**Azure & Azure Devops Interview Q’s & A’s:**

**1. Which of the following web applications can be deployed with Azure?**

1. ASP.NET
2. PHP
3. WCF
4. All of the mentioned

**Answer: D All of the mentioned**

**2. I have some private servers on my premises, also I have distributed some of my workload on the public cloud, what is this architecture called?**

1. Virtual Private Network
2. Private Cloud
3. Virtual Private Cloud
4. Hybrid Cloud

**Answer: D. Hybrid Cloud**

**3. Which service in Azure is used to manage resources in Azure?**

1. Application Insights
2. Azure Resource Manager
3. Azure Portal
4. Log Analytics

**Answer: B Azure Resource Manager**

**4. A \_\_\_\_\_\_\_\_\_ role is a virtual machine instance running Microsoft IIS Web server that can accept and respond to HTTP or HTTPS requests.**

1. Web
2. Server
3. Worker
4. Client

**Answer: A. Web**

**Explanation:**The answer should be Web Roles, there are no roles such as Server or Client roles. Also, Worker roles can only communicate with Azure Storage or through direct connections to clients.

### 5. Is it possible to create a Virtual Machine using Azure Resource Manager in a Virtual Network that was created using classic deployment?

**Explanation:**This is not supported. You cannot use Azure Resource Manager to deploy a virtual machine into a virtual network that was created using classic deployment.

**6. Are data disks supported within scale sets?**

**Explanation:**Yes. A scale set can define an attached data disk configuration that applies to all VMs in the set. Other options for storing data include:

* Azure files (SMB shared drives)
* OS drive
* Temp drive (local, not backed by Azure Storage)
* Azure data service (for example, Azure tables, Azure blobs)
* External data service (for example, remote database)

### 7. Do scale sets work with Azure availability sets?

**Explanation:**Yes. A scale set is an implicit availability set with 5 fault domains and 5 update domains. Scale sets of more than 100 VMs span multiple *placement groups*, which are equivalent to multiple availability sets. An availability set of VMs can exist in the same virtual network as a scale set of VMs. A common configuration is to put control node VMs (which often require unique configuration) in an availability set and put data nodes in the scale set.

### 8. What is a break-fix issue?

**Explanation:**Technical problems are called break-fix issue, it is an industry term which refers to “work involved in supporting a technology when it fails in the normal course of its function, which requires intervention by a support organization to be restored to working order”

### 9. What happens when you exhaust the maximum failed attempts for authenticating yourself via Azure AD?

**Explanation:**We use a more sophisticated strategy to lock accounts. This is based on the IP address of the request and the passwords entered. The duration of the lockout also increases based on the likelihood that it is an attack.

### 10. Where can I find a list of applications that are pre-integrated with Azure AD and their capabilities?

**Explanation:**Azure AD has around 2600 pre-integrated applications. All pre-integrated applications support single sign-on (SSO). SSO let you use your organizational credentials to access your apps. Some of the applications also support automated provisioning and de-provisioning.

### 11. How can I use applications with Azure AD that I’m using on-premises?

**Explanation:**Azure AD gives you an easy and secure way to connect to the web applications you choose. You can access these applications in the same way you access your SaaS apps in Azure AD, no need for a VPN to change your network infrastructure.

### 24. What is a VNet?

**Explanation:**VNet is a representation of your own network in the cloud. It logically isolates your instances launched in the cloud, from the rest of your resources.

### 25. What are the differences between Subscription Administrator and Directory Administrator?

**Explanation:**By default, one is assigned the Subscription Administrator role when he/she signs up for Azure. A subscription admin can use either a Microsoft account or a work or school account from the directory that the Azure subscription is associated with. This role is authorized to manage services in the Azure portal. If others need to sign in and access services by using the same subscription, you can add them as co-admins.

Azure AD has a different set of admin roles to manage the directory and identity-related features. These admins will have access to various features in the Azure portal or the Azure classic portal. The admin’s role determines what they can do, like create or edit users, assign administrative roles to others, reset user passwords, manage user licenses, or manage domains.

### 26. Are there any scale limitations for customers using managed disks?

**Explanation:** Managed Disks eliminates the limits associated with storage accounts. However, the number of managed disks per subscription is limited to 2000 by default.

### ****31. Is it possible to add an existing VM to an availability set?****

**Explanation:** No. If you want your VM to be part of an availability set, you need to create the VM within the set. There currently no way to add a VM to an availability set after it has been created.

### ****34. How much storage can I use with a virtual machine?****

**Explanation:**Each data disk can be up to 1 TB. The number of data disks which you can use depends on the size of the virtual machine.

### ****39. What are the various power states of a VM?****Power States - Azure Interview Questions - Edureka

### 44. My web app still uses an old Docker container image after I’ve updated the image on Docker Hub. Does Azure support continuous integration/deployment of custom containers?

**Explanation:**Yes, it does. For private registries, you can update the container by stopping and then re-starting your web app. Alternatively, you can also change or add a dummy application setting to force an update of your container.

**Different Series (or) Different types of VM’s in detail:**

## **A-Series**

### Entry-level economical VMs for dev/test

A-series VMs have CPU performance and memory configurations best suited for entry level workloads like development and test. They are economical and provide a low-cost option to get started with Azure. Av2 Standard is the latest generation of A-series VMs with similar CPU performance but more RAM per vCPU and faster disks.

**Example use cases include** development and test servers, low traffic web servers, small to medium databases, servers for proof-of-concepts and code repositories.

 A-Series

STARTING FROM

₹772.01 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#a-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#a-series)

## **B-Series**

### Economical burstable VMs

B-series are economical virtual machines which provide a low-cost option for workloads which typically run at a low to moderate baseline CPU utilisation, but sometimes need to burst to significantly higher CPU utilisation when the demand rises.

**Example use cases include** development and test servers, low-traffic web servers, small databases, micro services, servers for proof-of-concepts, build servers.

 B-Series

STARTING FROM

₹250.91 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#b-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#b-series)

## **D-Series**

### General purpose compute

D-series VMs feature fast CPUs and optimal CPU-to-memory configuration making them suitable for most production workloads. Dv2-series instances carry more powerful CPUs and the same memory and disk configurations as the D-series.

D2-64 v3 instances are the latest hyper-threaded generation of general purpose instances and are based on the 2.3 GHz Intel XEON ® E5-2673 v4 (Broadwell) processor. They can achieve 3.5 GHz with Intel Turbo Boost Technology 2.0. The Ds-series supports Azure Premium SSDs.

**Example use cases include** many enterprise-grade applications, relational databases, in-memory caching and analytics. The latest generations are ideal for applications which demand faster CPUs, better local disk performance or higher memories.

 D-Series

STARTING FROM

₹2,750.27 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#d-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#d-series)

## **DC-series**

### Protect data in use

DC-series virtual machines are a new family of VMs to protect the confidentiality and integrity of your data and code while it is processed in Azure through the use of secure enclaves. This is in addition to the existing built-in encryption capabilities that protect data in Azure while it is at rest and in transit.

These VMs are backed by the latest generation of Intel Xeon E-2176G 3.7GHz Processor with SGX technology. With Intel Turbo Boost Technology this processor can reach up to 4.7GHz.

**Example use cases include** confidential querying in databases, creation of scalable confidential consortium networks and secure multiparty machine learning algorithms. The DC-series VMs are ideal to build secure enclave-based applications to protect customers code and data while it is in use.

 DC-series

STARTING FROM

₹3,232.77 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#d-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#d-series)

## **E-Series**

### Optimised for in-memory hyper-threaded applications

The E-series family of Azure virtual machines are optimised for heavy in-memory applications such as SAP HANA. These VMs are setup with high memory-to-core ratios, which makes them well-suited for relational database servers, with medium to large caches and in-memory analytics. The E-series VMs range from 2 to 64 vCPUs and 16-432 GiB RAM, respectively. The Es-series supports Azure Premium SSDs.

**Example use cases include** SAP HANA, SAP S/4 HANA, SQL Hekaton and other large in-memory business critical workloads.

 E-Series

STARTING FROM

₹6,079.54 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#e-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#e-series)

## **F-Series**

### Compute optimised virtual machines

F-series VMs feature a higher CPU-to-memory ratio. They are equipped with 2 GB RAM and 16 GB of local solid state drive (SSD) per CPU core and are optimised for compute intensive workloads. The Fsv2-series features 2 GiB RAM and 8 GB of local temporary storage (SSD) per vCPU. The Fsv2-series is hyper-threaded and based on the 2.7 GHz Intel Xeon® Platinum 8168 (SkyLake) processor, which can achieve clock speeds as high as 3.7 GHz with the Intel Turbo Boost Technology 2.0.

**Example use cases include** batch processing, web servers, analytics and gaming.

 F-Series

STARTING FROM

₹2,364.27 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#f-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#f-series)

## **G-Series**

### Memory and storage optimised virtual machines

G-series VMs feature the [Intel® Xeon® processor E5 v3 family](https://go.microsoft.com/fwlink/?LinkId=692100&clcid=0x4009), two times more memory and four times more Solid State Drive storage (SSDs) than the General Purpose D-series. G-series features up to ½ TB of RAM and 32 CPU cores and provide unparalleled computational performance, memory and local SSD storage for your most demanding applications.

**Example use cases include** large SQL and NoSQL databases, ERP, SAP and data warehousing solutions.

 G-Series

STARTING FROM

₹21,181.87 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#g-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#g-series)

## **H-Series**

### High Performance Computing virtual machines

The HB-series VMs are optimised for HPC applications driven by memory bandwidth, such as fluid dynamics, explicit finite element analysis and weather modeling. HB VMs feature 60 AMD EPYC 7551 processor cores, 4 GB of RAM per CPU core, no hyperthreading and up to 4 Managed Disks. The AMD EPYC platform provides more than 260 GB/sec of memory bandwidth.

The HC-series VMs are optimised for HPC applications driven by intensive computation, such as implicit finite element analysis, reservoir simulation and computational chemistry. HC VMs feature 44 Intel Xeon Platinum 8168 processor cores, 8 GB of RAM per CPU core, no hyperthreading and up to 4 Managed Disks. The Intel Xeon Platinum platform supports Intel’s rich ecosystem of software tools and features an all-cores clock speed of 3.4 GHz for most workloads.

**Example use cases include** fluid dynamics, finite element analysis, seismic processing, reservoir simulation, risk analysis, electronic design automation, rendering, Spark, weather modeling, quantum simulation, computational chemistry, heat transfer simulation.

 H-Series

STARTING FROM

₹38,407.21 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#h-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#h-series)

## **Ls-Series**

### Storage optimized virtual machines

The latest Lsv2-series features high throughput, low latency, directly mapped local NVMe storage. The Lsv2 VMs run on the AMD EPYC™ 7551 processor with an all core boost of 2.55GHZ up to a 3.0GHz single core boost. The Lsv2 series VMs offer up to 80 vCPUs in a hyper-threaded configuration, with 8 GiB of memory per vCPU and up to 19.2TB (10x1.92TB) available directly to the VM.

The Ls-series VMs are storage optimized. These are ideal for applications requiring low latency, high throughput, and large local disk storage. These VMs are built on Intel Haswell processor technology, specifically E5 Xeon v3 processors with 4, 8, 16, and 32 core VM sizes. Ls-series VMs support up to 6 TB of local SSD and offer unmatched storage I/O performance.

**Example use cases include** NoSQL databases such as Cassandra, MongoDB, Cloudera, and Redis. Data warehousing applications and large transactional databases are great use cases as well.

 Ls-Series

STARTING FROM

₹30,108.17 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#lsv2-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#lsv2-series)

## **M-Series**

### Largest memory optimised virtual machines

The M-series family of Azure virtual machines are the largest memory optimised VMs to date. These VMs are ideal for heavy in-memory workloads such as SAP HANA. The M-Series offer up to 4 TB of RAM on a single VM. In addition, these VMs offer the highest virtual CPU count of up to 128 vCPUs on a single VM to enable high performance parallel processing.

**Example use cases include** SAP HANA, SAP S/4 HANA, SQL Hekaton and other large in-memory business critical workloads requiring massive parallel compute power.

 M-Series

STARTING FROM

₹74,136.53 /per month

[Pricing Windows VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/windows/#m-series)[Pricing Linux VMs](https://azure.microsoft.com/en-in/pricing/details/virtual-machines/linux/#m-series)

## **N-Series**

### GPU enabled virtual machines

The N-series is a family of Azure Virtual Machines with GPU capabilities. GPUs are ideal for compute and graphics-intensive workloads, helping customers to fuel innovation through scenarios like high-end remote visualisation, deep learning and predictive analytics.

