

Azure Talk – Azure Compute

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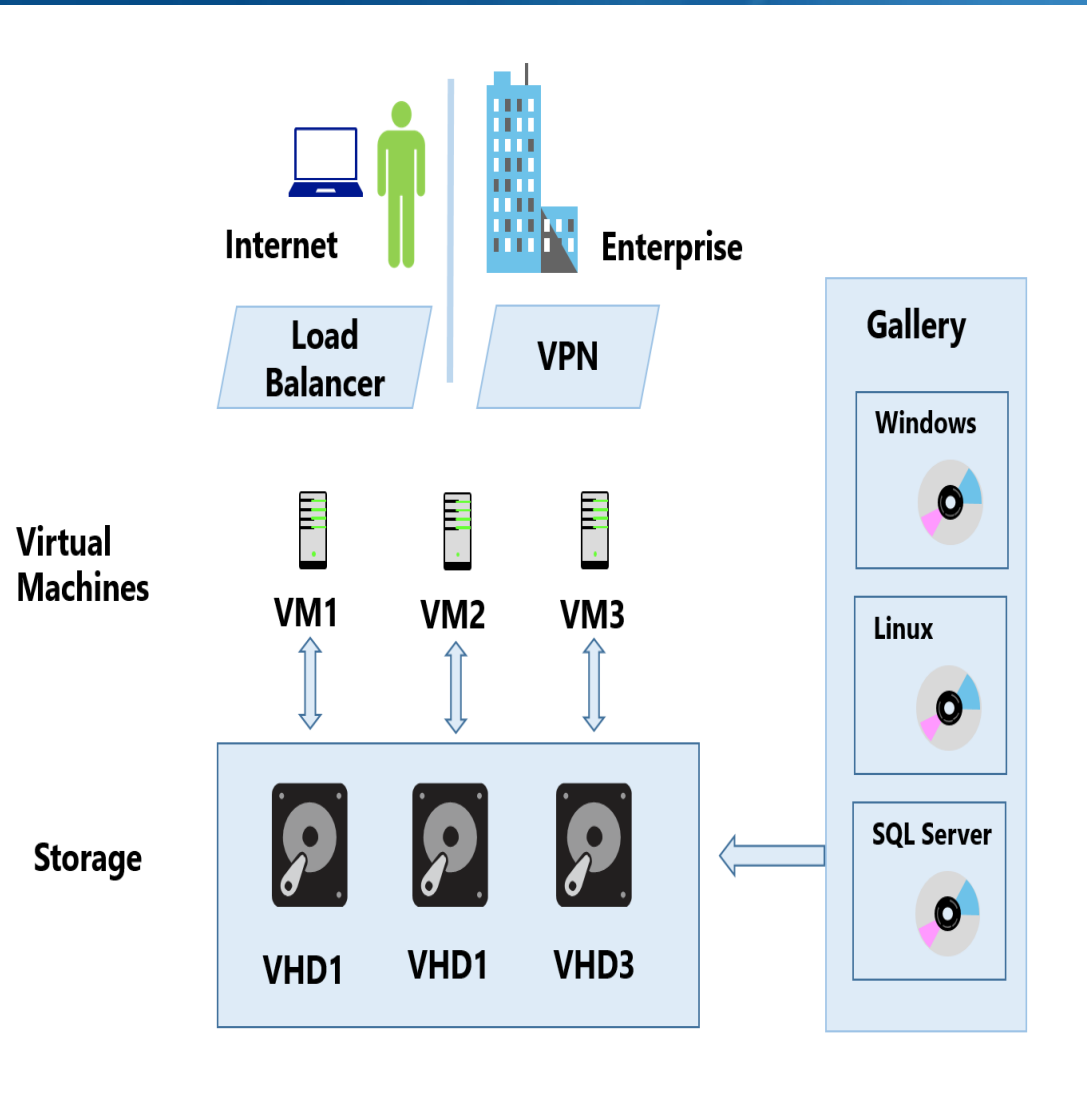
Agenda

