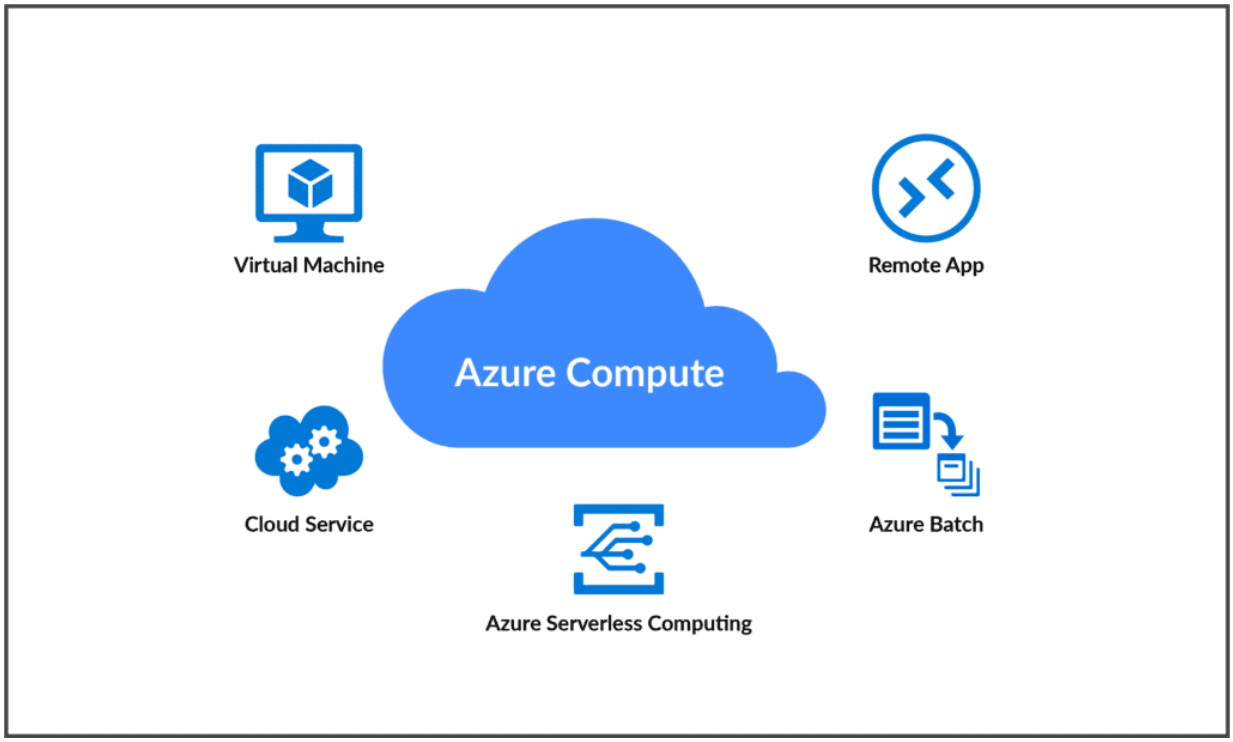
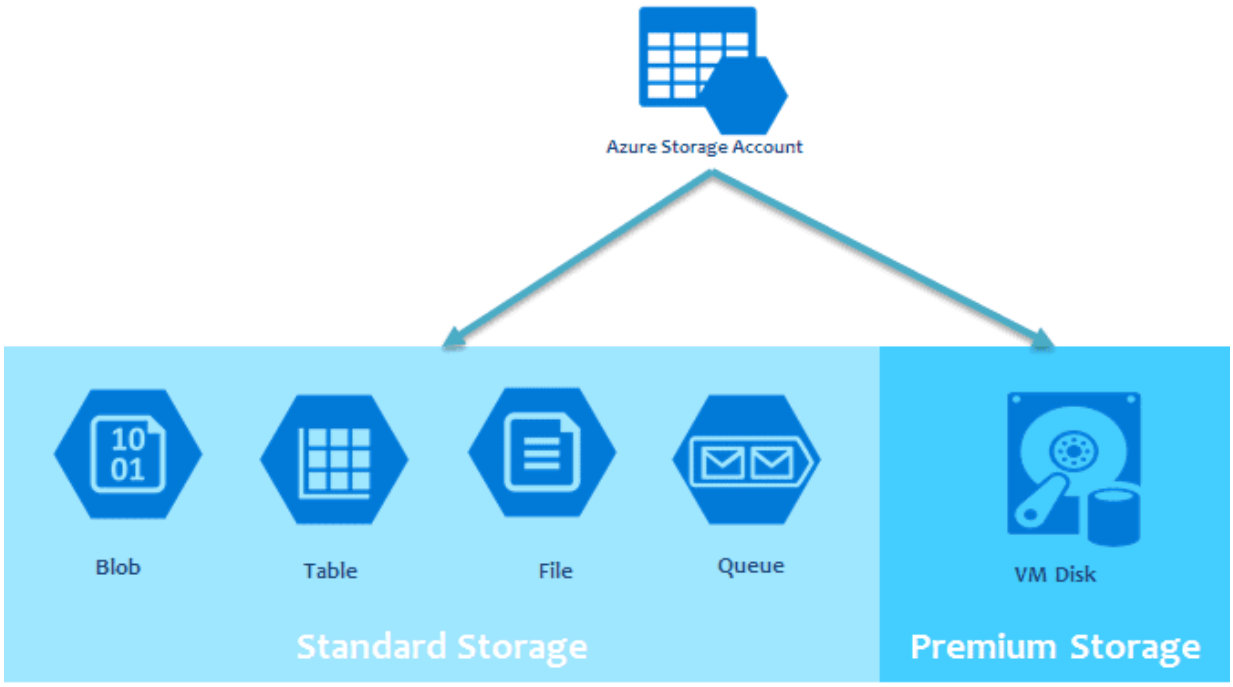
3.1. Microsoft Azure Core Services