The N-series has three different offerings aimed at specific workloads:

* The NC-series is focused on high-performance computing and machine learning workloads. The latest version—NCv3—features NVIDIA’s Tesla V100 GPU.
* The ND-series is focused on training and inference scenarios for deep learning. It uses the NVIDIA Tesla P40 GPUs. The latest version - NDv2 - features the NVIDIA Tesla V100 GPUs.
* The NV-series enables powerful remote visualisation workloads and other graphics-intensive applications backed by the NVIDIA Tesla M60 GPU.

NCv3, NCv2, NC and ND VMs offer optional InfiniBand interconnect to enable scale-up performance.

**Example use cases include** simulation, deep learning, graphics rendering, video editing, gaming and remote visualisation.

|  |  |
| --- | --- |
| **(1) \_\_\_is used to route the traffic between virtual machines inside your pirvate virtual network.**  **Answer:- Azure Internal Load Balancers   (2) The smallest recommended virtual machine size in Azure for a production environment is**  **Answer:- A1   (3)You can estimate costs you will incur on Azure by using which tool**  **Answer:- Pricing Calculator   (4)Which of the following Windows Server roles is not supported on Azure Virtual Machines**  **Answer:- Hyper-v   (5)Most types of resource can be moved to a different resource group at**  **Answer:- Anytime**  **(6)Which of the following helps Azure maintain high availability and fault tolerance when deploying and upgrading applications.**  **Answer:- Availability set   (7)Azure supports both .vhd and .vhdx file formats for Virtual Machines.**  **Answer:- False   (8)Azure Virtual Machines only support VM's running Microsoft Windows operating system.**  **Answer:- False   (9)The VM size determines the number of \_\_\_\_\_\_\_\_\_\_.  Answer:- Nic   (10) Which type of storage offering uses SSDs and is intended for use with Virtual machines**  **Answer:- Premium   (11) Geo Redundancy is to provide high availability in \_\_\_\_\_\_\_\_.**  **Answer:- Geographically   (12)What type of storage account is backed by magnetic drives and provides the lowest cost per GB**  **Answer:- Standard   (13)Premium storage disks for virtual machines support up to 64 TBs of storage**  **Answer:- True   (14)If you choose this redundancy strategy, you cannot convert to another redundancy strategy without creating a new storage account and copying the data to the account.**  **Answer:- ZRS   (15)Geo-replication is enabled by default in Windows Azure Storage**  **Answer:- Yes   (16)The maximum size for a file share is 5 TBs.**  **Answer:- True   (17)Your Azure storage account is always replicated to ensure durability and high availability. By default, which of the following replications schemes is used?**  **Answer:- RA-GRS   (18)You add a data disk to an Azure virtual machine. What drive type is created?**  **Answer:- SCSI   (19)Is it possible to create a custom Domain name, or use your organizations domain name, such as fresco.com, in Azure Active Directory?**  **Answer:- True   (20) Microsoft Azure Active Directory can be integrated with on-premises Active Directory to allow single sign-on.**  **Answer:- True   (21)Which of the following individual components are included on HDInsight clusters**  **Answer:- Spark   (22)Which of the following is also known as Compute**  **Answer:- Set of virtual machine instances   (23)Which of the following is a worldwide content caching and delivery system for Windows Azure blob content**  **Answer:- CDN   (24)Microsoft and Hortonworks joined their forces to make Hadoop available on \_\_\_\_\_\_\_\_\_\_\_ for on-premise deployments**  **Answer:- Windows Server   (25)The connection between storage and Microsoft’s CDN (Content Delivery Network) is stated to be at least \_\_\_\_\_\_\_ percent available**  **Answer:- 99.9   (26)Azure Storage plays the same role in Azure that \_\_\_\_\_\_ plays in Amazon Web Services.**  **Answer:- S3   (27)What’s the maximum bandwidth provided by ExpressRoute?**  **Answer:- 10 Gbps   (28)What is the format of an Azure Resource Template?**  **Answer:- JSON   (29)Azure data is replicated \_\_\_\_\_\_\_\_ times for data protection and writes are checked for consistency.**  **Answer:- Three   (30)Which of the following standard does Azure use ?**  **Answer:-Below are the answer  REST  XML  HTML   (31)Point out the wrong statement:  a) An Amazon Machine Image can be provisioned with an operating system, an enterprise application, or application stack  b) AWS is a deployment enabler  c) Google Apps lets you create a scalable cloud-based application  d) None of the mentioned**  **Answer:-None of the mentioned   (40)What does IPsec in Azure platform refers to ?**  **Answer:- Internet Protocol Security protocol suite   (41)Some true about azure  a) The Windows Azure service it The Windows Azure Platform allows a developer to modify his application so it can run in the cloud on virtual machines hosted in Microsoft datacenters  b) Windows Azure serves as a cloud operating system  c) With Azure’s architecture, an application can run locally, run in the cloud, or some combination of both**  **Answer:- All above are correct   (42)A \_\_\_\_\_\_\_\_\_ role is a virtual machine instance running Microsoft IIS Web server that can accept and respond to HTTP or HTTPS requests.**  **Answer:- Web   (43)Which of the following element allows you to create and manage virtual machines that serve either in a Web role and a Worker role ?**  **Answer:- Compute   (44)Which of the following element is a non-relational storage system for large-scale storage ?**  **Answer:- Storage   (45)Azure Storage plays the same role in Azure that \_\_\_\_\_\_ plays in Amazon Web Services.**  **Answer:- S3   (46)Which of the following element in Azure stands for management service ?**  **Answer:- config   (47)Which of the following standard does Azure use ?**  **Answer:-Below are the answer  a) REST  b) XML  c) HTML   (48)True about the Azure  a) An Amazon Machine Image can be provisioned with an operating system, an enterprise application, or application stack  b) AWS is a deployment enabler  c) Google Apps lets you create a scalable cloud-based application**  **Answer:-All above are true   (49)What does IPsec in Azure platform refers to ?**  **Answer:- Internet Protocol Security protocol suite   (50)A \_\_\_\_\_\_\_\_\_ role is a virtual machine instance running Microsoft IIS Web server that can accept and respond to HTTP or HTTPS requests.**  **Answer:- Web   (51)Which of the following element allows you to create and manage virtual machines that serve either in a Web role and a Worker role ?**  **Answer:- Compute   (52) Which of the following element is a non-relational storage system for large-scale storage ?**  **Answer:- Storage   (53)Azure Storage plays the same role in Azure that \_\_\_\_\_\_ plays in Amazon Web Services.**  **Answer:- S3** |  |

|  |
| --- |
|  |

**1)When using Azure Resource Manager, you can use a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for   
  
deployment, which can build identical environments for different work scenarios   
  
such as testing, staging, and production.**

**Answer:-Template   
  
(2)If you have to replace your current on-premise services in the form of virtual   
  
machines, then you can use Microsoft Azure cloud categorized as \_\_\_\_\_\_\_\_\_\_\_\_.**

**Answer:-IAAS   
  
(3)Which cloud offering focuses on the consumption of services?**

**Answer:-SaaS   
  
(4)High available applications are \_\_\_\_\_\_\_\_\_\_\_\_.**

**Answer:-All the options mentioned   
  
(5)Which of the following statements are correct?**

**Answer:-Are below are true   
With Azure’s architecture, an application can run locally, run in the cloud, or some   
  
combination of both.   
Windows Azure serves as a cloud operating system.   
Windows Azure Platform allows a developer to modify his application so it can run   
  
in the cloud on virtual machines hosted in Microsoft datacenters.   
  
(6)You can view the latest data center map and Pay as You Go subscription   
  
information in (the) \_\_\_\_\_\_\_\_?**

**Answer:-Azure Dash Board   
  
(7)In which operating system, we can use Azure PowerShell?**

**Answer:-Windows OS   
  
(8)The new Azure Portal is accessed using \_\_\_\_\_\_\_\_\_\_\_.**

**Answer:-https:\\portal.azure.com------   
  
  
(9)Which of the following is the older service management model, where cloud   
  
services contain your cloud resources?**

**Answer:-Classic Portal   
  
(10)ExpressRoute connections enable access to the \_\_\_\_\_\_\_\_\_.**

**Answer:-Below are the answer   
Microsoft Dynamics 365   
Microsoft Office 365 services   
Microsoft Azure services   
  
(11)Microsoft uses industry standard \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dynamic routing protocol   
  
to exchange routes between your on-premises network, your instances in Azure, and   
  
Microsoft public addresses.**

**Answer:-EGP   
  
(12)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is used to route the traffic between virtual machines inside   
  
your private virtual network.**

**Answer:-Azure Internal Load Balancers   
  
(13)Azure supports both .vhd and .vhdx file formats for Virtual Machines.**

**Answer:-False   
  
(14)To how many resource groups can a resource be added?**

**Answer:-1   
  
(15)You need to deploy a virtual machine on Azure with a low memory entry level   
  
requirement. Which virtual machine sizes should you consider choosing?**

**Answer:-Basic\_A0- Basic\_A4   
  
(16)Azure Virtual Machines only support VM's running Microsoft Windows   
  
operating system.**

**Answer:-False   
  
(17)To delegate administrative tasks for specific resource groups in Azure which   
  
functionality should be used?**

**Answer:-Role based access control   
  
(18)A VM can have multiple associated IP addresses. Which of the following are   
  
possible IP addresses associated with a VM?**

**Answer:- Below are the answer   
Static public IP   
Public virtual IP   
Static private IP   
Dynamic private IP   
  
(19)Which of the following services allow creation and management of virtual   
  
machines that serve either in a Web role and a Worker role?**

**Answer:-Compute   
  
(20)SQL Azure is a cloud-based relational database service that is based on   
  
\_\_\_\_\_\_\_\_\_.**

**Answer:-SQL Server   
  
(21)The smallest recommended virtual machine size in Azure for a production   
  
environments is \_\_\_\_.**

**Answer:-A1   
  
(22) A subnet is a range of IP addresses in a \_\_\_\_\_\_\_\_\_.**

**Answer:-VNet   
  
(23)Which Azure networking component is the core unit from which administrators   
  
can have full control over IP address assignments, name resolution, security settings,   
  
and routing rules?**

**Answer:-Virtual Networks   
  
(24)When should you use a static IP address?**

**Answer:-For VMs within a Vnet   
  
(25)Which of the following helps Azure maintain high availability and fault tolerance when deploying and upgrading applications?**

**Answer:-Availability set   
  
(26)In which type of storage replication, data is not replicated across multiple datacenters?**

**Answer:-Locally Redundant Storage(LRS)   
  
(27)In which Operating System, we can use Azure CLI?**

**Answer:-Below are the answer   
OS X   
Linux   
Windows OS   
  
28)Which connection configuration offers faster speeds, higher security, lower latencies and higher reliability?**

**Answer:-ExpressRoute   
  
(29)What VPN types are supported by Azure?**

**Answer:-Below are the Answer   
Point-to-Site   
Site-to-Site   
VNet-to-VNet   
Multi-set   
  
(30)Which of the following is a non-relational storage system for large-scale storage?**

**Answer:-Data Lake store   
  
(31)SQL Azure is a cloud based relational database that is based on \_\_\_\_\_\_\_\_.**

**Answer:-SQL Server   
  
(32)Is it possible to create a custom domain name, or use your organisation's domain name such as eduforum.in, in Azure Active Directory?**

**Answer:-True   
  
(33)What's the maximum bandwidth provided my ExpressRoute?**

**Answer:-10 Gbps   
  
(34) The VM size determines the number of \_\_\_\_\_\_\_\_\_.**

**Answer:-Nic   
  
(35)What is the format of an Azure Resource template?**

**Answer:-JSON   
  
(36)Which of the following are methods Traffic Manager uses to pick endpoints?**

**Answer:-Below are the answer   
Round-robin   
Performance   
Failover   
  
(37)Geo-Redundancy is to provide high availability in \_\_\_\_\_\_\_\_.**

**Answer:-Geographically   
  
(38) Azure is Microsoft’s \_\_\_\_\_\_\_\_\_\_\_ as a Service Web hosting service.**

**Answer:- Infrasturcture   
  
(39) When using Azure Resource Manager, you can use a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for deployment, which can build identical environments for different work scenarios such as testing, staging, and production.**

**Answer:- Template   
  
(40)Which one of the following serives is a NoSQL datastore?**

**Answer:- Tables   
  
(41). If you have to replace your current on-premise services in the form of virtual machines, then you can use Microsoft Azure cloud categorized as \_\_\_\_\_\_\_\_\_\_\_\_.**

**Answer:- IAAS   
  
(42) You can view the latest data center map and Pay as You Go subscription information in (the) \_\_\_\_\_\_\_\_?**

**Answer:- Azure Dash Board   
  
(43) In which operating system, we can use Azure PowerShell?**

**Answer:- Windows OS   
  
(44)Which cloud offering focuses on the consumption of services?**

**Answer:- SaaS   
  
(45)Which of the following is the older service management model, where cloud services contain your cloud resources?**

**Answer:- Classic Portal   
  
(46)Which Azure networking component is the core unit from which administrators can have full control over IP address assignments, name resolution, security settings, and routing rules?   
Answer:- Virtual Networks (VNETs)**

**(47)Which connection configuration offers faster speeds, higher security, lower latencies and higher reliability?**

**Answer:- ExpressRoute   
  
(48)When should you use a static IP address?**

**Answer:- DNS Server   
  
(49) A subnet is a range of IP addresses in a**

**Answer:- VNet   
  
(50)Default Private IP address allocation method is \_\_\_\_\_\_\_\_\_.**

**Answer:- dynamic**

**Question 1. What Are The Three Main Components Of Windows Azure Platform?**

**Answer :**

1. Compute
2. Storage
3. AppFabric

**Question 2. What Are The Service Model In Cloud Computing?**

**Answer : IAAS. PAAS. SAAS..shuru tapericorder**

1. **Question 8. What Is Windows Azure Compute Emulator?**

**Answer :**

The compute emulator is a local emulator of Windows Azure that you can use to build and test your application before deploying it to Windows Azure.

