# Answers review

Correct 3 Wrong 8 Skipped 34

## #12

With a web application deployed to Azure Web Apps, a company wants to start deploying rolling updates, but at the same time, they want to test the updates on the Azure environment before promoting the app to production. Which of the approaches below would help fulfill their requirements?

A Create a virtual machine and re-create the web application there. Deploy the updates, test the application and then deploy it to production.

B Create an on-premise virtual machine and re-create the web application there. Deploy the updates, test the application and then deploy it to production.

✓ Create a deployment slot, configure the app on this slot. Test the app, then swap the slots.

D Create a separate web app, then deploy and test it. Then deploy the web app with the updates to production site using Visual Studio.

**Explanation**

The Web Apps service in Azure App Service allows you to create deployment slots to have a separate staging environment for testing updates before they get rolled out to production. The deployment slot creates a new environment which can then be swapped with the production environment after all testing is complete.

https://docs.microsoft.com/en-us/azure/app-service-web/web-sites-staged-publishing

## #14

Your team develops multiple mobile finance APIs for an online banking service. You need mitigate potential abuse for a single online product, a business travel expense submission service. Using Azure API Management, you need to set policies within Azure API Management to control the character types within data strings submitted to the backend via all the product APIs. Which stage and level would you need to set for this API policy in Azure API Management?

✓ Inbound stage and Product scope

B Backend stage and Specific API scope

C Frontend stage at Individual Operation score

D Inbound stage and Global scope

**Explanation**

This policy would control inbound stages APIs at the product scope, because it modifies or controls request contents before they reach the backend for all of a product's APIs.

https://cloudacademy.com/course/configuring-azure-api-management/api-policies/

#15

Which Azure CLI command will provision an Azure Container Registry?

✓ az acr create

B az acr import

C az acr config

D az acr run

**Explanation**

The CLI command 'az acr create' will provision a new registry in ACR. The import command imports an image from one registry into another. The config command configures policy for the registry. The run command queues a quick run for a registry.

https://docs.microsoft.com/en-us/cli/azure/acr?view=azure-cli-latest#az-acr-create

# Answers review

Correct 3 Wrong 8 Skipped 34

#3

What operation does the following command in AzCopy perform? azcopy copy 'https://mysourceaccount.blob.core.windows.net/mycontainer/myTextFile.txt?sv=2018-03-28&ss=bfqt&srt=sco&sp=rwdlacup&se=2019-07-04T05:30:08Z&st=2019-07-03T21:30:08Z&spr=https&sig=CAfhgnc9gdGktvB=ska7bAiqIddM845yiyFwdMH481QA8%3D' 'https://mydestinationaccount.blob.core.windows.net/mycontainer/myTextFile.txt'

✓ Copies the blob "myTextFile.txt" in one Azure storage container to another container in the same Azure Storage account

**B** Copies the blob "myTextFile.txt" from one Azure storage account to another Azure storage account

**C** Moves the blob "myTextFile.txt" in one Azure storage container to another container in the same Azure Storage account

**D** Copies the blob "myTextFile.txt" from one Azure Storage account to another Azure storage account and deletes the blob from the source Azure Storage account

**Explanation**

The command copies the blob 'myTextFile.txt" from one Azure Storage account to another Azure Storage account, but does not delete the blob from the source account. AzCopy cannot perform deletions, and it is also important to remember that it only copies files and does not move or migrate them. The difference between copying vs. moving is that copying simply duplicates the blob in another storage account, while moving would remove it from the source account and place it in the other account.

https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-blobs?toc=%2fazure%2fstorage%2fblobs%2ftoc.json#copy-blobs-between-storage-accounts

#4

As the network engineer for a large investment firm, you have been asked to set up an Azure Redis Cache with one critical need. The application developers know that all database elements will likely be accessed with the same probability. Because it is important to select the right eviction policy depending on the access pattern of the application, what Maxmemory eviction policy setting should you choose?

**A** noeviction

✓ allkeys-lru

C allkeys-random

D volatile-random

**Explanation**

The Azure Redis Maxmemory policy setting on the Azure Portal Advanced settings blade configures the memory policy for the cache. The exact behavior Redis follows when the maxmemory limit is reached is configured using the maxmemory-policy configuration directive. There are several directives available: noeviction, allkeys-lru, volatile-lru, allkeys-random, volatile-random and volatile-ttl. Redis recommends using the allkeys-random value if you have a cyclic access where all the keys are scanned continuously, or when you expect the distribution to be uniform (all elements likely accessed with the same probability).

https://docs.microsoft.com/en-us/azure/redis-cache/cache-configure#maxmemory-policy-and-maxmemory-reserved

Eviction policies: The exact behavior Redis follows when the maxmemory limit is reached is configured using the maxmemory-policy configuration directive.The following policies are available:
noeviction: return errors when the memory limit was reached and the client is trying to execute commands that could result in more memory to be used (most write commands, but DEL and a few more exceptions).
allkeys-lru: evict keys by trying to remove the less recently used (LRU) keys first, in order to make space for the new data added.
volatile-lru: evict keys by trying to remove the less recently used (LRU) keys first, but only among keys that have an expire set, in order to make space for the new data added.
allkeys-random: evict keys randomly in order to make space for the new data added.
volatile-random: evict keys randomly in order to make space for the new data added, but only evict keys with an expire set.
volatile-ttl: evict keys with an expire set, and try to evict keys with a shorter time to live (TTL) first, in order to make space for the new data added.

#5

ASP.NET applications that run in Azure web app can create which of the following kinds of logs?

A Application tracing, Web server, Detailed error message, Failed request tracing

✓ Application tracing, Web server, Detailed error message, Access request tracing

C Application tracing, Web server, Error message, Access request tracing

D Application tracing, Web server, Error message, Successful request tracing

**Explanation**

ASP.NET applications running in Azure web apps can create the following types of logs:

- Application tracing
- Web server
- Detailed error message
- Failed request tracing.

https://azure.microsoft.com/en-us/documentation/articles/web-sites-dotnet-troubleshoot-visual-studio/

#6

Before you deploy a new application to its production environment, you need to integrate a monitoring solution that sends messages to the development team's mobile devices. The key requirements for this messaging solution are: It can be deployed with minimal customization or

administration required.It can deliver messages to mobile devices running Android and iOS operating systems.Which Azure solution is optimal for this scenario?