1.) Azure Compute Service



2.) Azure Storage Service



2.1 Azure Blobs :

It stores **Text and Binary Data** that support Big Data Analytics using Data lake Storage Gen2. blob Storage provides access to an image file, pdfs, or documents directly to the browser using a single link. Blob enables streaming of audio, video, and distributed access of files as well as log file management.

2.2 Azure Files

Microsoft Azure File storage is a type of Azure service that was designed to support the needs of the Azure VM environment. That storage is, in essence, a network share. You can store files there that can be accessed from different Virtual Machines. It is similar to Amazon EFS and is its direct competitor.

2.3 Azure Queues

Queue Storage is a type of storage that is built to connect components of your application. It allows you to build flexible applications with decoupled and independent components that rely on asynchronous message queuing.

- This service used for the storage and retrieval of messages
- This service is good when you want to decouple components of an application
- A single message in the queue can be up to 64kb in size

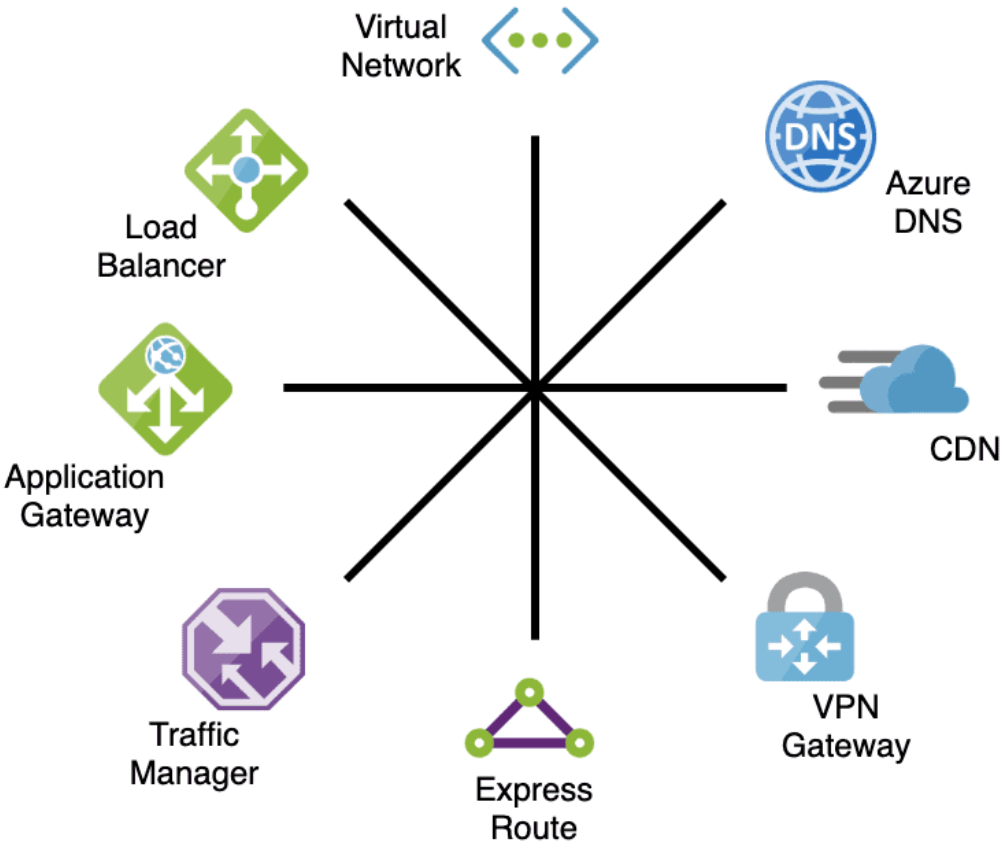
- You can store millions of messages in the queue

2.4 Azure Tables

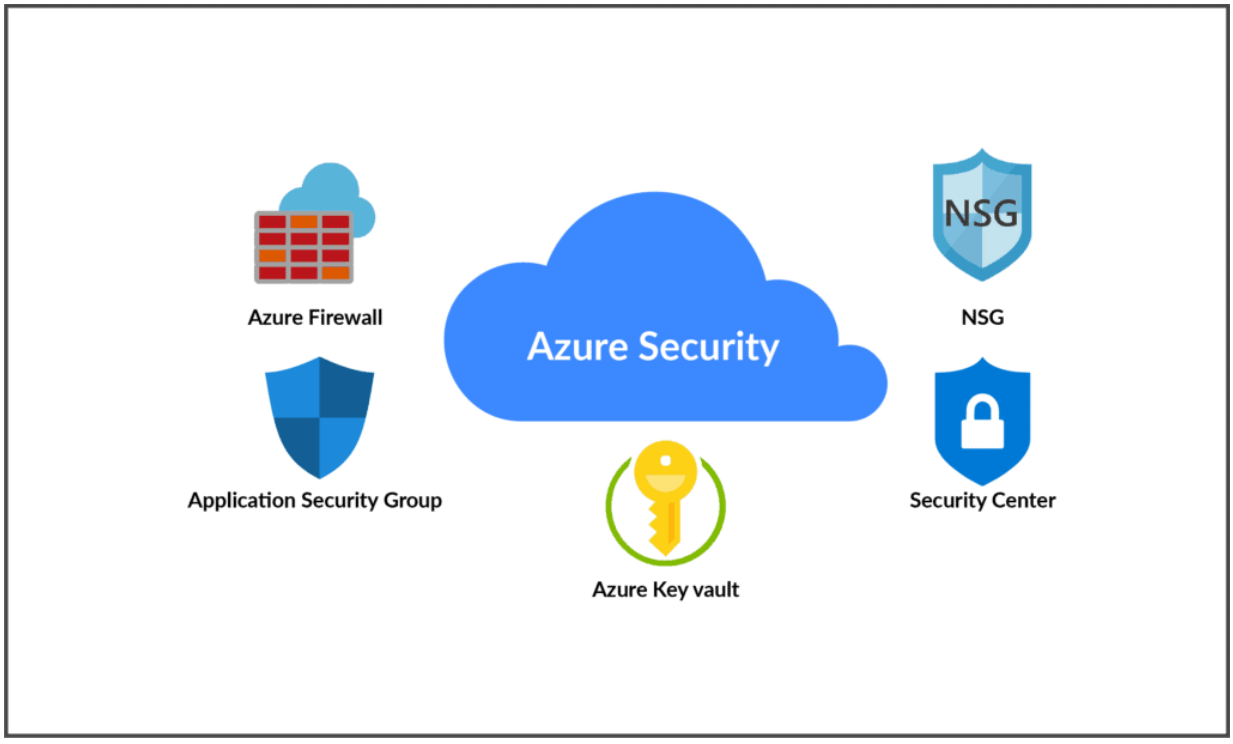
Microsoft Azure Table Storage was made to store structured NoSQL data. The storage is very scalable and, at the same time, very cheap to keep data in. However, it set off more expensive when you access files frequently.