1. **Question 9. What Is Fabric?**

**Answer :**

In the Windows Azure cloud fabric is nothing but a combination of many virtualized instances which run client application

**Question 16. What Is Web Role In Windows Azure?**

**Answer :**

Web roles in Windows Azure are special purpose, and provide a dedicated Internet Information Services (IIS) web-server used for hosting front-end web applications. You can quickly and easily deploy web applications to Web Roles and then scale your Compute capabilities up or down to meet demand.

1. **Question 17. What Is The Difference Between Public Cloud And Private Cloud?**

**Answer :**

Public cloud is used as a service via Internet by the users, whereas a private cloud, as the name conveys is deployed within certain boundaries like firewall settings and is completely managed and monitored by the users working on it in an organization.

**Question 18. What Is Windows Azure Diagnostics?**

**Answer :**

Windows Azure Diagnostics enables you to collect diagnostic data from an application running in Windows Azure. You can use diagnostic data for debugging and troubleshooting, measuring performance, monitoring resource usage, traffic analysis and capacity planning, and auditing.

**Question 21. What Is The Difference Between Windows Azure Queues And Windows Azure Service Bus Queues?**

**Answer :**

**Windows Azure supports two types of queue mechanisms:**

Windows Azure Queues and Service Bus Queues .

**Windows Azure Queues:** which are part of the Windows Azure storage infrastructure, feature a simple REST-based Get/Put/Peek interface, providing reliable, persistent messaging within and between services.

**Service Bus Queues:** are part of a broader Windows Azure messaging infrastructure that supports queuing as well as publish/subscribe, Web service remoting, and integration patterns.

**Question 31. What Is Azure Cloud Service?**

**Answer :**

By creating a cloud service, you can deploy a multi-tier web application in Azure, defining multiple roles to distribute processing and allow flexible scaling of your application. A cloud service consists of one or more web roles and/or worker roles, each with its own application files and configuration. Azure Websites and Virtual Machines also enable web applications on Azure. The main advantage of cloud services is the ability to support more complex multi-tier architectures

1. **Question 35. What Is A Web Role ?**

**Answer :**

A web role provides a dedicated Internet Information Services (IIS) web-server used for hosting front-end web applications.

1. **Question 36. What Is A Worker Role ?**

**Answer :**

Applications hosted within worker roles can run asynchronous, long-running or perpetual tasks independent of user interaction or input

**Question 38. What Is A Guest Operating System ?**

**Answer :**

The guest operating system for a cloud service is the operating system installed on the role instances (virtual machines) on which your application code runs.

**Question 40. What Is Deployment Environments?**

**Answer :**

Azure offers two deployment environments for cloud services: a staging environment in which you can test your deployment before you promote it to the production environment. The two environments are

distinguished only by the virtual IP addresses (VIPs) by which the cloud service is accessed. In the staging environment, the cloud service’s globally unique identifier (GUID) identifies it in URLs (GUID.cloudapp.net). In the production environment, the URL is based on the friendlier DNS prefix assigned to the cloud service (for example, myservice.cloudapp.net).

### ****Q4). I have two private servers and distributed some of the workloads on the public cloud then which type of cloud deployment is this?****

This is an example of a Hybrid Cloud Deployment Model.

#### **Q5). What do you mean by the Azure Cloud services and its significance too?**

Companies which are providing the cloud services are named as the cloud providers. One of the best cloud service Providers is Azure and it is used to access Microsoft’s infrastructure for Cloud.

#### **Q6). What service can be used to manage resources in Azure?**

It is the Microsoft Resource Manager that is used to manage resources in Azure.

#### **Q7). Which web apps can be deployed with Azure?**

These Asp.Net, WCF, and PHP.

**Q8). What are the different roles in Azure?**

There are three types of roles in Azure – Web Role, Worker Role, and VM.

* The Web role is basically dedicated to the website deployments.
* The Worker role is used to manage background processes in Azure.
* VM role is required to manage or schedule tasks. He is responsible for customizing machines and managing other Azure roles too.

#### **Q11). Is it possible to support disks within scale sets?**

Yes, disks are supported within scale sets in Azure. The other options that can be used for data storage include – Data File, OS drive, Temp drive, Azure Data Drive, and External data services.

#### **Q12). How will you define an availability set in Azure?**

An availability set in Azure is a logical set of VMs that will help you in understanding how the application is designed or built to handle redundancy more effectively.

#### **Q16). How scale sets and availability sets work together in Azure?**

A scale set could be defined as the explicit availability set with five fault domains and five update domains.

#### **Q17). What are the break-fix issues in Azure?**

The break-fix issues or technical problems are the same and it involves the necessary work done by Azure developers to fix the technical issues.

#### **Q18). What is the usage of AAD (Azure Active Directory) in Azure?**

AAD is an access or identity management system that is used to set permissions for employees within a network. The Directory has a plenty of inbuilt functions that can be added directly whenever needed.

#### **Q19). What should be done when a maximum number of authentication attempts are completed in Azure ADD?**

Here, we need a sophisticated strategy to lock accounts. It is little technical and based on IP address of the network. The lockout duration can be increased in the attempt of an attack.

#### **Q20). How will you find the list of apps that are pre-integrated with ADD?**

The Azure Active Directory has more than 2600 apps that pre-integrated and helps you in accessing application more securely.

### ****Q22). How will you define the Azure Service Fabric?****

The Azure Service Fabric is a distributed platform where deployment, packaging, scaling, maintenance is much easier than your expectations. The service fabric is also able to manage or develop cloud apps more confidently. The complex infrastructure can be avoided and developers can always focus on the core tasks.

#### **Q24). How subscription administrator is different from the directory administrator in Azure?**

By default, every user is assigned to the subscription administrator role and he is given a Microsoft account or an Azure account too. The person is responsible for managing services in the Azure portal and the user should log in with the same account that is assigned.

#### **Q25). Do there are any scale limitations for customers using managed disks?**

With the help of managed disks, you can always eliminate the limits associated with the storage accounts. However, the number of disks associated with each subscription is 2000 by default.

#### **Q26). How will you differentiate the storage queues and service bus queues?**

The storage queues are used to access data from files and they are especially useful during the development and the QA activities. At the same time, Azure service bus queues are used to delete contents automatically after a configurable idle time

#### **Q30). Can you add some existing virtual machine to an availability set?**

No, this is not possible. For this purpose, you should create a new VM within the set.

#### **Q31). Are there any user requirements when creating a new Virtual Machine?**

The length of username should not be more than 20 characters and it cannot end with a period.

#### **Q32). How much data can be stored within a VM?**

It could store maximum one TB data and the number of disks depends on the requirements. Azure offers the most stable data storage mechanism in the form of disks that could be either Premium or Managed disks.

#### **Q35). How can you stop a Virtual machine within a power shell?**

Stop-AzureRmVM –ResourceGroupName MyResourceGroupBm –Name “MyVM” - Force

#### **Q36). What could be the reason for client disconnection from the Cache?**

It could be the client-side reasons or issues at the server side. You should check your network carefully then solve the issues accordingly.

#### **Q38). Does Azure support continuous integration or deployment services for the custom containers?**

Yes, it is possible.

### ****Q39). Give an overview of the Azure subscription pricing.****

Azure prices are generally based on product types. The software and infrastructure costs are charged differently as per Azure subscriptions.

**4. Why should you use Azure CDN?**

Azure CDN should be used to reduce load time and bandwidth as well as speed the responsiveness.

**5. Name some important applications of Microsoft Azure**

Most important application of Microsoft Azure are:

Infrastructure Services, Mobile Apps, Web Applications, Cloud Services, Storage, Media Services, etc.

**7. Explain the crucial benefits of Traffic Manager**

Traffic management offers many advantages for the user:

Increase the performance

No Downtime required for update or Maintenance

You can easily configure Azure Traffic manager on Windows Azure portal.

**10. State the difference between repetitive and minimal monitoring.**

Verbose monitoring collects metrics based on performance. It allows a close analysis of data fed during the process of application.

On the other hand, minimal monitoring is a default configuration method. It makes the user of performance counters gathered from the operating system of the host.

* **11. What is the main difference between the repository and the powerhouse server?**

The main difference between them is that repository servers are instead of the integrity, consistency, and uniformity while powerhouse server governs the integration of different aspects of the database repository.

* **14.Explain Cmdlet command of Microsoft Azure**

A cmdlet is a command which is utilized as a part of the Microsoft PowerShell environment. The cmdlet is called by the Windows PowerShell to automate the scripts which are in the command line.

**15. What is the use of the Migration Assistant tool in Azure Websites?**

Migration Assistant tool helps you to examine your IIS installation. It helps you to recognize which site can be migrated to the cloud. It is also featuring components which are either not migrated or unsupported on the Azure platform.

**16.** **What is the use of Azure Active Directory?**

Azure Active Directory is an identify and access management system. It is very much similar to the active directories. It allows you to grant your employee in accessing specific products and services within the network.

**19. Explain the term 'service fabric' in Azure**

Service fabric is a middleware platform which gives more scalable outcome. It mostly renders with a more managed and reliable enterprise.

**21. Name the types of web application which can be deployed with Azure**

ASP.Net, PHP, WCF are a type of web application which can be deployed with SQL Azure.

**22. How many customers subscriptions allowed in managed disks?**

The number of managed disks subscription is limited to 2000.

**25. Name the services which are used to manage resources in Azure**

* Application Insights
* Azure Portal
* Azure Resource manager
* Log Analytics

**27. What are the important drawbacks of using Microsoft Azure?**

* Cloud computing is not possible if you are not able to connect to the Internet.
* Azure is a web-based app which needs a lot of bandwidth to download, as do large documents.
* Web-based applications can sometimes be slower compared accessing similar software program on your desktop PC.

**29. What is the step you need to perform when drive failure occurs?**

When there is an instance that the drive has failed, the following step should be performed:

* The drive should be not mounted, which allows the object Azure storage to function without fail.
* The second scenario is replacing the drive in which the desired step will remounting, formatting the dri
* **32. Can you create VM by using Microsoft Azure Resource Manager in a Virtual Network?**
* No, it is not possible to create a virtual machine using the Azure Resource Manager.
* **33. What is the use of VNET?**
* With the help of VNET, you can represent your network within the cloud. It could insulate the instance logically which are launched within the cloud.
* **38. Explain cspack in Microsoft Azure**
* Cspack is a command-line tool which generates a service package file. It also helps you to prepares an application for deployment, either in compute emulator or Microsoft Windows Azure.
* **39. What is the purpose of using an application partition scheme in Azure?**
* An application partition aims to reduce the replication traffic within a specific domain area.

**40. Explain Azure Service Level Agreement**

* The Service ensures that when you send two or more roles instances for each role, access to your cloud service will be maintained 9 out of 10 times. Moreover, identification re-correction activity will be stared when the procedure of a role instance is not running.
* **42.** **What happens when you exhaust the maximum failed attempts by authenticating yourself using Azure AD?**
* We use a more method to lock accounts. This is based on the IP address of the request and the passwords entered by the user.