**A** Azure Service Bus

**B** Azure Event Hub

**C** Azure Notification Hub

✓ Azure Event Grid

**Explanation**

This is where Azure Notification Hubs and IoT Edge come in. The former is a ready-made smart device notification solution. Need to send push notifications to iPhones, Android phones, or tablets? Notification Hubs is your answer. The great thing about it is that it takes away a lot of the pain involved in supporting a variety of mobile devices. If you have experience as a mobile developer, then you'll know what I am talking about. Unlike other forms of messaging, push notifications often have tricky platform-dependent logic. Scaling, managing tokens, and routing messages to different segments of users on different hardware and different versions of Android is non-trivial work for even an experienced tech team.

Notification Hub takes away most of that pain. It lets you broadcast to all platforms with a single interface. It can work both in the cloud or on-premises and includes security features like SAS, shared access secrets, and federated authentication. See the "How To" guide link for more details.

https://docs.microsoft.com/en-us/azure/notification-hubs/notification-hubs-push-notification-overview

#7

You have successfully containerized your application within an Azure Container Registry, created an image of your application and pushed it into the container registry. You have also created an AKS cluster. Now you want to deploy the containerized application onto your AKS cluster. Which three steps do you need to complete? (Choose 3 answers)

✓ Get credentials to authenticate **kubectl** commands sent to the Kubernetes cluster.

✓ Create a manifest file declaring the required Kubernetes resources.

**C** Create the resources in the cluster

✓ Create a service principal to allow your cluster to interact with Azure resources

**Explanation**

You would need to complete all of the following steps in order to deploy your application to an AKS cluster except for creating a service principal. This step must already be completed in order for your AKS cluster to be provisioned and ready to host your application. You can also have AKS create a service principal for you using Azure CLI or Azure Portal.

https://docs.microsoft.com/en-us/azure/aks/tutorial-kubernetes-deploy-cluster#create-a-service-principal

#8

There are four replicas of a multi-tier application separated into four resource groups with the following specifications:Each resource group is in a separate region - East US, West US, West Central US, and South Central US.Each resource group includes a replica of a three-tier application replica comprised of five VMs. Two front-end VMs, two mid-tier application VMs, and one back-end database VM.You want to increase the resilience of your database solution by replacing the database hosted on an ARM virtual machine with Cosmos DB. You want to offer a consistent experience for each customer while minimizing the latency of your responses. Which consistency type would be ideal?

**A** Bounded Staleness

**B** Session

**C** Consistent Prefix

✓ Eventual

**Explanation**

Strong consistency guarantees that a read operation will return the most recent version of an item. This is the type of consistency that relational databases have. For a distributed database to achieve strong consistency, it has to ensure that each write operation has been propagated to all of the replicas before the operation is considered complete. There's an obvious problem with this approach. It's very slow, especially if the database is distributed over a wide geographic region. So how can Cosmos DB provide strong consistency for a global database? Well, it can't. If you choose strong consistency, then the database can only be in one region.

At the other end of the spectrum is eventual consistency. The only guarantee made by this approach is that if no new writes are made to an item, then eventually all of the replicas will have the same value for that item. This is a very weak guarantee because not only could a request return an old value, but it could return a value older than the one that you retrieved previously. This could happen if your second request connected to a replica that hadn't been updated yet. This is the level of consistency typically offered by NoSQL databases. It has the lowest latency, but the worst consistency.

Cosmos DB offers three other consistency levels that are in between these two extremes. As you add more consistency, both the latency and the cost generally go up.

Consistent Prefix is the same as eventual consistency except that it guarantees that read operations will never see out-of-order writes. That is, reads can still return older values, but never out of order.

Session consistency guarantees consistency for each client session. So a client will never see data older than what it has written during a session. This is relatively easy to provide because the system doesn't have to worry about conflicts between multiple clients. It just needs to keeps things consistent for an individual client. This approach offers the lowest latency reads and writes. It's also by far the most popular consistency level chosen by Cosmos DB customers.

Bounded staleness guarantees that reads may lag behind writes by a limited amount of time. This costs as much as strong consistency, but it allows you to distribute your database across regions and has lower latency. This is the second most popular consistency level chosen by customers.

/course/designing-an-azure-data-implementation/designing-an-azure-data-implementation-cosmos-db/

#9

Which of the following PowerShell cmdlets will initiate a planned failover for an Azure SQL Database?

**A** Set-AzureRmSqlDatabaseSecondary -Failover

**B** Set-AzureRmSqlDatabaseSecondary -Failover -AllowDataLoss

✓ Set-AzureRmSqlDatabasePrimary -Failover

**D** Set-AzureRmSqlDatabasePrimary -Failover -AllowDataLoss

**Explanation**

**Set-AzureRmSqlDatabaseSecondary** with the -Failover parameter used to promote a secondary DB to primary DB, demoting the existing primary to secondary.

https://azure.microsoft.com/en-us/documentation/articles/sql-database-geo-replication-failover-powershell/

#11

If you don't know how long to retain data when setting a retention period for immutable blob storage, what kind of policy can you put in place?

**A** Elastic

✓ LTR Long Term Retention

**C** Legal

**D** Fluid

**Explanation**

Immutable storage supports the following features:

Time-based retention policy support: Users can set policies to store data for a specified interval. When a time-based retention policy is set, blobs can be created and read, but not modified or deleted. After the retention period has expired, blobs can be deleted but not overwritten.

Legal hold policy support: If the retention interval is not known, users can set legal holds to store immutable data until the legal hold is cleared. When a legal hold policy is set, blobs can be created and read, but not modified or deleted. Each legal hold is associated with a user-defined alphanumeric tag (such as a case ID, event name, etc.) that is used as an identifier string.

https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-immutable-storage

**Covered in this lecture**

**Blob Storage Retention**

Course: **Configuring Azure Application and Data Security**

54s

# Answers review

Correct 3 Wrong 8 Skipped 34

## #1

Jeremy will manage security for all applications within two subscriptions, named Subscription 1 and Subscription 2. Jeremy needs to be assigned the appropriate role to manage these resources.This new role has the following requirements:Jeremy needs to be able to assign employees he manages permanent roles within PIM.With his potential ability to assign other employees resource access in PIM, his role assignment will need administrative review.Before management activates his assignment, they would like Jeremy to complete MFA.What Azure resource role assignment within PIM will meet these requirements?