Azure Compute

- Azure Virtual Machine
- Azure VM Scale set
- Migrating from Classic to ARM.
- Azure Demo



Azure Virtual Machine



- **Azure Virtual Machines** is one of several types of on-demand, scalable computing resources that Azure offers.
- Azure Virtual Machines lets you create and use virtual machines in the cloud. Providing what's known as *Infrastructure as a Service (IaaS)*.
- Azure VM's provide you with an **operating system**, **storage**, and **networking** capabilities and can run a wide range of applications.



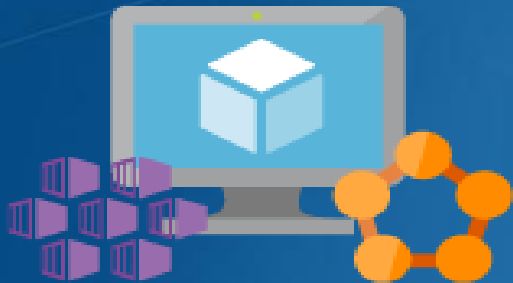
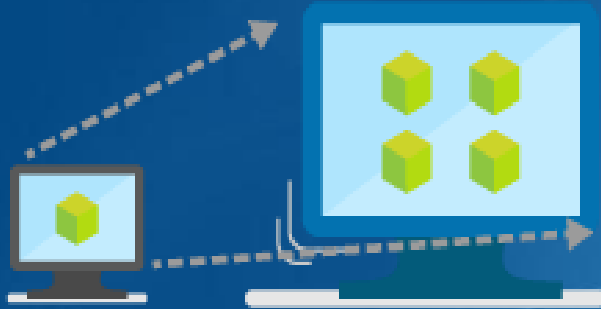
Azure Virtual Machine Sizes

- You can configure virtual machines with a variety of options for CPU, memory, and IOPS.
- The Windows virtual machines sizes consist of several series: A-series, D-series, F-series, and G-series. When your requirements change, it is easy to resize the VM.

| Type | Sizes | Description |
|--------------------------|-----------------------------|--|
| General Purpose | DSv2, Dv2, DS, D, Av2, A0-7 | Balanced CPU-to-memory ratio. Ideal for testing and development, small to medium databases, and low to medium traffic web servers. |
| Compute Optimized | Fs, F | High CPU-to-memory ratio. Good for medium traffic web servers, network appliances, batch processes, and application servers. |
| Memory Optimized | GS, G, DSv2, DS | High memory-to-core ratio. Great for relational database servers, medium to large caches, and in-memory analytics. |
| Storage Optimized | Ls | High disk throughput and IO. Ideal for Big Data, SQL, and NoSQL databases. |
| GPU | NV, NC | Specialized virtual machines targeted for heavy graphic rendering and video editing. Available with single or multiple GPUs. |
| High Performance Compute | H, A8-11 | Our fastest and most powerful CPU virtual machines with optional high-throughput network interfaces (RDMA). |