**43. Explain the concept of the table in Windows Azure**

A table is one kind of Azure store. In which you can store your information.

Below given are the key concepts of the table:

* Tables allow structure data storage
* There can be 0 to n table in a storage account.
* An element has an essential key and properties as a key-value pair.
* **44. What is the use of Temp Drive in VM?**
* Temp Drive is used for Paging in Azure. However, it is a short drive, and you should not use it for storage.
* **45. Explain guest OS in Microsoft Azure**
* Guest OS is an operating system which runs on the virtual machine which allows you to hosts an instance of a role.
* **46. When will you find the list of built-in app with ADD?**
* The Azure Active Directory has more than 2500 built-in app. It allows you to access the application more securely.

**47. Are data disks provide support within scale sets?**

Yes, a scale allows you to define an attached data disk configuration which applies to all VMs In the set. Other options for data storing are:

* Azure files
* Azure Data services
* OS drive
* External data service
* **51. How much storage can a user with a virtual machine use?**
* Each data disk on the VM can be up to 1 TB. However, the number of data disks, which you can use depends on the size of the virtual machine.

**52. Name three types of Disks used by VMs**

**Three types of disk used in VMs are:**

* Operating system disk
* Temporary disk
* Data disk

**4. What are the three principal segments of Windows Azure platform?**

Windows Azure has three principal segments: Compute, Storage, and Fabric.

**A. Windows Azure Compute**

Windows Azure gives a code that can be managed by the hosting environment. It gives the calculation benefit through parts. Windows Azure backs three types of roles:

* Web roles utilized for web application programming and upheld by IIS7
* Worker roles utilized for foundation handling of web roles
* Virtual machine (VM) roles utilized for moving windows server applications to Windows Azure in a simple way

**B. Windows Azure Storage**

It gives four types of storage services:

* Queues for informing between web parts and worker roles
* Tables for storing structural data
* BLOBs (Binary Large Objects) to store contents, records, or vast information
* Windows Azure Drives (VHD) to mount a page BLOB. These can be transferred and downloaded by means of BLOBs

**C. Windows Azure AppFabric**

AppFabric provides five services:

* Service bus
* Access
* Caching
* Integration
* Composite

**6. What is the distinction between Windows Azure Queues and Windows Azure Service Bus Queues?**

* Azure Queues give a solid, diligent messaging between and within the services. They also highlight a very straightforward rest-based get/put/peek interface.
* Bus Queues are part of a more extensive Windows Azure messaging framework that supports queuing.

**15. What is a storage key?**

Storage keys or access keys are utilized as a validation mode for accessing the storage services account to control data based on our prerequisites. In Windows Azure, we have an alternative to give a primary access key and a secondary access key, despite the fact that we will utilize a solitary access key to confirm our application to the storage. The primary reason to give the secondary access key is to avoid downtime to the application.

**22. What is Azure App Service?**

Azure App Service is a completely managed Platform-as-a-Service (PaaS) offering for proficient developers that conveys a rich arrangement of abilities to web, mobile, and integration scenarios. Mobile apps in Azure App Service offer a very adaptable, universally accessible mobile application development platform for Enterprise Developers and System Integrators that conveys a rich set of capacities to mobile engineers.

**23. What is profiling in Azure?**

Profiling is only a procedure for measuring the performance analysis of an application. It is normally done to guarantee that the application is sufficiently steady and can maintain overwhelming traffic.

##### **Q17) What is Azure Diagnostics?**

**Ans:**Azure Diagnostics is the API that enables you to collect diagnostic data from applications running in Azure. Azure Diagnostics must be enabled for cloud service roles in order for verbose monitoring to be turned on.

##### **Q29) What are the options to manage session state in Windows Azure?**

**Ans:**

* Windows Azure Caching
* SQL Azure
* Azure Table

###### **Q31) What is csrun?**

**Ans:**It is a command-line tool that deploys a packaged application to the Windows Azure compute emulator and manages the running service.

#### **7. What are the main functions of the Azure Cloud Service?**

**Answer:** The main functions of the Azure Cloud Service are;

* It is designed to host the running application and at the same time manage the background running application.
* The application of web processing is termed as “web role” whereas the background processing is termed as the “worker role”.

#### **8. State the purpose of the cloud configuration file?**

**Answer:**There is a primary .csfg file available with each and every cloud service. The main purpose of this file is

* They hold the main copy of certificates.
* They have the storage of user-defined settings.
* There are a number of instances in any service project

#### **34. Discuss the different database types in SQL Azure?**

**Answer:** This is one of the commonly askedSQL Azure interview questions that must be answered by stating that there are two major type of database in SQL Azure;

* **Web Edition –** It is having a limit of 5GB SQL that is related to the relational database. The basic advantage is that they can be self-maintained, tolerant to a fault and highly available.
* **Business-based Edition –** they support 50GB of T-SQL that is self-managed, tolerant to a fault and highly available. They are suited for the custom web applications or ISV application.

#### **43. State what will you do in case of a drive failure?**

**Answer:**This is one of the another Microsoft Azure interview questions for experienced that should be answered in the following manner. When there is an instance that the drive has failed the following step should be performed;

* The first is that the drive should be not mounted enabling the object storage to function without fail.
* The second scenario is replacing the drive in which the desired step will be remounting, formatting the drive.

#### **45. Give a clear overview of API in Azure?**

**Answer:**The Test Analytics in API is a web service that is built with the Azure learning. It is an effective tool to analyze the unstructured data like the extraction of the key phrase. It runs with the binomial scoring unit that is either 0 or 1 where 1 corresponds to a positive and 0 corresponds to a negative viewpoint. The advantage is that it does not need any assistance with designing and training which imply that the data is in the hands of directly the user. Proceed to find more Microsoft Azure interview questions for experienced.

#### **50. If the client gets disconnected from cache with the services state the probable cause?**

**Answer:** If the client gets disconnected the causal factor can be distributed into two categories;

The cause on the operator side;

* There might be a failure in the transfer of the standard cache from one node to the other.
* While the service was processing and dispatching the cache got deployed.
* There was a server update or an automated VM maintenance.

The fault on the client side;

The application of the client accidentally got redeployed.

* The application on the client side got auto-scaling.
* The layer of the network on the client side altered.
* There was a transient error on the network node.
* The bound operation took more time.
* The upper limit of the bandwidth was reached.

## **Q: What is the benefit of the Azure CDN?**

A: The Content Delivery Network (or CDN) in Azure offers the same benefits as other CDNs: it can be used to reduce load times and bandwidth as well as speed up responsiveness

**Q. What is the way to implement Caching or Session management mechanism in Azure?**

Ans. Azure Redis Cache.

**Q. What is Azure Resource Manager (ARM) and what are the benifits of ARM over Classic services?**

Ans. ARM is deployment methodology to deploy your Azure components. It's act like a container of multiple resources with scalability. In comparison with classic services it can help you deploy, manage and monitor all resources for you solution as a group, rather than handling these resources individually.

**Q. What is Azure Cloud Service?**

By creating a cloud service, you can deploy a multi-tier web application in Azure, defining multiple roles to distribute processing and allow flexible scaling of your application. A cloud service consists of one or more web roles and/or worker roles, each with its own application files and configuration. Azure Websites and Virtual Machines also enable web applications on Azure. The main advantage of cloud services is the ability to support more complex multi-tier architectures.

**6. What is a Storage keys?**

Storage keys or Access Keys are used as an authentication mode for accessing the storage services account to manipulate information based on our requirements. In Azure we have an option to provide a Primary Access Key and a Secondary Access Key, even though we will use a single access key to authenticate our application to the storage. The main reason to provide the secondary access key is to avoid downtime to the application. If we need to change the application access key by regenerating the access key it takes quite some time to take effect; this provides a downtime.

To avoid this type of situation, a secondary access key is provided so that if the primary needs to be changed or regenerated we can map the secondary temporarily to the storage and regenerate the primary. Let us see step by step of how to get the Access Keys using Windows Azure Management Portal.

**21. Is it possible to create a Virtual Machine using Azure Resource Manager in a Virtual Network that was created using classic deployment?**

This is not supported. You cannot use[Azure Resource Manager](https://en.wikipedia.org/) to deploy a virtual machine into a virtual network that was created using classic deployment.

**22. What is Azure Platform?**

Azure Platform lays the foundation for running applications and keeping data on the cloud. It contains compute services, storage services and the fabric. Windows Azure affords a wide range of capabilities in the form of computing services to run applications, storage services and creating a framework that supports several applications, as well as host services and manage them centrally. This platform readily stipulates an internet infrastructure for deploying distributed applications and services since we can develop a cloud service in Visual Studio .NET and deploy it into the Azure cloud right from on-premise tools. The Azure platform is a group of three cloud technologies as in the following:

**28. what is VM role in Azure?**

Virtual Machine (VM) roles, now in Beta, enable you to deploy a custom Windows Server 2008 R2 (Enterprise or Standard) image to Windows Azure. You can use the VM role when your application requires a large number of server OS customizations and cannot be automated. The VM Role gives you full control over your application environment and lets you migrate existing applications to the cloud.

**Azure Fabric:**

The Azure fabric is the main core concept over here. It provides a service called the Azure Fabric Controller. It is called as OS for the Azure. Because it handles/manages:

All roles (computing) and resources. Deployment and activating services.  
Health monitoring for all services. Allocating, releasing of resources. Provisioning VM, terminating etc.

Updating patches for installed OS on VM automatically.  
So there would be better to have two instances of roles and also no need to worry about software updates for user.

**7. What are the features and service of Windows Azure?**

Answer:  
Windows Azure has many features that are:

* It allows the users to build the sites using any of the [programming languages like Java](https://www.educba.com/java-programming-language-features/), .net, etc. and these can be deployed with help of using GIT etc.
* SQL Azure database extends and scales up and down the application to the cloud with the help of using [Microsoft SQL server](https://www.educba.com/database-management-tools/).
* It is a platform as a service (PaaS), which supports multi-tier applications and automated deployment and other services.

Windows Azure has different services to offer that are: Websites, Cloud service, virtual machine (VM), SQL database and Tables in Data management, SQL reporting and data marketplace in [Business Analytics](https://www.educba.com/data-analytics-vs-business-analytics/).

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Private Cloud** | **Public Cloud** |
| 1. | It is built exclusively for individual organization or enterprise. | It is built for many organizations. |
| 2. | Privately shared virtual resources. | Publically shared virtual resources. |
| 3. | Private Cloud’s Cost is very high | Public clouds are comparatively cheaper as all the cost handled by  providers |
| 4. | It provides the connectivity over the internet, private network or fiber. | It provides connectivity over the internet. |
| 5. | Its maintained by the owned organization itself. | Its maintained by the organization which is providing the cloud service. |
| 6. | It is mainly suited for more confidential information | It is suited for less confidential information. |
| 7. | It is not accessible by anyone. | It may be accessible by other as well. |
| 8. | In a private cloud, it is difficult to meet the scalability sometimes. | In a public cloud, scalability can be done easily. |

## **What is Azure Virtual Machine?**

Azure Virtual Machines are on-demand computing resources or virtual machines offering of Microsoft Azure. We can typically use a VM as a service when required and shut down the system when not in use. The Azure Virtual Machines are listed under Infrastructure as a service (IaaS) category in Azure. With Azure Virtual Machines we get more control over the environment to customize the development environment or hosting.

## **You have received an email from your company security team that a couple of VMs are exposed to the internet, how toprevent that public access without interruption of any service?**

In that case, you need to create the NSG and associate your VMs if there is no NSG. Now, block the port 80/443 and allow only specific ports of azure which will fix the issue.

* Click on the VMs
* Click on the networking tab
* Click on the NSG
* Then create the Outbound deny rule for the internet.

## **You have a couple of VMs of 4 Core and 16GB. You need to upgrade VMs to 8 Core and 32 GB Ram since they are not performing well. So, what are the steps you will take?**

You will go to specific VMs and perform the below steps.

* First, take approval from the Application Owner for downtime because it will automatically reboot the VM.
* Go to each VM and Click on the Size
* Select the VM instance Size of 8 core 32 GB Ram VMs.
* Once you will select the specific Size, it will automatically start upgrading the instance.
* After that, you need to verify all the setting of the VMs and handover to application Owner if activity completed successfully

## **Is it possible to enable the NSG in Vnetsinceyou doesn’t want to enable it on VMs level?**

It’s not possible to enable the NSG in Vents but certainly, you can associate with Subnets which will help you to reduce the manageability of your NSG.

## **Is it possible to host the VM in another region and connect to a different region?**

Yes, you need to set up the interconnectivity while creation the V-net (Virtual Network) to V-net (Virtual Network) connection between both the regions.