**A** Permanent eligible assignment

**B** Permanent active assignment

**C** An eligible assignment with expiration

**D** An active assignment with expiration

**Explanation**

Permanent assignments allow users to assign other users permanent roles within PIM. Eligible assignments require the user to complete an action, which could be a justification for the role or MFA, before activating the role. Active role assignments do not need to be justified or require MFA.

https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-resource-roles-eligible-visibility

## #2

You have created an investment app that uses machine learning to analyze day-to-day stock market activity. The real-time data is processed using Azure Stream Analytics, uploaded to an Azure SQL Database for initial queries and then migrated to an SQL Data Warehouse, where it is analyzed. The data analysis is done within a custom application hosted on heterogenous Azure Virtual Machines within an availability set. Analysis of new data is a stateful process assigned to a specific instance within the availability set. The analysis tasks can take 40 minutes to complete if the process is not interrupted. In the event of any errors or transient failures that cannot be resolved, the analysis must completely restart. Which potential solutions could work together to streamline analysis of new data? (Choose 2 answers)

**A** Modify the data analysis process to be idempotent.

**B** Configure a scale set to manage the stateful process via scheduled auto scaling.

**C** Integrate a checkpoint mechanism into the process.

**D** Reduce the time between each retry to address transient failures.

**Explanation**

Modifying the two processes so they can be performed idempotently increase the chance that the operation can be spread across multiple instances and continue in the event of an instance failure. Integrating a checkpoint mechanism would also allow the process to save its progress in stages, and in the event of an error, the process could restart from where it left off.

https://cloudacademy.com/course/developing-autoscaling-azure/application-design-considerations/

#10

Your company would like to enable Azure MFA within its Azure Active Directory tenants. The company includes an office of roughly 300 employees, with many employees working from home periodically throughout the week. Sales representatives who travel most of the year require remote access to applications in demonstration environments hosted on Azure.The company's requirements are:Minimal administrative overhead in MFA setup and managementAll employees must register for MFAAll employees must MFA when logging into their user accounts remotely, but not when in the office.Without considering the necessary Azure Active Directory licenses, what choice best accomplishes these requirements?

A Enable Azure AD Identity Protection. Configure an Azure MFA registration policy requiring all users to register and enable MFA. Configure all office IP addresses as federated IP addresses which can skip MFA.

B Enable Azure MFA for all employees via the Azure Portal. Configure an Azure MFA registration policy requiring all users to register and enable MFA. Configure all office IP addresses as managed IP addresses which can skip MFA.

C Enable Azure AD Identity Protection. Configure an Azure MFA registration policy requiring all users to register and enable MFA. Configure an Azure MFA risk-based conditional access policy requiring users accessing Azure resources remotely to complete MFA for all logins.

D Enable Azure AD Identity Protection. Configure an Azure MFA registration policy requiring all users to register and enable MFA. Configure an MFA bypass option for all employees when they log in through an office IP address.

**Explanation**

With Azure Active Directory's Identity Protection service, you can set up registration policies that enforce your MFA requirements for all directory users. You can also setup all office IP addresses as federated (not managed) Trusted IP addresses, which will not require MFA, or administrative updates as your office IP addresses change.

https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/overview

**Covered in this lecture**

**Azure AD B2B**

Course: **Designing for Azure Identity Management**

3m 18s

#13

Which PowerShell command will create a new deployment slot for a web app?

A New-AzureRmWebAppSlot -ResourceGroupName [resource group name] -Name [web app name] -Slot [deployment

slot name] -AppServicePlan [app service plan name]

**B** New-AzureRmDeploymentSlot -ResourceGroupName [resource group name] -Name [web app name] -Slot [deployment slot name] -AppServicePlan [app service plan name]

**C** New-AzureRmWebAppSlot -Name [web app name] -Slot [deployment slot name] -AppServicePlan [app service plan name]

**D** New-AzureRmWebAppDeploymentSlot -ResourceGroupName [resource group name] -Name [web app name] -Slot [deployment slot name] -AppServicePlan [app service plan name]

**Explanation**

The correct answer is:

**New-AzureRmWebAppSlot -ResourceGroupName [resource group name] -Name [web app name] -Slot [deployment slot name] -AppServicePlan [app service plan name].**

All of the other answers contain errors.

https://azure.microsoft.com/en-us/documentation/articles/sql-database-elastic-pool-create-powershell/

#16

Stuart is a contractor who needs to read and write access to resources within two resource groups, Resource Group 1 and Resource Group 2. He will assist with updates to live applications within both resource groups.The role assignment has the following requirements:For security reasons, credentials assigned to contractors must last no longer than five business daysThis release will take 30 business days to properly plan, test and execute. If Stuart does not have access to resources at all times, the project will be compromised.How can these requirements and project goals be met?

**A** Assign Stuart an active role that expires after five business days. Assign a resource administrator to extend his role before it expires.

**B** Assign Stuart an eligible role that expires after five business days. Assign a designated approver to extend his role before it expires.

**C** Assign Stuart an active role that expires after 30 business days business days. Assign a Privileged Role Administrator to review his activity and all actions performed on the resources for 30 business days.

**D** Assign Stuart an eligible role that expires after 30 business days. Require MFA for each login, and re-approval for role activation every 5 days.

**Explanation**

Here are the key facts related to this question:

- Roles with expiration can be extended or renewed. Extensions are better in this case to avoid potential loss of access during role renewal.
- Only resource administrators (Owners, User Access Administrators, and Global Admins) can renew or extend roles in Azure PIM.

https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-resource-roles-configure-role-settings#require-multi-factor-authentication

#17

What Azure Active Directory (Azure AD) role is required to add users to applications?

**A** Azure Automation Manager

**B** Azure Owner

**C** Device Manager

**D** Azure AD administrator

**Explanation**

Azure AD can support password-based single sign on for any cloud-based app that has an HTML-based sign-in page. Administrators can create and manage application credentials, and assign those credentials to users or groups who need access to the application. Alternatively, administrators can assign applications to end users or groups, and allow the end users to enter their own credentials directly upon accessing the application for the first time in their access panel.

https://docs.microsoft.com/en-us/azure/active-directory/active-directory-appssoaccess-whatis#how-does-single-sign-on-with-azure-active-directory-work

#18

You are designing several message queue services for clients. Service 1 is a delivery system for online invitations with the following specifications: First-in, first-out support is required to ensure messages are delivered in order. Messages must have unlimited time to live (TTL). Service 2 is a billing reminder delivery services with the following specifications: Prevention of duplicate messages - any duplicate messages would need to be detected and removed from the queue automatically. The messages will average 150 KB in size. Service 3 is a data delivery system for weather data from numerous IoT producers to a central data warehouse for batch processing for eventual data analysis. Its specifications are: The messages will be 10 KB in size The service will have to process thousands of messages per second. The data analysis application used with Service 3 performs idempotent operations. Which service(s) would be ideal for Azure Storage Queue?

