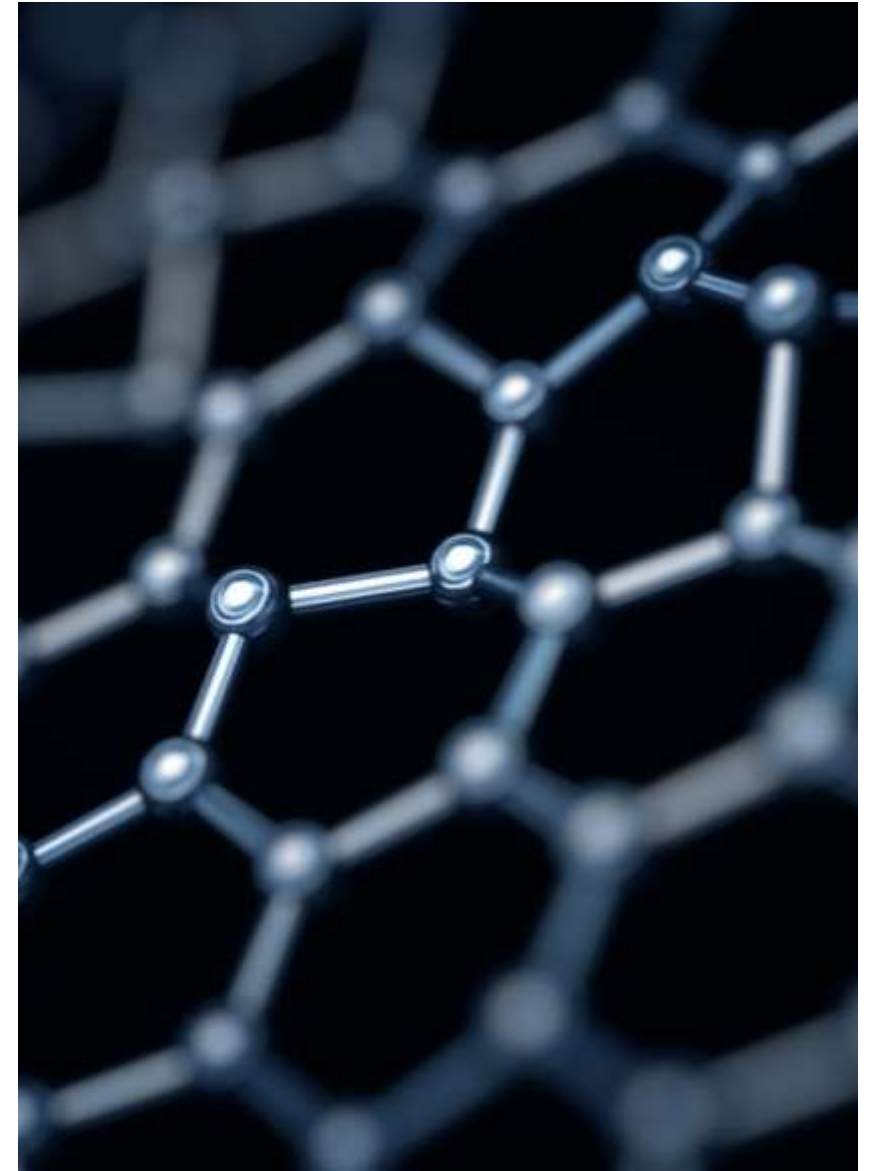
Azure  
Datalake

Azure SQL  
Database

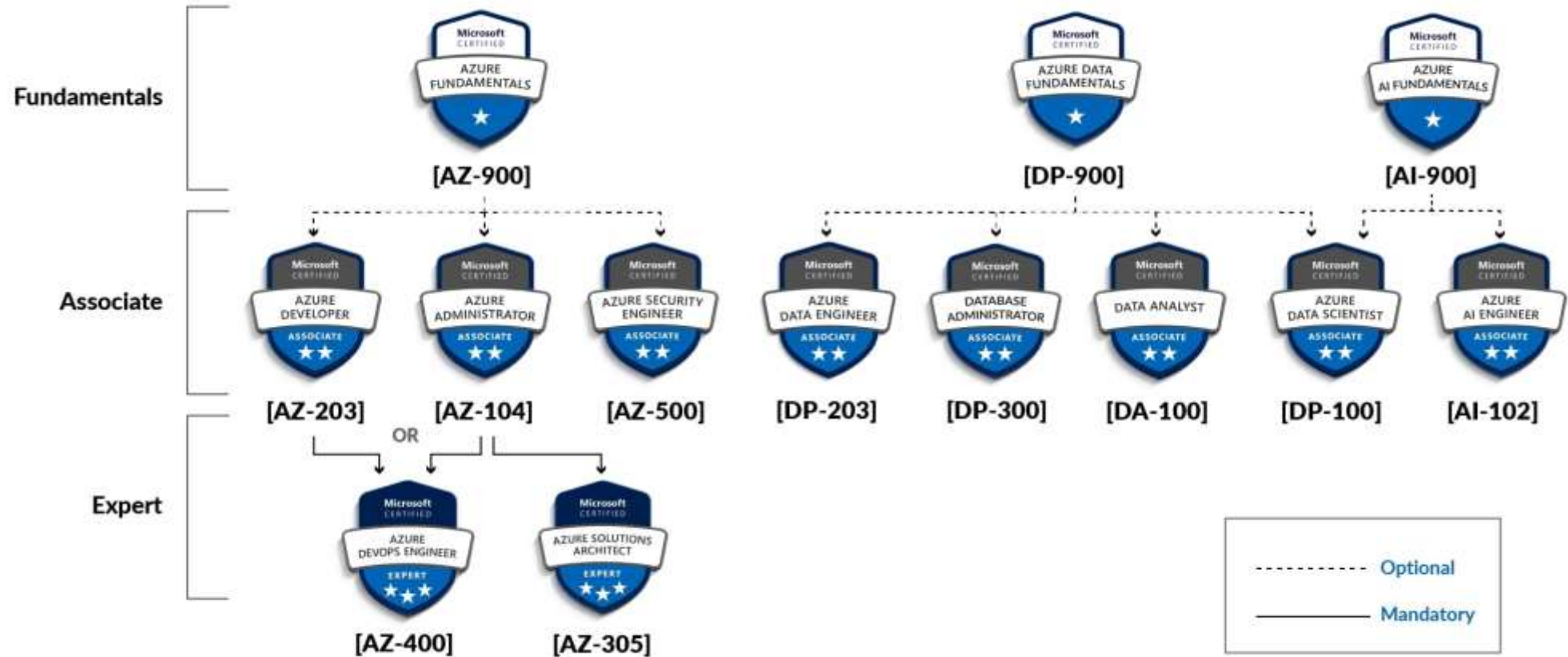
Azure Cosmos  
DB

HDinsight

Databricks



# Azure Certifications



# Resources

- Microsoft Learn
- Prepare dumps from exam topics website.

Any Questions?