## **One of your clients escalated that hisVM has been rebooted without intimating to him and you need to know logs who has rebooted the VM, how can get the details.**

In that case, Activity logs will help, as any activity happens in VMs through the portal, you will get a log alerts store in the activity logs, so you will go to activity logs and found that who has rebooted the VM and can share with clients after manager approval.

## **In your organization, you have some client who doesn't want to give the subscription access, but they have given the PowerShell access, how you create the Storage account using PowerShell?**

New-AzureRmStorageAccount -ResourceGroupName azure4you -Name azureint234 -SkuNameStandard\_LRS -Location 'East Us'

## **How to tag the resources using a command?**

You should use the below command lets to tag the resources.

Set-AzureRmResourceGroup -Name "Azure4you.com" -Tag @{Department="IT"}

## **What is the difference between Premium Storage Account and Standard Storage Account?**

Premium Storage Accounts are backed by SSD Disk which provided the resilience and better performance where standard Storage Accounts are backed by HDD (magnetic Disk) and Provides the maximum IOPS up to 500.

## **What is the difference between Managed Disk and Unmanaged Disk?**

**Managed Disk:** In Managed disk storage accounts creation/Management done on the backend. It will help you on the scalability of storage accounts and backed by Standard/premium Tires.

**Unmanaged Disk:** Unmanaged disk are the disk which you will create the storage accounts. Create the disk and Managed by you and you need to make sure you can’t exceed the Storage limit up 20K IOPS while adding many disks which may throttled the VMs performance.

## **A customer has Prod, Dev and Test environments. How to implement a solution that each environment can’t connect to each other?**

In that case, you can separate the environments while creating the different subnets for Prod, Dev, Test environments and apply the NSG on each subnet with specific deny rule which will not allow connecting to those environments.

## **What are the tools you will use to create the Vnets?/In how many ways we can create Vnets??**

You can use the below tools to configure the Azure Vnets.

* Azure portal
* PowerShell
* Azure CLI

## **Your customer has configured the policy-based routing but due to the issue, he wants to change to route based configuration in Azure VPN, how you can deliver the solution?**

Basically, the customer can’t change them or update their routing method directly as that is not supported by MS Azure. He must create the New connection use the method to route based on the new connection.

* First, you need to delete the Route based connection
* Delete the Gateway
* Then you will recreate the connection using Azure Portal, CLI or PowerShell.

## **How to configure the static public IP address VPN gateway?**

Basically, it’s not supported by Microsoft and when you create the VPN gateway at that time dynamic IP address will automatically configure and that will change only when you will delete or recreate the VPN gateway.

## **What protocols are supported by Application gateway?**

It supports the HTTP, HTTPS, HTTP/2, and WebSocket

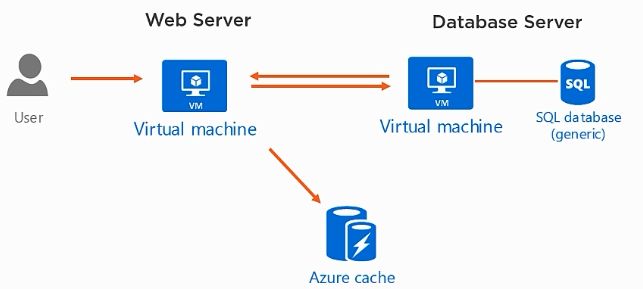
## **What is Azure Backup and what are the benefits of Azure Backup?**

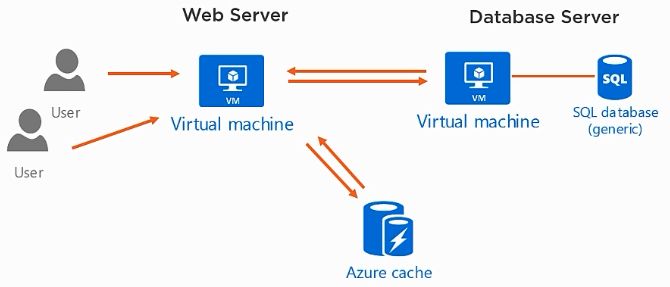
Azure Backup is a cloud-based solution which will help you to take the backup of the Azure VM, PaaS SQLDB, file service, web apps etc.

* It provides a hybrid solution to take the backup.
* Storage will be managed automatically using Azure storage accounts and it doesn’t require any local storage like on-premises.
* You can transfer the unlimited data and this data stored in encrypted format in Azure storage accounts.

## **What is Azure Redis Cache and how to implement it?**

Azure Redis Cache is a managed version of the popular open source version of Redis Cache which makes it easy for you to add Redis into your applications that are running in Azure. Redis is an in-memory database where data is stored as a key-value pair so the keys can contain data structures like strings, hashes, and lists. You can cache information in Redis and can easily read it out because it is easier to work with memory than it is to go from the disk and talk to a SQL Server.

* Suppose, we have a web server where your web application is running. The back-end has SQL Server implementation where the SQL Server is running on a VM or maybe it is an Azure SQL database.  
    
  
* A user comes to your application and they go to a page that has tons of products on it.  
    
  
* Now, that page has to go to the database to retrieve the information and then that gets sent back to the web server and gets delivered to the user. But if you have thousands of users hitting that web page and you are constantly hitting the database server, it gets very inefficient.  
    
  
* The solution to this is to add Azure Redis Cache and we can cache all of those read operations that are taking place. So, that goes to an in-memory database on the Azure Redis Cache.  
    
  
* When other users come back and look for the same information on the web app, it gets retrieved right out of the Azure Redis Cache very quickly and hence we take the pressure of the back-end database server



While deploying Azure Redis Cache, we can deploy it with a single node, we can deploy it in a different pricing tier with a two node implementation and we can also build an entire cluster with multiple nodes.

## **How to migrate a SQL Server database to Azure SQL.**

 It is common to migrate a SQL Server database to Azure SQL. We can use the SSMS’s Import and Export features for this purpose.

Continue reading: [Migrate SQL Server Database To Azure SQL](https://www.c-sharpcorner.com/article/migrate-a-sql-server-database-to-azure-sql-server/).

## **What is Azure Advisor**

The Azure Advisor service provides information about your entire Azure landscape. It gives you a complete overview of your system needs including possible ways to save money.

What is Windows Azure compute emulator?

The compute emulator is a local emulator of Windows Azure that you can use to build and test your application before deploying it to Windows Azure.

**9. What is fabric?**

In the Windows Azure cloud fabric is nothing but a combination of many virtualized instances which run client application

**10. How many instances of a Role should be deployed to satisfy Azure SLA (service level agreement) ? And what's the benefit of Azure SLA?**

TWO. And if we do so, the role would have external connectivity at least 99.95% of the time.

**11. What are the options to manage session state in Windows Azure?**

Windows Azure Caching

SQL Azure

Azure Table

**What is the difference between Windows Azure Queues and Windows Azure Service Bus Queues?**

Windows Azure supports two types of queue mechanisms: Windows Azure Queues and Service Bus Queues .

Windows Azure Queues , which are part of the Windows Azure storage infrastructure, feature a simple REST-based Get/Put/Peek interface, providing reliable, persistent messaging within and between services.

Service Bus Queues are part of a broader Windows Azure messaging infrastructure that supports queuing as well as publish/subscribe, Web service remoting, and integration patterns.

http://wcfpro.wordpress.com/2010/12/06/communication-in-windows-azure/

<http://msdn.microsoft.com/en-us/library/windowsazure/hh767287.aspx>

**What are instance sizes of Azure?**

Windows Azure will handle the load balancing for all of the instances that are created. The VM sizes are as follows:

Compute Instance Size CPU Memory Instance Storage I/O Performance

Extra Small 1.0 Ghz 768 MB 20 GB Low

Small 1.6 GHz 1.75 GB 225 GB Moderate

Medium 2 x 1.6 GHz 3.5 GB 490 GB High

Large 4 x 1.6 GHz 7 GB 1,000 GB High

Extra large 8 x 1.6 GHz 14 GB 2,040 GB High

<http://www.codeproject.com/Articles/83481/Windows-Azure-Storage>

**What is the difference between Azure VM and Azure Instance.?**

Azure VM provides you with the entire virtual machine, where you can decide the [OS](http://en.wikipedia.org/wiki/Operating_system), patches or updates etc. It is just that your have control on your own machine, but it resides on MS datacenter.

Azure Instances comes within the cloud service, where you only worry about the application within it and other tasks such as OS, patching/updating etc will be taken care by MS. Instances are more suited if you’ve a web application.

**How can I add extra hard disk space in my Azure VM.?**

By default using Azure management portal you can’t do this. There are some third party tools like CloudXplorer, which will help you to extend your hard disk space. Or yes, if your hard disk is small enough (in used space) and if you’ve a good internet connection, you can get the hard disk downloaded, extend using Hyper-V manager snap in and upload it to Azure.

**15.An application front end is hosted on Azure but due to security reasons customer want database to be hosted on-premises within his office building. What are the different ways to handle this connectivity scenario in Azure?**

Looking at the requirement of connecting single on premises DB machine to Azure hosted application, Azure VNET based “Point to Site” can be considered as correct choice in this scenario for Azure to on premises connectivity. Point to Site is ideal choice for establishing VPN connectivity between on premises resources and Azure resources where number of resources to be connected is limited.

**16.What are the other VNET options for achieving connectivity with on premise and azure resources?**

Site to Site and express route are other options for achieving cross premises connectivity. Site to site to specifically use when you have large number of resources to be connected.

In some cases, Site to Site or Point to Site connectivity may introduce network latency as VPN created by these features work on public infrastructure (Internet) only. To overcome on this situation “Express Route” option can be taken which offers dedicated Leased Line based offering to overcome on latency issue.

**17.What is the option to connect on premises Database in case user is not willing to open up VNET based connectivity?**

In such case, a WCF service can be developed and hosted on premises. This WCF service will have CRUD operations specifically against the on premises database. Then Service bus relay option can be used for invoking on premises WCF service from Azure hosted web application to access the database. Use of WCF and service bus relay will avoid the option of VPN connectivity using Azure VNETs offerings.

**18.On premises application running few windows services, console applications to handle certain tasks. What should be the approach for migration of such applications to Azure?**

There are 3 ways by which we can achieve background process migration to Azure – 1. Azure Virtual Machine 2. Worker role 3. Azure Web Jobs

**6. Which service in Azure is used to manage resources in Azure?**

1. Application Insights
2. Azure Resource Manager
3. Azure Portal
4. Log Analytics

**Answer: B Azure Resource Manager**

**7. Which of the following web applications can be deployed with Azure?**

1. ASP.NET
2. PHP
3. WCF
4. All of the mentioned

**Answer: D**

**9. A \_\_\_\_\_\_\_\_\_ role is a virtual machine instance running Microsoft IIS Web server that can accept and respond to HTTP or HTTPS requests.**

1. Web
2. Server
3. Worker
4. Client

**Answer: A. Web**

**12. Are data disks supported within scale sets?**

**Explanation:**Yes. A scale set can define an attached data disk configuration that applies to all VMs in the set. Other options for storing data include:

* Azure files (SMB shared drives)
* OS drive
* Temp drive (local, not backed by Azure Storage)
* Azure data service (for example, Azure tables, Azure blobs)
* External data service (for example, remote database)

**17. Do scale sets work with Azure availability sets?**

* **Explanation:**Yes. A scale set is an implicit availability set with 5 fault domains and 5 update domains. Scale sets of more than 100 VMs span multiple *placement groups*, which are equivalent to multiple availability sets. An availability set of VMs can exist in the same virtual network as a scale set of VMs. A common configuration is to put control node VMs (which often require unique configuration) in an availability set and put data nodes in the scale set.

###### **Q. 2. What is linking of a resource?**

We can “link” any resource to the cloud service to show a cloud service’s dependencies on other resources, such as a database. Linking a resource does not connect the resource to the application as this requires us to configure the connections in the application code.

###### **Q. 4. What are Azure Virtual Machines used for?**

Azure Virtual Machines are used in a similar fashion as virtual machines. These are used to add computing power without adding physical hardware. Azure supports Windows Server, Linux, SAP, Oracle, IBM, and SQL Server, etc.

###### **Q. 20. How is the subscription administrator different from the directory administrator?**

Every user is assigned to the subscription administrator role with a Microsoft and Azure accounts and is responsible for managing services(or) resources in the Azure portal.

**2. What are the main types or categories of cloud? Among those what all does Azure provide you.?**

A. Three main categories:  
IAAS – Infrastructure As A Service  
PAAS – Platform As A Service  
SAAS – Software As A Service  
Azure provides the first two categories – IAAS, PAAS to their end users.