**A** Service 1 and 3

**B** Service 2 only

**C** Service 3 only

**D** Service 1 and 2.

**Explanation**

Azure Storage Queues and Azure Service Bus Queues have several similar use cases, but their service limitations make them ideal for specific services.

- Storage Queues cannot guarantee FIFO delivery, while Service Bus Queues can.
- Storage Queues cannot detect duplicate messages in a queue.
- Storage Queues have a maximum message TTL of 7 days, while Service Bus Queues TTL can be unlimited.
- Storage Queues have a maximum file size of 64 KB, and although they can provide a pointer to larger size files if necessary, doing so decreases the speed of the service. Service Bus Queues are capable of delivering larger messages.
- Storage Queues are generally recommended for large, asynchronous workflows while Service Bus Queues are ideal for medium-scale transaction workflows.

https://cloudacademy.com/course/intro-to-azure-storage/queue-storage-overview-1/

## #19

Your database administrator and you are brainstorming ways to monitor memory pressure on a newly installed Azure Redis Cache Premium tier instance. Your database administrator insists that using the cache misses Azure Portal metric is the best way to monitor memory pressure. Why do you advise against using cache misses for monitoring memory pressure?

**A** Cache misses are normal and do not always reflect memory pressure.

**B** Cache misses are more a reflection of server CPU utilization issues and latency issues.

**C** Cache misses result from client/server regional variances and request/response timeouts.

**D** Cache misses can only measure timeout issues resulting from low network bandwidth availability.

**Explanation**

Cache misses are not necessarily a bad thing. Not all data can be in the cache at once. When using the cache-aside programming pattern, an application looks first in the cache for an item. If the item is not there (cache miss), the item is retrieved from the database and added to the cache for next time. Cache misses are normal behavior for the cache-aside programming pattern. Higher than expected cache misses may be caused by application logic that populates and reads from the cache. However, if items are being evicted from the cache due to memory pressure then there may be some cache misses, but a better metric to monitor for memory pressure would be Used Memory or Evicted Keys.

https://docs.microsoft.com/en-us/azure/redis-cache/cache-how-to-monitor#available-metrics-and-reporting-intervals

## #20

You need to design and implement a function using Azure Functions to initiate order processing for your online website. Online orders from the client are processed via an Azure Storage Queue, and these order details need to be written into a CosmosDB database table. To create the necessary function in Azure Functions to complete this task, which function components will you need to configure? (Choose 2 answers)

A An Azure App Service account connection

B An Azure Storage Queue trigger

C An Azure Cosmos DB output binding

D An HTTP input binding

**Explanation**

The Azure Queue trigger includes an input binding, so the HTTP input binding is not necessary. The data received from the queue is being written to the Cosmos DB table, so modifying a boilerplate Cosmos DB output binding accomplishes that task. When configuring the function, you need to create connections between Azure Functions and the other services and resources that the function will interact with, so connections must be created for the Azure Storage account that delivers the message via a queue, and for the Cosmos DB account that contains the table.

https://cloudacademy.com/course/intro-to-azure-functions/triggering-on-queues-and-binding-to-documentdb/

**Covered in this lecture**

**DEMO: Input Bindings**

Course: **Introduction to Azure Functions**

7m 2s

#21

Your team is spending too much time recovering from unplanned events, specifically when small resource updates occur that disrupt service operations, or noncompliant resources are created. You want to automate a process to review log data related to resource updates. You also need to design specific queries and potentially alerts related to these kinds of noncompliant resource updates. What type of logs would you analyze, and with what Azure service?

A Analyze activity logs with Log Analytics

B Analyze diagnostic logs with Event Grid

C Analyze application logs with Stream Analytics

D Analyze diagnostic logs with Event Hub

**D** Analyze diagnostic logs with Event Hub

**Explanation**

There are three types of logs we need to be aware of: activity logs, diagnostic logs, and application logs, or guest OS logs. Let's take a look at where these logs exist within an Azure subscription in relation to the resources they are monitoring. Here we have a Non-Compute Resource, which is tightly integrated and delivered through Azure providers, for example a network security group. Next to this, we have a Compute Resource.

This is a virtual machine with a guest OS, like Windows or Linux, and it has an application installed like IIS or Apache. Activity logs provide a record of operations from a subscription level, executed against the resource. For example, when administrative tasks are performed on the resource, like creating a resource or updating the properties of an existing resource, this will

generate an event in the activity log. Diagnostic logs are collected within a subscription at an Azure resource level for services like VPN gateways or network security groups. Not all Azure services have an option for diagnostic logging, and the level of detail you can capture varies. You can view a full list of resources that support diagnostic logging from the Microsoft Azure website. Application logs are logs generated by applications or services within a guest OS. These logs are collected from within the operating system through an agent. Application logs can be collected from core services, like Windows Event logs, or from applications like IIS. Diagnostic logging can be enabled in a couple of ways: using the Azure portal, PowerShell, Azure CLI or the REST API via Azure Resource Manager.

/course/designing-for-azure-operations/designing-for-azure-operations-section1-3-log-analytics/

#22

Which Azure domain service is based in Azure rather than on-premise, and is designed to help migrate on-premise applications which need Active Directory Domain Service authentication to the cloud?

**A** Do-It-Yourself Active Directory Domain Services

**B** Azure AD Standalone

**C** Azure Active Directory Hybrid ID Solution

**D** Azure Active Directory Domain Services Solution

**Explanation**

Azure AD Domain Services solution is a cloud-based, lightweight option to meet on-premises identity requirements for network application development and testing. This isn't meant to replace your on-premises identity solution but rather act as a mechanism to help migrate on-premises applications that require AD DS authentication methods to the cloud.

https://cloudacademy.com/course/azure-active-directory-security/identity-management-1/

**Covered in this lecture**

**Identity and Access Management**

## #23

Your team is spending too much time recovering from unplanned events, specifically when small resource updates occur that disrupt service operations, or noncompliant resources are created. You want to automate a process to review log data related to resource updates, to detect anomalies within the updates. You would like to utilize live dashboards to evaluate the log data quickly. What type of logs would you analyze, and with what Azure service?