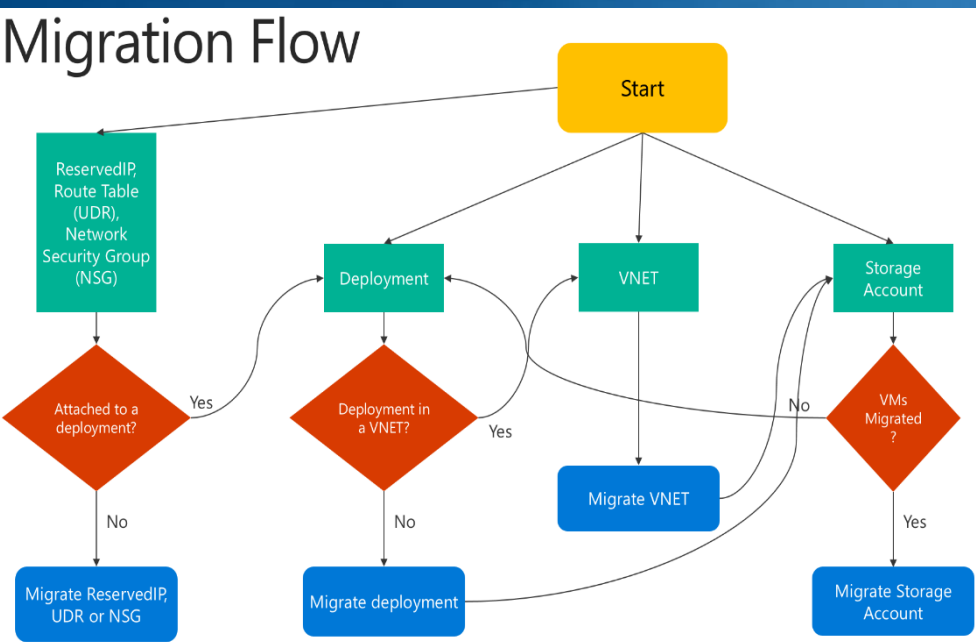
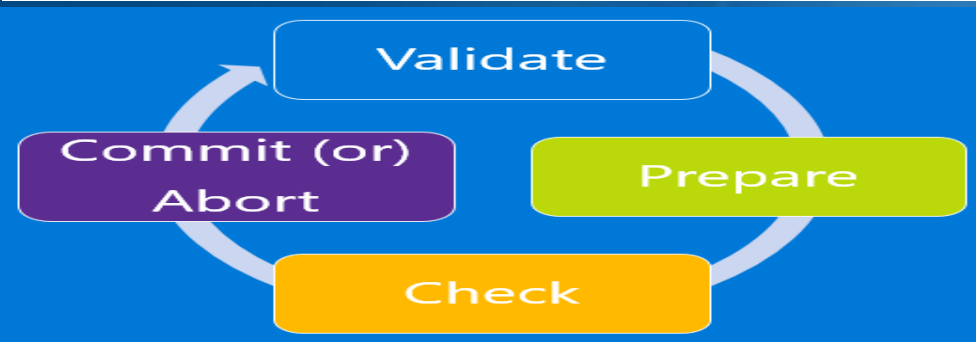
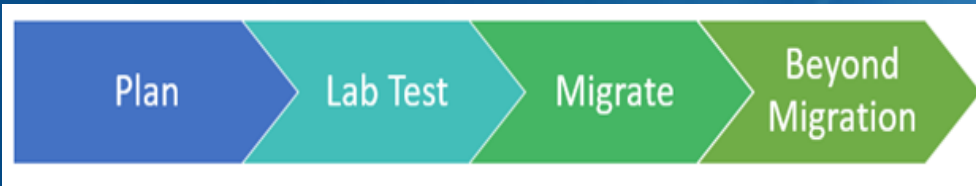
Azure VM Scale Sets



- **Virtual machine scale sets** are an Azure compute resource that you can use to deploy and manage a set of *identical VMs*.
- Support Windows platform images, Linux platform images, custom images, and extensions.
- Can be configured with **autoscale** settings.
- Support hyperscale workloads. **Azure container service** and **Azure Service fabric** run on VM scale sets.
- **Simplified networking**: Integrates with Azure networking resources such as **Azure Load Balancer** and **Application Gateway**.



Migrate from Classic to ARM



- Azure offers 2 deployment model
 - **ARM**(Azure Resource Manager)
 - Classic or **ASM**(Azure Service Manager)
- Azure originally provided only the **classic** deployment model
- In 2014, Resource Manager was introduced
- Supported scopes of migration
 - Migration of virtual machines (NOT in a virtual network)
 - Migration of virtual machines (in a virtual network)
 - Storage accounts migration
 - Unattached resources (Network Security Groups, Route Tables & Reserved IPs)



Azure Compute *demo*

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