**8. How can I add extra hard disk space in my Azure VM.?**

A. By default using Azure management portal you can’t do this. There are some third party tools like [CloudXplorer](http://clumsyleaf.com/products/cloudxplorer), which will help you to extend your hard disk space. Or yes, if your hard disk is small enough (in used space) and if you’ve a good internet connection, you can get the hard disk downloaded, extend using Hyper-V manager snap in and upload it to Azure.

**Q1) What is Azure Cloud Service?**

By creating a cloud service, you can deploy a multi-tier web application in Azure, defining multiple roles to distribute processing and allow flexible scaling of your application. A cloud service consists of one or more web roles and/or worker roles, each with its own application files and configuration. Azure Websites and Virtual

Machines also enable web applications on Azure. The main advantage of cloud services is the ability to support more complex multi-tier architectures

**Q2) What is a cloud service role?**

A cloud service role is comprised of application files and a configuration. A cloud service can have two types of roles.

**Q3) What is link a resource?**

To show your cloud service’s dependencies on other resources, such as an Azure SQL Database instance, you can “link” the resource to the cloud service. In the Preview Management Portal, you can view linked resources on the Linked Resources page, view their status on the dashboard, and scale a linked SQL Database instance along with the service roles on the Scale page. Linking a resource in this sense does not connect the resource to the application; you must configure the connections in the application code.

**Q4) What is scale a cloud service?**

A cloud service is scaled out by increasing the number of role instances (virtual machines) deployed for a role. A cloud service is scaled in by decreasing role instances. In the Preview Management Portal, you can also scale a linked SQL Database instance, by changing the SQL Database edition and the maximum database size, when you scale your service roles.

**Q5) What is a web role?**

A web role provides a dedicated Internet Information Services (IIS) web-server used for hosting front-end web applications.

**Q6) What is a worker role?**

Applications hosted within worker roles can run asynchronous, long-running or perpetual tasks independent of user interaction or input.

**Q7) What is a role instance?**

A role instance is a virtual machine on which the application code and role configuration run. A role can have multiple instances, defined in the service configuration file.

**Q8) What is a guest operating system?**

The guest operating system for a cloud service is the operating system installed on the role instances (virtual machines) on which your application code runs.

**Q9) What is deployment environments?**

Azure offers two deployment environments for cloud services: a staging environment in which you can test your deployment before you promote it to the production environment. The two environments are distinguished only by the virtual IP addresses (VIPs) by which the cloud service is accessed. In the staging environment, the cloud service’s globally unique identifier (GUID) identifies it in URLs (GUID.cloudapp.net). In the production environment, the URL is based on the friendlier DNS prefix assigned to the cloud service (for example, myservice.cloudapp.net).

**Q10) What is swap deployments?**

To promote a deployment in the Azure staging environment to the production environment, you can “swap” the deployments by switching the VIPs by which the two deployments are accessed. After the deployment, the DNS name for the cloud service points to the deployment that had been in the staging environment.

**Q11) What is minimal vs. verbose monitoring?**

Minimal monitoring, which is configured by default for a cloud service, uses performance counters gathered from the host operating systems for role instances (virtual machines). Verbose monitoring gathers additional metrics based on performance data within the role instances to enable closer analysis of issues that occur during application processing. For more information

**Q12) What is a service package?**

The service package (.cspkg) contains the application code and the service definition file.

**Q13) What is a cloud service deployment?**

A cloud service deployment is an instance of a cloud service deployed to the Azure staging or production environment. You can maintain deployments in both staging and production.

**Q14) What is Azure Diagnostics?**

Azure Diagnostics is the API that enables you to collect diagnostic data from applications running in Azure. Azure Diagnostics must be enabled for cloud service roles in order for verbose monitoring to be turned on.

**Q15) What is Azure Service Level Agreement (SLA)?**

The Azure Compute SLA guarantees that, when you deploy two or more role instances for every role, access to your cloud service will be maintained at least 99.95 percent of the time. Also, detection and corrective action will be initiated 99.9 percent of the time when a role instance’s process is not running.

**Q16) What is Cloud Computing?**

Cloud computing is the use of computing resources (hardware and software) that are delivered as a service over a network (typically the Internet).

**Q17) What are the Service Model in Cloud Computing?**

Cloud computing providers offer their services according to three fundamental models: Infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS).

**Q18) How many types of deployment models are used in cloud?**

There are 4 types of deployment models used in cloud:

Public cloud/Private cloud/Community cloud/Hybrid cloud

**Q19) What is Azure Platform?**

A collective name of Microsoft’s Platform as a Service (PaaS) offering which provides a programming platform, a deployment vehicle, and a runtime environment of cloud computing hosted in Microsoft data centres.

**Q20) What are the roles available in Azure?**

All three roles (web, worker, VM) are essentially Windows Server 2008. Web and Worker roles are nearly identical: With Web and Worker roles, the OS and related patches are taken care for you; you build your app’s components without having to manage a VM

**Q21) What is the difference between Windows Azure Platform and Windows Azure?**

The former is Microsoft’s PaaS offering including Windows Azure, SQL Azure, and App fabric; while the latter is part of the offering and the Microsoft’s cloud OS.

**Q22) What are the three main components of Windows Azure Platform?**

Compute

Storage

AppFabric

**Q23) What is Windows Azure compute emulator?**

The compute emulator is a local emulator of Windows Azure that you can use to build and test your application before deploying it to Windows Azure.

**Q24) What is fabric?**

In the Windows Azure cloud fabric is nothing but a combination of many virtualized instances which run the client application

**Q25) How many instances of a Role should be deployed to satisfy Azure SLA (service level agreement)? And what’s the benefit of Azure SLA?**

TWO. And if we do so, the role would have external connectivity at least 99.95% of the time.

**Q26) What are the options to manage session state in Windows Azure?**

Windows Azure Caching

SQL Azure

Azure Table

**Q27) What is cspack?**

It is a command-line tool that generates a service package file (.cspkg) and prepares an application for deployment, either to Windows Azure or to the compute emulator.

**Q28) What is csrun?**

It is a command-line tool that deploys a packaged application to the Azure compute emulator and manages the running service.

**Q29) What is guest OS?**

It is the operating system that runs on the virtual machine that hosts an instance of a role.

**Q30) How to programmatically scale out Azure Worker Role instances?**

Using AutoScaling Application Block

**Q31) What is the difference between Public Cloud and Private Cloud?**

Public cloud is used as a service via Internet by the users, whereas a private cloud, as the name conveys is deployed within certain boundaries like firewall settings and is completely managed and monitored by the users working on it in an organization.

**Q32) How to design applications to handle connection failure in Azure?**

The Transient Fault Handling Application Block supports various standard ways of generating the retry delay time interval, including fixed interval, incremental interval (the interval increases by a standard amount), and exponential back-off (the interval doubles with some random variation).

static RetryPolicy policy = new RetryPolicy(5, TimeSpan.FromSeconds(2), TimeSpan.FromSeconds(2)); policy.ExecuteAction(() => { try { string federationCmdText = @”USE FEDERATION Customer\_Federation(ShardId =” + shardId + “) WITH RESET, FILTERING=ON”; customerEntity.Connection.Open(); customerEntity.ExecuteStoreCommand(federationCmdText); } catch (Exception e) { customerEntity.Connection.Close(); SqlConnection.ClearAllPools(); } });

**Q33) What is Azure Diagnostics?**

Azure Diagnostics enables you to collect diagnostic data from an application running in Azure. You can use diagnostic data for debugging and troubleshooting, measuring performance, monitoring resource usage, traffic analysis and capacity planning, and auditing. [HTTP://WWW.WINDOWSAZURE.COM/EN-US/DEVELOP/NET/COMMON-TASKS/DIAGNOSTICS/](http://www.windowsazure.com/EN-US/DEVELOP/NET/COMMON-TASKS/DIAGNOSTICS/)

**Q34) What is Blob?**

LOB stands for Binary Large Object. Blob is file of any type and size.

The Azure Blob Storage offers two types of blobs –

Block Blob

Page Blob

-The maximum size for a page blob is 1 TB. A page written to a page blob may be up to 1 TB in size.

**Q36) What is the difference between Windows Azure Queues and Windows Azure Service Bus Queues?**

Windows Azure supports two types of queue mechanisms: Windows Azure Queues and Service Bus Queues.

Windows Azure Queues, which are part of the Windows Azure storage infrastructure, feature a simple REST-based Get/Put/Peek interface, providing reliable, persistent messaging within and between services.

Service Bus Queues are part of a broader Windows Azure messaging infrastructure dead-letterrts queuing as well as publish/subscribe, Web service remoting, and integration patterns.

**Q37) What is DeadLetter queue?**

Messages are placed on the dead-letter sub-queue by the messaging system in the following scenarios.

When a message expires and dead-lettering for expired messages is set to true in a queue or subscription.

When the max delivery count for a message is exceeded on a queue or subscription.

When a filter evaluation exception occurs in a subscription and dead-lettering is enabled on filter evaluation exceptions.

#### [**Q1. What are the differences between Azure Service Manager and Azure Resource Manager?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: ASM uses XML REST API and ARM uses JSON REST API. In ASM, it is difficult to delete the resources which have been created and in ARM we can easily group to delete the resources. ASM supports only specific PaaS workloads and in ARM it supports all workloads of PaaS.

#### [**Q2.Provide few Advantages of Resource Group?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: In Resource Manager, we could easily maintain all the services which have been created under a single resource group which could be segregated by application wise if required. If we required deleting the services, instead of deleting one by one, we can able to delete all the services in a single click by deleting the resource group. To provide a permission of individual service, we could provide a permission to the resource group, whereas provided permission will be implemented to all the services.

#### [**Q3.Could we able to move the services from one Resource Group to Another?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, we could be able to move the services from One resource group to another if that subscription has a permission to do it with respective services.

#### [**Q4.Is that possible to migrate the services from one Subscription to Another Subscription?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, it could be possible to move the services from one to another only if both the subscriptions are available in the same Azure Active Directory Tenant.

#### [**Q5.Could we able to move Express Route / Managed Disks / Application Gateway to another subscription or Resource Group?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: No, we couldn’t be able to since these are dependency services.

#### [**Q6.Is there any possibility to change an Instance Size once the Virtual Machine has been created?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, we can. By navigating to Size under settings option, we could be able to change the instance type to higher or lower configurations.

#### [**Q7.If this CIDR 10.0.0.0/16 is provided in the Address Space under a Virtual Network, how many subnets we could be able to create?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: 256 Subnets can be created.

#### [**Q9.What is the best solution to handle application performance without manual intervention?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: We could provision a Virtual Machines under VM Scale Sets by defining the policy which would handle loads of application by provisioning a new Virtual Machine automatically.

#### [**Q10.Can we able to restrict database port number to communicate only to Application Server?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, that could be possible in Network Security Group

#### [**Q11.If I have more than 3 application servers, I require the database port number needs to communicate to all the 3 application servers. How could be possible?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: I will provide the Application Subnet ranges in Network Security Group on Database Port number rule.

#### [**Q12.What are the types of Virtual Network Gateway?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: VPN & Express Route. In VPN, there is Site to Site, Multi-Site & Point to Site

#### [**Q13.In AWS we are using Elastic Beanstalk for deploying an application automatically. What is the similar feature provided in Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Under App Services, we could use WebApps for deploying an application automatically

#### [**Q14.If I need to execute the code without a server, what is the best solution does Azure offering?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Azure Functions could be used to execute the code with serverless

#### [**Q15.Provide few Azure PaaS services?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Web Apps, Mobile Apps, Logic Apps, Azure Functions, Web Jobs, CDN, etc.

#### [**Q16.In Application Gateway, could I able to add a TCP Port as an Endpoint/backend port?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: No, Application Gateway Supports only HTTP, HTTPS, HTTP/2, and WebSocket.

#### [**Q17.What are the features supported in an Application Gateway?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: It supports URL-based routing, Redirection, Multiple-site hosting, Session affinity, SSL termination, Web application firewall, WebSocket and HTTP/2 traffic.

#### [**Q18.Difference between Azure Load Balancer and Application Gateway?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Load Balancer runs in Transport Layer, whereas Application Gateway runs in Layer 7.

#### [**Q19.Could I able to get a Public IP address or DNS for Azure Internal Load Balancer?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: No, Azure Internal Load Balancer supports only Private IP address and we couldn’t be able to assign the Public IP / DNS name.

#### [**Q20.What is the best feature is used for handling failover between regions in Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Using Traffic Manager, we could handle failover within the regions.