**A** Process activity logs with Azure Event Hub.

**B** Process diagnostic logs with Log Analytics.

**C** Process application logs with tables in Azure Storage.

**D** Process diagnostic logs with Power BI.

**Explanation**

Azure offers activity logs to help you track subscription level operations on resources, such as creating or updates resources. Azure Event Hubs allows you to receive thousands of log events per second and detect anomalies, and it also provides live dashboards as well.

https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-overview-activity-logs

## #24

The following is a subsection of an ARM template to deploy a Windows VM. In order to create the network interface you need a public IP Address and a Virtual Network. Which of the answers below belong in the dependsOn array to accomplish that objective?...{"apiVersion": "2016-03-30","type": "Microsoft.Network/networkInterfaces","name": "[variables('nicName')]","location": "[resourceGroup().location]","dependsOn": [____FILL_IN_THE_BLANK____"[resourceId('Microsoft.Network/virtualNetworks/', variables('virtualNetworkName'))]"],...

**A** "[resourceId('Microsoft.Network/publicIPAddresses/', variables('publicIPAddressName'))]",

**B** "[resourceId('Microsoft.Network/networkInterfaces/', variables('nicName'))]"

**C** "[reference(variables('publicIPAddressName')).dnsSettings.fqdn]"

**D** "[resourceId('Microsoft.Storage/storageAccounts/', variables('storageAccountName'))]",

**Explanation**

The dependsOn property of a resource will allow you to delay the creation of a resource until another exists.

https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-authoring-templates

## #25

When using a mobile app with the Azure Notification Hub services, what are the required steps to ensure that push notifications are received on mobile devices?

**A** Configure the Notification Hub. Retrieve the PNS handle from the provider. Register the PNS handle with the app back end. The Notification Hub sends the message to the platform notification service.

**B** Retrieve the PNS handle from the provider. Register the PNS handle with the app back end. The Notification Hub sends the message to the platform notification service.

**C** Configure the Notification Hub. Retrieve the PNS handle from the provider. The Notification Hub sends the message to the platform notification service.

**D** Configure the Notification Hub. Register the PNS handle with the app back end. The Notification Hub sends the message to the platform notification service.

**Explanation**

At the high level , this is how the push notification works

1. The client app decides it wants to receive pushes, and contacts the corresponding PNS to retrieve its unique and temporary push handle. The handle type depends on the system.

2. The client app stores this handle in the app back-end or provider.

3. To send a push notification, the app back-end contacts the PNS using the handle to target a specific client app.

4. The PNS forwards the notification to the device specified by the handle.

https://docs.microsoft.com/en-us/azure/notification-hubs/notification-hubs-push-notification-overview

## #26

You are designing a networking events mobile application with the Mobile Apps platform in Azure App Service. What type of notification would you send to clients by integrating their SDKs with the registration capabilities of Azure Notification Hubs?

**A** push

**B** pull

**C** post

**D** get

**Explanation**

When developing a mobile application in Azure App Service, Azure Notification Hubs provides a multiplatform, scaled-out infrastructure that enables you to send mobile push notifications from any backend (in the cloud or on-premises) to any mobile platform. With a single API call, you can target individual users or entire audience segments containing millions of users, across all their devices.

https://docs.microsoft.com/en-us/azure/notification-hubs/notification-hubs-push-notification-overview

## #27

The junior database administrator at your organization is experimenting with an Azure Stream Analytics parallel job. The job input is from an Event Hub with eight partitions. Which of the following would be feasible for the job output?

**A** An Event Hub with 0 partitions

**B** An Event Hub with 16 partitions

**C** A Blob Output

**D** A Blob Output with 8 partitions

**Explanation**

The number of input partitions must equal the number of output partitions so the idea is to avoid a mismatched partition count issue. Blob output does not currently support partitions. However, it will inherit the partitioning scheme of the upstream query. If Event Hubs are used, there must be eight partitions.

https://docs.microsoft.com/en-au/azure/stream-analytics/stream-analytics-scale-jobs#example-scenarios-that-are-not-embarrassingly-parallel

## #28

Which tool can copy blobs from one Azure Storage container to another container programmatically, and delete data from the source container once the copy is complete?

**A** AzCopy

**B** Azure Storage Data Movement Library

C Azure Migrate

D Azure Storage Explorer

**Explanation**

It is possible to effectively move blobs between containers programmatically using the Microsoft Azure storage data movement library. This library contains methods that can be added to a C# project that can copy data between containers as well as delete the blobs after the copy process has completed. To learn more about the Microsoft Azure storage data movement library refer to this URL (https://docs.microsoft.com/azure/storage/common/storage-use-data-movement-library).

https://cloudacademy.com/course/managing-azure-blob-storage/moving-blobs-between-storage-containers/?context_id=534&context_resource=lp

## #29

Below is a section from an ARM Template.Which of the following options will cause the "adminPassword" property to be masked if deployed inside the portal?"parameters": { "adminPassword": { "type": "_____" },}

A secureString

B string

C secureObject

D array

**Explanation**

The secureString allows you to mask properties inside the portal.

https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-authoring-templates

## #30

You have recently launched a Python application with an Azure Cache for Redis. You want to store a string within your Python app titled Reference that reads "Filename: Critical_Doc; Last update 8/19/2019". Which script will perform this operation?

A result = r.set("Reference", "Filename: Critical_Doc; Last update 8/19/2019")

**B** print = r.insert("String: Reference", "Filename: Critical_Doc; Last update 8/19/2019")

**C** result = r.get("String", "Filename: Critical_Doc; Last update 8/19/2019")

**D** print = r.add("Reference", "Filename: Critical_Doc; Last update 8/19/2019")

**Explanation**

The script **result = r.set("Reference", "Filename: Critical_Doc; Last update 8/19/2019")** will store the string in your Azure Cache for Redis. You can retrieve it using the short script **result = r.get("Reference").**

https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-python-get-started#read-and-write-to-the-cache

#31 You have an ARM template, and you need to test and deploy it with PowerShell. Which of the following shows the correct series of commands to run?