- Structured NoSQL data are stored in Azure Table
- It is a key attribute store
- It is a cost-effective option for the storage of table-like data for applications

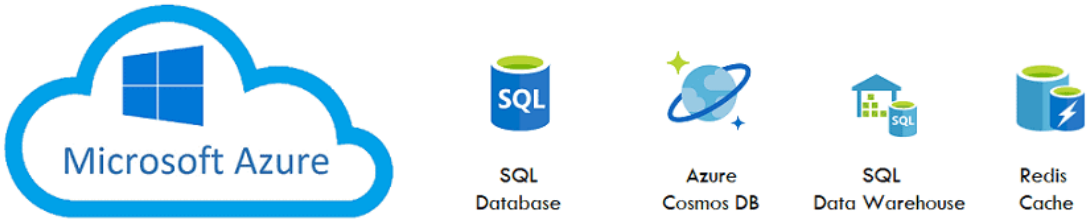
3.) Azure Network Service



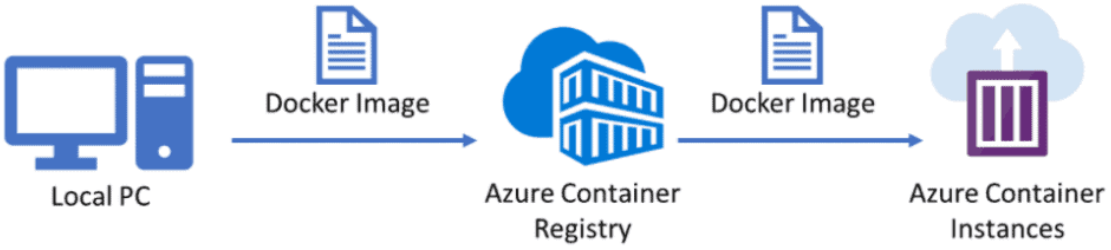
4.) Azure Security



5.) Data Platform Service



6.) Container Services



6.1) Container instances

Running Application in Container without adding any virtual machine or full operating system service integration. it helps in the development and real-time

production environment setup for applications.

- It dilutes the management of the operating system by adding containers that do not require any management. if any container fails then it automatically detects and launches a similar service container without any delay in service processing.
- Docker container is a tool that creates containers with the help of container instance service.

6.2) Container Registry

Azure Container Registry is a private Azure registry with a collection of docker container images. Moreover, it enables faster Global replication of images which enables multiple regions-based single registry images. Container Registry supports Many Azure services such as Azure Active Directory authentication process, RBAC, and virtual network.

6.3) Azure Kubernetes service

Azure Kubernetes Service (AKS) is a managed **Kubernetes service** in which the master node is managed by Azure and end-users manages worker nodes. As a managed **Kubernetes service AKS is free** – you only pay for the worker nodes within your clusters, not for the masters. You can create an AKS cluster in the Azure portal, with the Azure CLI, or template-driven deployment options such as Resource Manager templates and Terraform.