#### [**Q21.Could I able to use same Virtual Network Gateway for both VPN & Express Route?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: No, Virtual Network Gateway needs to be created separately for different types.

#### [**Q22.I have an application running in my On-Premises and I had backed up the environment to Azure East US region. If On-Premises application failed to access, could I able to switch to Azure environment?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, using Site Recovery, we could handle fail over and fail back to On-Premises and Azure environment.

#### [**Q23.By Using Azure AD Connect Health could we monitor the actions ?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, using Azure AD Connect Health we could monitor the actions which are performed in your On-Premises Active Directory.

#### [**Q24.I have IIS Web Server running on two Windows Machine with different port numbers like 80 & 81. Could I able to map these servers in Azure Load Balancer?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, we could able to do that by creating separate Load Balancer Rules in Azure.

#### [**Q25. Any Idea about maintenance in Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: In Azure, maintenance is handled by region wise.

#### [**Q26.Could I able to use custom Images / Private Images for VM Scale Sets using Portal?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: No. At present, there is no option to use private Images in VM Scale Sets using Portal and same could be fachieved in CLI / PowerShell / Template.

#### [**Q27.Is there any possibility to add more than one Private IP Address for single Virtual Machine?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes. By adding NIC, we could able to attach more than one Private IP Address for one Virtual Machine.

#### [**Q28.I have 10 Virtual Machines and I would require a common file sharing between all these Virtual Machines. What will be the best feature recommended to achieve this?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Azure File System could be used as a common repository which shares the data with all these Virtual Machines using SMB, NFS & FTPS.

#### [**Q29.Does Oracle as a Database Service Available in Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: No, Azure doesn’t have a Database as a Service for Oracle.

#### [**Q30.If I want to distribute a Website which is available in Storage Container without replicating, what is the recommended solution?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Using CDN Profiles, we can distribute the content across the globe and latency will be reduced by delivering the content from Edge Location instead of reaching the original server.

#### [**Q31.Does Geo Replication support in PostgreSQL Database service which is offered by Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: At present, there is no support on Geo-Replication for PostgreSQL and it may be in Azure Road Map.

#### [**Q32.If the transaction between my Application Server and Database Server are delayed due to Disk IOPS. What is the solution to avoid this issue?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: We could use any Database as a Service offered by Azure. Or else, using Redis Cache, we could feed the frequent accessible data in it and map the Redis URL into Application as the first point of contact to store/retrieve the information.

#### [**Q33.Could I able to login to Linux Virtual Machine without a password?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, using Key Vault mapping to anyone Admin VM, we could be able to login to another Virtual Machine without a Password.

#### [**Q34.What is the best feature for monitoring an Azure environment?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Using OMS / Log Analytics, we could monitor the Virtual Machines which are running in Azure.

#### [**Q35.With respect to monitoring an Application, what is the best feature?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Using Application Insights, we could monitor application transactions and performance.

#### [**Q36.Could I able to use an OTP / Call / Email as an additional authentication for logging into my Azure Portal apart from Password?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, using Multi-Factor Authentication, we could be able to authenticate our Azure Portal for secured login.

#### [**Q37.Is there any possibility to connect with Private IP Address of one Virtual Machine from the different virtual network in another region?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, using Peer to Peer connection or VNet to VNet peering, we could be able to connect with Private IP address of another region Virtual Machine.

#### [**Q38.I want to distribute two or three Azure accounts to my internal teams without creating a new account. How is that possible?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: We could create a new AD / IAM user by providing certain privileges to access the services.

#### [**Q39.One Production Virtual Machine has been deleted without deleting the disk. Is there any chance to retrieve the Virtual Machine?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, if the OS Disk / Attached disk is not deleted during Virtual Machine deletion, we can able to retrieve the machines.

#### [**Q40.I want to monitor all the sub-user / IAM user activities. What is the best solution?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Using Operational Insights, Administrator could be able to monitor all the user actions on Azure services.

#### [**Q41.Could I able to reserve the MAC Address / ID of Virtual Machines even if I stop the VM?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, MAC Address / ID could be reserved/retained same even though if we stop the VM. But it will be released if we terminate the VM.

#### [**Q42.What is the maximum size of single disk supported for Virtual Machine?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Up-to 4 TB we could create and attach it to the Virtual Machine for one disk.

#### [**Q44.Could I able to do Vertical Scaling of a Virtual Machine?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, Instance type/flavor of the Virtual Machine can be changed at any point of time.

#### [**Q45.Is there a way to do stop/start of a Virtual Machines automatically?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Yes, using an Automation Accounts & Run Books it can be achieved.

#### [**Q46.I created one Virtual Machine without selecting any Availability Set. Is there any option to attach to an Availability Set, without terminating the Virtual Machine?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: No, currently there is no option to attach an existing Virtual Machines with an Availability Set once the Virtual Machines are created.

#### [**Q47.Provide us few ways for provisioning an Azure service without using the portal?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Using CLI, ARM Template, PowerShell, API & SDK we could provide a service without logging into the portal.

#### [**Q48.What is an Advantages of PFX or certificates in Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: If any REST API is being used to provide a service, these certificates are being used for authentication.

#### [**Q49.I uploaded a zip file in Blob container and I couldn’t be able to download it. What is the reason for it?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: After uploading any data, we want to make sure certain private/public access has been provided for that data/blob container.

#### [**Q50.My Application load is high and there is no man support on the floor. Is there any feature available in Azure to stop this issue?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: Using VM Scale Sets, by defining the proper condition it is possible to provision a new Virtual Machine whenever load increases in my application.

#### [**Q51.What is Blue / Green Model?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Ans: To maintain a zero downtime during Upgrade activities, we could use this Blue & Green model for swapping the Production environments to a Staging environment.

#### [**Q52.What You Know about Microsoft Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Launched in 2010, Microsoft Azure is a flexible cloud computing platform which helps in data storage, service management, development, and service hosting.

#### [**Q53.Elaborate Command Task in Microsoft Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Command task Tool manages Azure resources via scripting. In addition to that, it can set off the flow of single or multiple whiles.

#### [**Q54.Tell Us about Cmdlet Command in Microsoft Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Cmdlet command is used by the Windows PowerShell environment that allows automating Command line scripts.

#### [**Q55.Elaborate Service Fabric in Azure**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Mostly used in managed enterprises, Service Fabric is a middleware platform that offers scalable results to the users.

#### [**Q56.What are the different services that you can use to manage the resource in Microsoft Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Azure Portal, Log Analytics, Application Insights, and Azure Resource Manager are some of the services which are used to manage resources in Azure.

#### [**Q57.How will you differentiate between a list and a library?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

The list is the depiction of an item in a table via rows and columns that can also be attached to different documents. However, a library is an interface which assists in storing and managing the documents created via MS Excel, PowerPoint, and Word.

#### [**Q63.Is it possible to create a VM with the help of Microsoft Azure Resource Manager in a Virtual Network?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

No, you cannot create a virtual machine using the Azure Resource Manager.

#### [**Q65.How Migration Assistant tool in Azure Websites is helpful?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

If you want to monitor your IIS installation, then the Migration Assistant tool in helpful. With the help of this tool, you can recognize the sites which are migrated on the cloud. Moreover, you can also tell the components that are unsupported or are not migrated on Azure.

#### [**Q67.What are some of the most important applications of Microsoft Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Mobile Apps, Cloud services, Media services, Web applications, and infrastructure services are some of the most important applications of Microsoft Azure.

#### [**Q91.What do you mean by Azure as PaaS?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Mainly used by application providers and developers, PaaS is a computing platform that has programming language execution environment, web services, database or an operating system.

#### [**Q92.What significant difference do you find in the powerhouse and repository server?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

When it comes to the difference between the two, then the main difference is that powerhouse server governs the integration of the database repository whereas repository servers work on consistency, integrity and uniformity.

#### [**Q94.What is the prime reason to use Azure CDN?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Azure CDN is used to decrease bandwidth and load time. Moreover, it also boosts the responsiveness.

#### [**Q93.What are the benefits of Traffic Manager?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

The main benefit of Traffic Manager is that it boosts performance. Apart from that, it is uncomplicated to configure Azure Traffic Manager on Azure portal and there is no Downtime needed for maintenance or update.

#### [**Q95.What will you do when drive failure occurs?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

In order to overcome this situation, the first thing that you need to do is unmount the drive. The next thing is to replace the drive and format it.

#### [**Q96.What are the requirements to consider while developing a new Virtual Machine?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

When creating a new Virtual Machine, you have to make sure that the username is not exceeding the limit of 20 characters and it should never end with a period.

#### [**Q98.What happens when the maximum failed attempts limit reaches while authenticating via Azure ID?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

In that case, the account will be locked. The locking method is based on the protocol which analyses the passwords entered and the IP address requesting to login.

#### [**Q99.Will you get support for data disks within scale sets?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Yes, you can define a data disk configuration for all the Virtual Machines. In addition to that, you can also consider different data storing options including OS drive, Azure data solutions, external data solutions, or Azure files.

#### [**Q100.How much storage you can use with a Virtual Machine?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

Every data disk on a virtual machine can have up to 1 TB of storage. However, the size of the virtual machine directly affects the number of data disks on the VM as well as the storage that you can get.

#### [**101.What are the names of the blobs that are generally used in Microsoft Azure?**](https://www.besanttechnologies.com/windows-azure-interview-questions-and-answers)

The most common blobs that are used in Azure are page and block blob.

**3. How is SQL Azure different than SQL server?**

SQL Azure is a cloud-based service and so it has own set of pros and cons when compared to SQL server. SQL Azure service benefits include on-demand provisioning, high availability, reduced management overhead and scalability. But SQL Azure abstracts some details from the subscriber which can be good or bad which depends on the context of the need.

**4. How many replicas are maintained for each SQL Azure database?**

For each database, three replicas are maintained for each database that one provisions. One of them is a primary replica. All read/write happen on primary replica and other replicas are kept in sync with the primary replica. If for some reason, primary goes down, another replica is promoted to primary. All this happens under the hood.

**5. How can we migrate from SQL server to SQL Azure?**

For Data Migration, we can use BCP or SSIS. And for schema Migration, we can use Generate Script Wizard. Also, we could use a Tool called SQL Azure migration wizard.

**6. Which tools are available to manage SQL Azure databases and servers?**

We can manage SQL Azure database using SQL server management server 2008 R2. Also, we can manage SQL Azure databases and servers through a Silverlight app integrated in Azure management portal.

**7. Tell me something about security and SQL Azure.**

SQL Azure service allows blocking a request based on its IP address through SQL Azure firewall. It uses SQL server Authentication mechanism to authenticate connections. Also connections to SQL Azure are SSL-encrypted by default.

**8. What is SQL Azure Firewall?**

SQL Azure firewall is a security mechanism that blocks requests based on its IP address.

**10. How do we synchronize On-Premise SQL server with SQL Azure?**

We could use a No code solution called DATA SYNC (currently in community technology preview) to synchronize on-premise SQL server with SQL Azure. We can also develop custom solutions using SYNC framework.

**11. How do we Backup SQL Azure Data?**

SQL Azure keeps three replicas of a database to tackle hardware level issues. To tackle user level errors, we can use COPY command that allows us to create a replica of a SQL Azure database. We can also backup SQL Azure data to local SQL server using BCP, SSIS, etc. but as of now, point in time recovery is not supported.

**12. What is the current pricing model of SQL Azure?**

Charges for SQL Azure consumption is based on 1) Size 2) Data Transfer.

[For contemporary pricing model, read: [http://www.microsoft.com/windowsazure/pricing/](https://azure.microsoft.com/en-us/pricing/calculator/) ]

**13. What is the current limitation of the size of SQL Azure DB?**

The maximum size of a SQL Azure database is 50 GB.

**14. How do you handle datasets larger than 50 GB?**

As of now, we have to build the custom solution at the application level that can handle scale out of underlying SQL Azure databases. But Microsoft has announced, SQL Azure Federations that will assist scaling out of SQL Azure databases. And scale out means that we are splitting the data into smaller subsets spread across multiple databases.

**15. What happens when the SQL Azure database reaches Max Size?**

Read operations continue to work but create/insert/update operations are throttled. You can drop/delete/truncate data.

**16. How many databases can we create on a single server?**

150 databases (including master database) can be created in a single SQL Azure server.

**17. How many servers can we create in a single subscription?**

As of now, we can create six servers under a single subscription.

**18. How do you improve the performance of a SQL Azure Database?**

We can tune a SQL Azure database using information available from execution plan and statistics of a query. We could use SQL Azure’s Dynamic Management views to monitor and manage SQL Azure database.