**A**
1. Add-AzureRmAccount
2. New-AzureRmResourceGroup
3. Test-AzureRmResourceGroupDeployment
4. New-AzureRmResourceGroupDeployment

**B**
1. Login-AzureAccount
2. New-AzureResourceGroup
3. Test-AzureResourceGroupDeployment
4. New-AzureResourceGroupDeployment

**C**
1. Add-AzureRmAccount
2. Test-AzureRmResourceGroupDeployment
3. New-AzureRmResourceGroup
4. New-AzureRmResourceGroupDeployment

**D**
1. Login-AzureAccount
2. Test-AzureResourceGroupDeployment
3. New-AzureResourceGroup
4. New-AzureResourceGroupDeployment

**Explanation**

This is a difficult question if you don't use PowerShell regularly.

However the order should be to first to login

```
Add-AzureRmAccount
```

Next you can create the resource group

```
New-AzureRmResourceGroup -Name ExampleResourceGroup -Location "West US"
```

Then you can test the deployment

```
Test-AzureRmResourceGroupDeployment -ResourceGroupName ExampleResourceGroup -TemplateFile <PathToTemplate>
```

Then you can actually deploy the resource group

```
New-AzureRmResourceGroupDeployment -Name ExampleDeployment -ResourceGroupName ExampleResourceGroup -Templa
```

https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-template-deploy

#32

Which Microsoft PowerShell Security Cmdlet converts a secure string to an encrypted standard string?

**A** ConvertTo-EncryptedString

**B** ConvertFrom-EncryptedString

**C** ConvertTo-SecureString

**D** ConvertFrom-SecureString

**Explanation**

PowerShell has a Security module that consists of cmdlets and providers that manage the basic security features of Windows.

To convert a secure string to an encrypted standard string, use the ConvertFrom-SecureString cmdlet.

https://msdn.microsoft.com/en-us/powershell/reference/5.1/microsoft.powershell.security/microsoft.powershell.security

#33

You're designing a messaging solution and it has the following requirements:Messages must have a time-to-live of at least 10 daysYour application message size does not exceed 150 KBYour queue size will not grow larger than 50 GBYour application requires at-most-once deliveryWhich of the following services will be included in your design?

**A** Service Bus Queues

**B** Service Bus Relay

**C** Storage Queues

**D** Event Hubs

**Explanation**

Asa solution architect/developer, you should consider using Storage queues when:

- Your application must store over 80 GB of messages in a queue, where the messages have a lifetime shorter than 7 days.

As a solution architect/developer, you should consider using Service Bus queues when:

- The time-to-live (TTL) characteristic of the application-specific workload can exceed the 7-day period.
- Your application handles messages that can exceed 64 KB but will not likely approach the 256 KB limit.
- Your messaging solution must be able to support the "At-Most-Once" delivery guarantee without the need for you to build the additional infrastructure components.

https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted

#34

You have configured an Azure Stream Analytics job and want to check its progress periodically using the metric graphing feature available in Azure Portal. You need to monitor the following metrics: Streaming units (percentage) Late input events (count) Early input events (count) Input Event Bytes (bytes) Runtime errors (count) Out-of-Order Events (count) You prefer to create the minimum number of graphs, for optimal efficiency. How many graphs will you need to create

**A** 5

**B** 1

**C** 3

**D** 2

**Explanation**

All of the metrics on the same graph have to be the same unit of measure. There are three units of measure in the collection of metrics listed in this question - count, percentage, and number of bytes. Therefore, the correct answer is three.

https://cloudacademy.com/course/introduction-to-azure-stream-analytics/monitoring/

## #35

When configuring Azure Notification Hub push notifications for your Azure App Service mobile app, which credential type is required to allow your mobile backend to connect to your notification hub?

**A** Access policy connection strings

**B** OAuth 2.0 authentication

**C** Managed Service Identity authentication

**D** HubTriggers

**Explanation**

You will need to get the connection string from the Access Policies page. This is the credential that will let your mobile backend actually connect to your hub for pushing messages. It will be part of your mobile backend code.

/course/design-solutions-using-platform-services/creating-push-notification-system/

## #36

When using the Azure Monitoring service for Web Apps in Azure, which of the below logging facilities is not an available option?

**A** Application Logging (File System)

**B** Application Logging (Table Storage)

**C** Application Logging (Blob Storage)

**D** Application Logging (Queue Storage)

**Explanation**

By default, the following Application Diagnostics are disabled for a Web App service , but can be enabled whenever required:

1. Application Logging (File System): The logs are collected by the file system of the web app.

2. Application Logging (Table Storage): The logs are collected in the Table storage that is specified under Manage Table Storage.
3. Application Logging (Blob Storage): The logs are collected in the Blob container that is specified under Manage Blob Storage.

https://docs.microsoft.com/en-us/azure/app-service-web/web-sites-enable-diagnostic-log

## #37

Your developers need to be able to send messages between the web and worker roles and have asked you for architectural help. Which of the following options would be well suited to pass messages between a web and worker role?

**A** Azure Queue Storage

**B** Azure Blob Storage

**C** Azure File Storage

**D** Azure Table Storage

**Explanation**

Storage queues allow for asynchronous messaging.

https://docs.microsoft.com/en-us/azure/storage/storage-dotnet-how-to-use-queues

**Covered in this lecture**

**Queues**

Course: **Developing Long-Running Tasks on Azure**

42s

## #38

You are developing a data processing application that continuously receives updates in near real-time from sources across the globe. Once processed, the data will be stored in Cosmos DB. You would like to minimize storage costs as much as possible and ensure that your Cosmos DB database can receive data from multiple regions simultaneously. You also want to minimize latency, but the data update sequence is critical. Therefore, it is critical that data is delivered and updated in proper order. What Cosmos DB consistency level is ideal for this data processing application based on these requirements?

**A** Bounded Staleness

**B** Session

**C** Consistent Prefix

**D** Eventual

**Explanation**

With Consistent Prefix and Eventual consistency levels, both of these levels guarantee that your data will eventually converge to the most recently written. With Consistent Prefix at least you get an additional guarantee that data will never be out of order. So even if you don't get the most recent data on read, you can at least be sure you are not skipping over data inadvertently. Both of these consistency levels allow for fast throughput and are relatively inexpensive. The more inconsistency you can tolerate, the more you can save money on request unit usage.

https://cloudacademy.com/course/introduction-azure-cosmos-db/cosmos-db-features-and-capabilities/

## #39

You have an Azure service plan hosting three Azure Web Apps, named Azure Web App 1, Azure Web App 2, and Azure Web App 3. Web App 1 is suddenly experiencing a complete outage that is affecting multiple deployment slots. You would like to stop the entire application.What effect can executing a stop command for Web App 1 application have in Azure App Service? (Choose 2 answers)

**A** It can stop the VMs hosting the application.

**B** It can stop all Web App 1 deployment slots.

**C** It can stop Web App 1 entirely.

**D** It can stop all Web Apps running on your App Service Plan.

**Explanation**

There are commands to **Stop** and **Restart** the application. The underlying virtual machines are not stopped or restarted, so these commands do not impact other apps in the same App Service plan.

https://cloudacademy.com/lab/deploying-monitoring-azure-app-service-web-apps/creating-web-app-azure/

## #40

You need to update the metadata for a blob within an Azure Blob Storage account using Azure PowerShell. The process to update the metadata includes the following steps, but not in the numbered order listed below. Which answer places the following numbered steps in the proper order to complete the task? Review the object properties Retrieve the desired blob Set the storage context to the correct storage account and provide access key Set properties using the set properties method

**A** 3-2-1-4

**B** 2-1-3-4

**C** 3-1-2-4

**D** 2-3-1-4

**Explanation**

The correct order is:

(3) Set the storage context to the correct storage account and provide access key

(2) Retrieve the desired blob

- (1) Review the object properties
- (4) Set properties using the set properties method

https://cloudacademy.com/course/managing-azure-blob-storage/setting-and-retrieving-blob-properties-and-metadata/

#41

Your company has a formal process for sending shared access signatures (SAS) to verified third parties, but is concerned that the SAS tokens could be obtained by an unintended or malicious user. You are considering additional security options to integrate into your SAS process, such as stored access policies. Consider the security options available with shared access signatures. What additional security option is available with stored access policies, and is not possible with shared access signatures alone?

**A** Limiting access to a specific IP address or address range

**B** Specifying when access via SAS token starts and ends

**C** Limiting access to specific Azure storage containers or objects

**D** Modifying existing SAS token permissions

**Explanation**

Shared access signatures allow you to:

1. Define the scope of access - account level (multiple Azure Storage services like queue, blob, etc) or resource level (limited

to service, container, or blob)

2. Define allowed actions (read, write, and delete, for example)
3. Specify start and expiration time
4. Specify approved IP address or address range that may use the URI
5. Set approved protocols: HTTP or HTTPS

Stored Access Policies allow you to:

1. Set at container level
2. Modify start and expiration time
3. Revoke a SAS token after it is issued
4. Modify existing SAS permissions

https://cloudacademy.com/course/intro-to-azure-storage/blob-storage-demo-1/

## #42

You are binding a certificate with IP SSL for your Azure App Service web app. What additional step is required to successfully bind a certificate with IP SSL that is unnecessary for binding other types of SSL certificates with an App Service web app?

**A** Re-map your A record to the new custom domain IP address

**B** Enforce HTTPS

**C** Ensure your app deployed on the basic level tier or higher

**D** Provide the certificate password

**Explanation**

Only one IP SSL binding may be added. This option allows only one SSL certificate to secure a dedicated public IP address. The other steps, enforcing HTTPS and providing the certificate password, are required for all SSL certificate types. The other potential answer is required for other SSL certificates - at least a basic level tier for your app service. For IP SSL, you actually are required to use either the production or isolated tier.

https://docs.microsoft.com/en-us/azure/app-service/configure-ssl-bindings#remap-a-record-for-ip-ssl

## #43

You are auditing and updating a small number of critical blobs within an Azure Blob Storage account, and those updates are recorded in a separate on-premises database. The entire update process for each blob takes roughly 30-50 seconds because the on-premises update can lag occasionally. The process has never takes longer than 50 seconds. During this update, you plan to lease each blob individually as you audit the account, to limit the potential effects to ongoing business. You want to lease the blob from the time you begin your update until the time the update is recorded in the on-premises database. Which lease operations should you perform?

**A** Lease the blob for 60 seconds, perform the update, and break the lease.

**B** Lease the blob for 60 seconds, perform the manual update, and release the lease.

**C** Lease the blob indefinitely, perform the manual update and then break the lease.

**D** Lease the blob indefinitely, perform the manual update and, then release the lease.

**Explanation**

The key to answering this question correctly is understanding how timed and indefinite (or infinite) leases operate.

- Timed and indefinite leases, when released, end immediately.
- Timed leases, when broken, last for the remaining time of the lease period and then end.
- Indefinite leases, when broken, end immediately.

Therefore, the correct answer is to select a timed lease of 60 seconds, and break it once you've completed the manual update.

This way, the lease will extend the full 60 seconds while the on-premises database is updated.

https://cloudacademy.com/course/managing-azure-blob-storage/implementing-blob-leasing/

#44

You have just launched an update for your multi-language translation mobile app, hosted on App Service. You receive multiple complaints that customer submissions of text translations are not being processed, and did not receive HTTP 4xx or 5xx error code responses. You want to know which App service components may have caused the issue. What log type should you enable?

**A** Failed Request Tracing

**B** Web Server Logging

**C** Detailed Error Messaging

**D** Application Logging

**Explanation**

Detailed information on failed requests, including a trace of the IIS components used to process the request and the time taken in each component. It's useful if you want to improve site performance or isolate a specific HTTP error.

https://docs.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs

#45

You are configuring your ARM template named AzureAppVMTemplate.json to deploy four virtual machines. The resource IDs for the virtual machines deployed in AzureAppVMTemplate.json will be passed to a separate ARM template titled AzureAppSecurity.json. What is required to pass the VM resource IDs from AzureAppVMTemplate.json to AzureAppSecurity.json successfully? (Choose 2 answers)

**A** AzureAppVMTemplate.json must be linked to AzureAppSecurity.json

**B** AzureAppVMTemplate can be a parent or child of AzureAppSecurity.json to pass the VM resource IDs to it.

**C** AzureAppVMTemplate.json must reference the AzureAppSecurity.json file.

**D** AzureAppVMTemplate.json template must be a parent of AzureAppSecurity.json template to pass the VM resource IDs to it.