Also, SQL Azure performance is affected by network latency and bandwidth. Considering this, code near application topology gives the best performance.

**20. What were the latest updates to SQL Azure service?**

Latest SQL Azure updates include multiple servers per subscription, SQL Azure co-administrator support, creating Firewall rules for servers with IP detect.

**Q: What is DNS and which port number is used by DNS?**

**A:**The Domain Name System (DNS) is used to resolve human-readable hostnames like [www.intenseschool.com](http://www.intenseschool.com/) into machine-readable IP addresses like 69.143.201.22.

DNS servers use UDP port 53 but DNS queries can also use TCP port 53 if the former is not accepted.

**Q: How do you backup AD?**

**A:**Backing up Active Directory is essential to maintain the proper health of the AD database.

**Azure VMs and storage services fall under which of the following cloud computing models?**

* IaaS
* PaaS
* SaaS
* All of the above

**YOUR ANSWER** – IaaS

**Which Azure management tool analyzes resources and provides recommendations to optimize deployments?**

* Azure Advisor
* Azure Recommend
* Azure Proactive
* Azure Optimize

Answer : Azure Advisor

**Which of the following Azure products helps enterprises deploy and manage a hybrid cloud architecture?**

* Azure Databricks
* Azure Pack
* Azure Stack
* Azure Hybrid

Asnswer : Azure Stack

**On Sept. 4, 2018, Azure experienced an outage in the South Central U.S. region in San Antonio which left some cloud services offline for days. What caused the outage?**

* Human error
* Severe weather
* Security breach
* All of the above

Answer : Severe weather

**Azure Service Fabric is a distributed systems platform aimed primarily at:**

* Containers and microservices
* Serverless architectures
* Blockchain projects
* All of the above

**YOUR ANSWER** - Containers and microservices

**Which Microsoft Azure cloud security tool can an enterprise use for key management?**

* Azure GuardDuty
* Azure Lockdown
* Azure Key Management
* Azure Key Vault

**YOUR ANSWER** - Azure Key Vault

**Compared to rivals AWS and Google, Microsoft Azure cloud is the only provider that offers a service-level agreement (SLA) for its API management service.**

* True
* False

Answer : True

**Azure Storage offers how many storage tiers?**

* 3
* 4
* 5
* 8

**Answer : 4**

**Which company did Microsoft acquire to supplement its cost management service?**

* RightScale
* Cloudify
* Cloudability
* Cloudyn

**YOUR ANSWER** – Cloudyn

**Azure Cognitive Services is made up of which five service components?**

* Speech, Language, Search, Video and Translation
* Vision, Speech, Language, Search and Knowledge
* Language, Translation, Vision, Knowledge and Audio
* Knowledge, Translation, Audio, Visual and Speech

Answer : Vision, Speech, Language, Search and Knowledge

**What of the following capabilities does the Azure Migrate service NOT provide?**

* Assess cloud readiness
* Estimate monthly cloud costs
* Recommend cloud VM sizes
* Migrate VMs

Answer : Migrate VM’s

**What is file  storage ?**

File storage offers shared storage for applications using the standard SMB 2.1 or SMB 3.0 protocol. Microsoft Azure virtual machines and cloud services can share file data across application components via mounted shares, and on-premises applications can access file data in a share via the File storage API

**Pre-requisite of  create and  WebApps?**

* Azure Subscription.
* Storage account
* SQL Database Connection
* SSL certificate
* Network security Group configuration.
* Custom DNS
* Data source
* Deployments Credentials if you are using the FTP.
* Deployments Option like Visual Studio Onedrive ,local git etc
* We should know the application version(.net4.5,4.3 python 32bit etc ) while migrating or creating the webapps

**How you plan Disaster Recovery if I have 10 Vms running on Hyper-V on-Prem and VMware Environment?**

* We will Set up Azure environment for migration.
* we will Prepare the configuration server
* we will Prepare for automatic discovery and push installation
* we will create a Recovery Services vault
* we will Select the protection goal and start protecting servers.
* we will Set up the source environment
* Run Site Recovery Unified Setup
* we have to setup the target server.
* Set up replication settings
* Plan capacity
* Prepare VMs for replication
* we will enable the Enable replication
* we will run a test failover

**How to migrate the File servers to Azure?**

* Create Azure file storage account as per user requirements
* Under storage account, create the file storage and need to assign the storage quota
* Create the file share and directories as per customer requirement
* Upload on premise data to Azure file share directory
* Configure shared access signatures(SAS) via the REST API or the client libraries.
* Generate tokens with specific permission as required by the client
* Install the storage explorer to migrate the data from on premise to azure file server
* Install and configure the Azure copy client On- premise server to migrate the data to the azure storage account
* Configure Azure file share access and signature for storage account to access the file server
* Initiate data migration process
* Upload and download files to and from On-premise file share sever

# **Steps for troubleshooting Azure Vm’s:**

**Troubleshoot Remote Desktop connections to an Azure virtual machine**

* Reset Remote Desktop configuration & Password .
* Check Network Security Group rules / Cloud Services endpoints.
* Review VM console logs.
* Reset the NIC for the VM.
* Check the VM Resource Health.
* Reset your VM password.
* Restart your VM.
* Redeploy your VM.

Is it possible to host the VM in another region and connect to different region?

Yes, We need to setup the interconnectivity while creation the  **V-net to V-net  connection** between both the region than only we can connect.

### ****12. Are data disks supported within scale sets?****

Ans:

Yes. A scale set can define an attached data disk configuration that applies to all VMs in the set. Other options for storing data include:  
Azure files (SMB shared drives)  
OS drive  
Temp drive (local, not backed by Azure Storage)  
Azure data service (for example, Azure tables, Azure blobs)  
External data service (for example, remote database)

**33. What are the password requirements when creating a VM?**

Ans:

Passwords must be 12 – 123 characters in length and meet 3 out of the following 4 complexity requirements:

* Have lower characters
* Have upper characters
* Have a digit
* Have a special character (Regex match [\W\_])

### 44. My web app still uses an old Docker container image after I’ve updated the image on Docker Hub. Does Azure support continuous integration/deployment of custom containers?

Ans:

Yes, it does. For private registries, you can update the container by stopping and then re-starting your web app. Alternatively, you can also change or add a dummy application setting to force an update of your container.

**50. What are special Azure Regions?**

Ans:

Azure has some special regions that you may wish to use when building your applications for compliance or legal purposes. These special regions include:

* **US Gov Virginia** and **US Gov Iowa**
  + A physical and logical network-isolated instance of Azure for US government agencies and partners, operated by screened US persons. Includes additional compliance certifications such as FedRAMP and DISA.
* **China East** and **China North**
  + These regions are available through a unique partnership between Microsoft and 21Vianet, whereby Microsoft does not directly maintain the datacenters.
* **Germany Central** and **Germany Northeast**
  + These regions are available via a data trustee model whereby customer data remains in Germany under control of T-Systems, a Deutsche Telekom company, acting as the German data trustee.

**Q.What is the purpose of having AD?**

**Answer:** Active directory is a directory service that identifies all resources on a network and makes that information available to users and services. The Main purpose of AD is to control and authenticate network resources.

**Q.Differentiate between NTFS & FAT.**

**Answer:** NTFS is the current file system used by Windows. It offers features like security permissions (to limit other users’ access to folders), quotas (so one user can’t fill up the disk), shadowing (backing up) and many other features that help Windows.

FAT32 is the older Microsoft filesystem, primarily used by the Windows 9X line and Window could be installed on a FAT32 parition up to XP. In comparision, FAT32 offers none of what was mentioned above, and also has a maximum FILE (not folder) size of 4GB, which is kind of small these days, especially in regards to HD video.

**Q.Explain Functions of Active Directory?**

**Answer:** AD enables centralization in a domain environment.

The Main purpose of AD is to control and authenticate network resources.

**Q.What is Proxy Server.**

**Answer:** A proxy server is a computer that acts as a gateway between a local network (e.g., all the computers at one company or in one building) and a larger-scale network such as the Internet. Proxy servers provide increased performance and security. In some cases, they monitor employees’ use of outside resources.

**Q.Differentiate between FIREWALL/ANTIVIRUS.**

**Answer:** **Antivirus:**

The prime job of an anivirus is protect your system from computer viruses. Your computer may be standalone or part of network or connected to Internet you need an antivirus program. It actively monitors when you are using your system for any virus threat from different sources. if it found one it tries to clean or quarantine the virus ultimately keeping your system and data safe.

**Firewall:**

Firewall is in other hand a program which protects your system from outsider/intruder/hacker attacks. These attacks may not be virus type. In some cases hackers can take control of your system remotely and steal your data or important information from system. If your system is directly connected to internet or a large network than you can install a software firewall in your PC to protect your self from unauthorized access. Firewall is available either in software or in hardware form. For a single PC you may need a software firewall while a large corporate implements hardware firewall to protect all of their systems from such attacks.

**Q.Differentiate between Frond end & Back End Server. Backend server:**

**Answer:** A back end server is a computer resource that has not been exposed to the internet. In this regard the computing resource does not directly interact with the internet user. It can also be described as a server whose main function is to store and retrieve email messages.

**Frontend server:**

A frontend server is a computer resources that has exposed to the internet.

**Q.What is APIPA.**

**Answer:** Stands for Automatic Private IP Addressing

APIPA is a DHCP fail over mechanism for local networks. With APIPA, DHCP clients can obtain IP addresses when DHCP servers are non-functional.

APIPA exists in all modern versions of Windows except Windows NT.

When a DHCP server fails, APIPA allocates IP addresses in the private range 169.254.0.1 to 169.254.255.254

**Q.How Release and renew IP address from Command prompt.**

**Answer:** Ipconfig / release

ipconfig / renew

**Q.What is wins server.**

**Answer:** Windows Internet Name Service (WINS) servers dynamically map IP addresses to computer names (NetBIOS names). This allows users to access resources by computer name instead of by IP address. If you want this computer to keep track of the names and IP addresses of other computers in your network, configure this computer as a WINS server.

If you do not use WINS in such a network, you cannot connect to a remote network resource by using its NetBIOS name.

**Q.What is the Windows Registry.**

**Answer:** The Windows Registry, usually referred to as “the registry,” is a collection of databases of configuration settings in Microsoft Windows operating systems.

**Q.How Long My Computer Has Been Running? Get to Know My Computer’s Uptime.**

**Answer:**  Start Task manager,and select Performance tab .

In performance tab we can see system up time

Method 2: By typinag systeminfo in command prompt we can find out up time of your server In system boot time

**Q.Event viewer in Windows server**

Control panel – Administrative tools – Computer Management – event Viewer

Three types events

Error/Warning/Information

**Q.How DHCP work?**

**Answer:** DHCP Stands for Dynamic host configuration protocol.

DHCP is a protocol used for automatic configuration IP address in client computers connected to IP networks. DHCP operates on a client server model in four phases.

**Q.What is DHCP Scope?**

**Answer:** A range of IP address that the DHCP server can assign to clients that are on one subnet .

**Q.What protocol and port does DHCP use ?**

**Answer:** UDP protocol and 67 port in client and 68 port in server.

**Q.Can DHCP support statically defined addresses**.

**Answer:**  Yes.

**Q.what is the port no of DNS.**

**Answer:** UDP and port number – 53

**Q.Where are group policies stored ?**

**Answer:**  C:\Windows\System32\GroupPolicy.

**Q.How to Do Group policy backup**

**Answer:** To backup a single GPO, right-click the GPO, and then click Back Up.

To backup all GPOs in the domain, right-click Group Policy Objects and click Back Up All.

**Q.What is domain?**

**Answer:** A domain is a set of network resources (applications, printers, and so forth) for a group of users. The user needs only to log in to the domain to gain access to the resources, which may be located on a number of different servers in the network. The ‘domain’ is simply your computer address not to confuse with an URL. A domain address might look something like 211.170.469.

**Q.What are the benefits of virtualization ?**

**Answer:** Reduce the number of physical servers

Reduce the infrastructure needed for your data center

**Q.What are a host, guest, and virtual machine.**

**Answer:** A host system (host operating system) would be the primary & first installed operating system. If you are using a bare metal Virtualization platform like Hyper-V or ESX, there really isn’t a host operating system besides the Hypervisor. If you are using a Type-2 Hypervisor like VMware Server or Virtual Server, the host operating system is whatever operating system those applications are installed into.

A guest system (guest operating system) is a virtual guest or virtual machine (VM) that is installed under the host operating system. The guests are the VMs that you run in your virtualization platform.

Some admins also call the host & guest the parent and child.