**Explanation**

In order for AzureAppVMTemplate.json to pass the VM resource IDs to AzureAppSecurity.json, the two templates must be linked. It does not matter which template is the parent for this to succeed.

https://cloudacademy.com/course/azure-arm-intro/azure-arm-template-structure/

#1

_____ allows you to store and manage your container images in a central registry.

A Azure Container Instances

B Azure Service Fabric

C Azure Web Apps

✓ Azure Container Registry

**Explanation**

The Azure Container Registry is another container-centric service offering available in Azure. It allows you to store and manage your container images in a central registry, which is integrated with several other Azure services, including the App Service, Batch, and Service Fabric, among others.

https://cloudacademy.com/course/building-containers-with-azure-devops-978/container-related-services-in-azure/

#3

_____ is a distributed systems platform that allows you to build and operate always-on, scalable, distributed apps.

✓ Azure Service Fabric

B Azure Container Registry

C Azure Container Instances

D Azure Web Apps

**Explanation**

Azure Service Fabric is a distributed systems platform that allows you to build and operate always-on, scalable, distributed apps.

https://cloudacademy.com/course/building-containers-with-azure-devops-978/container-related-services-in-azure/

#4

You are publishing a debug build configuration. Which of the following must be done in order for remote debugging to work?

**A** Ensure the debug attribute of the compilation element in the web.config file is set to false.

✓ Ensure the debug attribute of the compilation element in the web.config file is set to true.

**C** Ensure the debug attribute of the httpRuntime element in the web.config file is set to true.

**D** Ensure the debug attribute of the httpRuntime element in the web.config file is set to false.

**Explanation**

Make sure the debug attribute of the compilation element in the web.config file is set to true.

https://support.microsoft.com/en-us/help/815157/how-to-disable-debugging-for-asp-net-applications

_____ allows you to assess your update status across your entire environment and to manage updates for both on-prem and Azure-hosted Windows servers and Linux servers from a single location.

✓ Azure Resource Manager

**B** Azure Update Management

**C** Azure Security Center

**D** Azure Container Registry

### Explanation

Azure Update Management is a service that's included with each Azure subscription. This service allows you to assess your update status across your entire environment and to manage updates for both on-prem and Azure-hosted Windows servers and Linux servers from a single location.

https://cloudacademy.com/course/configuring-azure-vm-and-container-security/configuring-system-updates-for-virtual-machines/

Azure Resource Manager (ARM) policy focuses on ____ actions at various scopes.

**A** organizational

**B** user

**C** resource

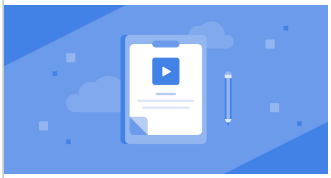
**D** system

### Explanation

With policies, you can prevent users in your organization from breaking conventions that are needed to manage your organization's resources. It is important to note that policies and RBAC work together. However, there are differences. RBAC focuses on the actions a user can perform at different scopes while policy focuses on resource actions at various scopes.

https://docs.microsoft.com/en-us/azure/resource-manager-policy#how-is-it-different-from-rbac

### Covered in this lecture



**Book 8 - Infrastructure as Code**

Course: **DevOps Playbook Part 2**

5m 59s

There is a requirement to store audit logs for an application hosted in Azure. Which of the following Azure Blob Storage blob type is recommended for this purpose?

✓ Append blob

B Normal blob

C Block blob

D Page blob

**Explanation**

The append blob gives the ability to append data to an existing blob. This blob type is ideal for storing data that is relevant to logging and auditing.

https://blogs.msdn.microsoft.com/windowsazurestorage/2015/04/13/introducing-azure-storage-append-blob/

#3

You're an application developer looking to persist your data into Azure Blob Storage using REST API, with the occasional need to remove and update your records. What type of Blob would you use?

A Append Blobs

B Any

✓ Block Blobs

D Page Blobs

**Explanation**

Best option here is to use Block Blobs, as they offer programmatic access via REST API, unlike Page Blobs which are used by filesystem disks and Append Blobs do not support update and delete operations.

https://docs.microsoft.com/en-us/rest/api/storageservices/understanding-block-blobs--append-blobs--and-page-blobs

When you configure key management for storage accounts, you must ensure which of the following key vault configurations?

A The key vault is in the same region as the storage account

B The key vault is linked to a container within the storage account

C The key vault is in the same subscription as the storage account

✓ Make sure of all of these key configurations are correct

**Explanation**

Azure Key Vault is a multi-tenant service and uses a pool of Hardware Security Modules (HSMs) in each Azure location.

All HSMs at Azure locations in the same geographic region share the same cryptographic boundary (Thales Security World). For example, East US and West US share the same security world because they belong to the US geo location. Similarly, all Azure locations in Japan share the same security world and all Azure locations in Australia, India, and so on.

A backup taken of a key from a key vault in one Azure location can be restored to a key vault in another Azure location, as long as both of these conditions are true:

- Both of the Azure locations belong to the same geographical location
- Both of the key vaults belong to the same Azure subscription

For example, a backup taken by a given subscription of a key in a key vault in West India, can only be restored to another key vault in the same subscription and geolocation; West India, Central India or South India.

https://docs.microsoft.com/en-us/azure/key-vault/key-vault-ovw-security-worlds

#4

Regarding Azure Storage Managed Disks, which disk role is used for the persistent storage of application data?

A Temporary disks

✓ Any disk type can persistently store application data

C Data disks

D OS disks

**Explanation**

There are three disk roles in Azure. These roles include data disks, OS disks, and temporary disks.

Data disks are managed disks that you attach to a virtual machine. They're used to store applications and other sorts of data that you need. When you attach a data disk to a VM, it's registered as a SCSI drive. You can assign a drive letter to a data disk just like any other physical disk in a physical server. Data disks have a max capacity of 32 terabytes, and the number of data disks that you can attach to a virtual machine will be determined by the size of the virtual machine itself.

OS disks are pretty self-explanatory. When you deploy a virtual machine, it's deployed with a single OS disk attached. The OS disk, as you may have guessed, hosts the VM's operating system and boot volume. The max capacity of an OS disk is four terabytes.

Temporary disks are probably the most misunderstood of the three disk types. Every VM contains a temporary disk. I should mention, however, that the temporary disk is not a managed disk. The temporary disk is not intended for the storage of important data. Instead, temporary disks are used to host things like page files and swap files.

https://docs.microsoft.com/en-us/azure/virtual-machines/managed-disks-overview#disk-roles

**Covered in this lecture**

**An Introduction to Azure Managed Disks**

Course: **Introduction to Azure Storage**

#5

What is one reason to use a Shared Access Signature instead of an account key?

A To provide access to a client that can't be trusted with the account key

✓ To protect the access key's integrity

C To provision storage to external clients

D To enable remote access

**Explanation**

You would use a Shared Access Signature to provide access to a client that can't be trusted with the accont key.

https://docs.microsoft.com/en-us/azure/storage/storage-dotnet-shared-access-signature-part-1