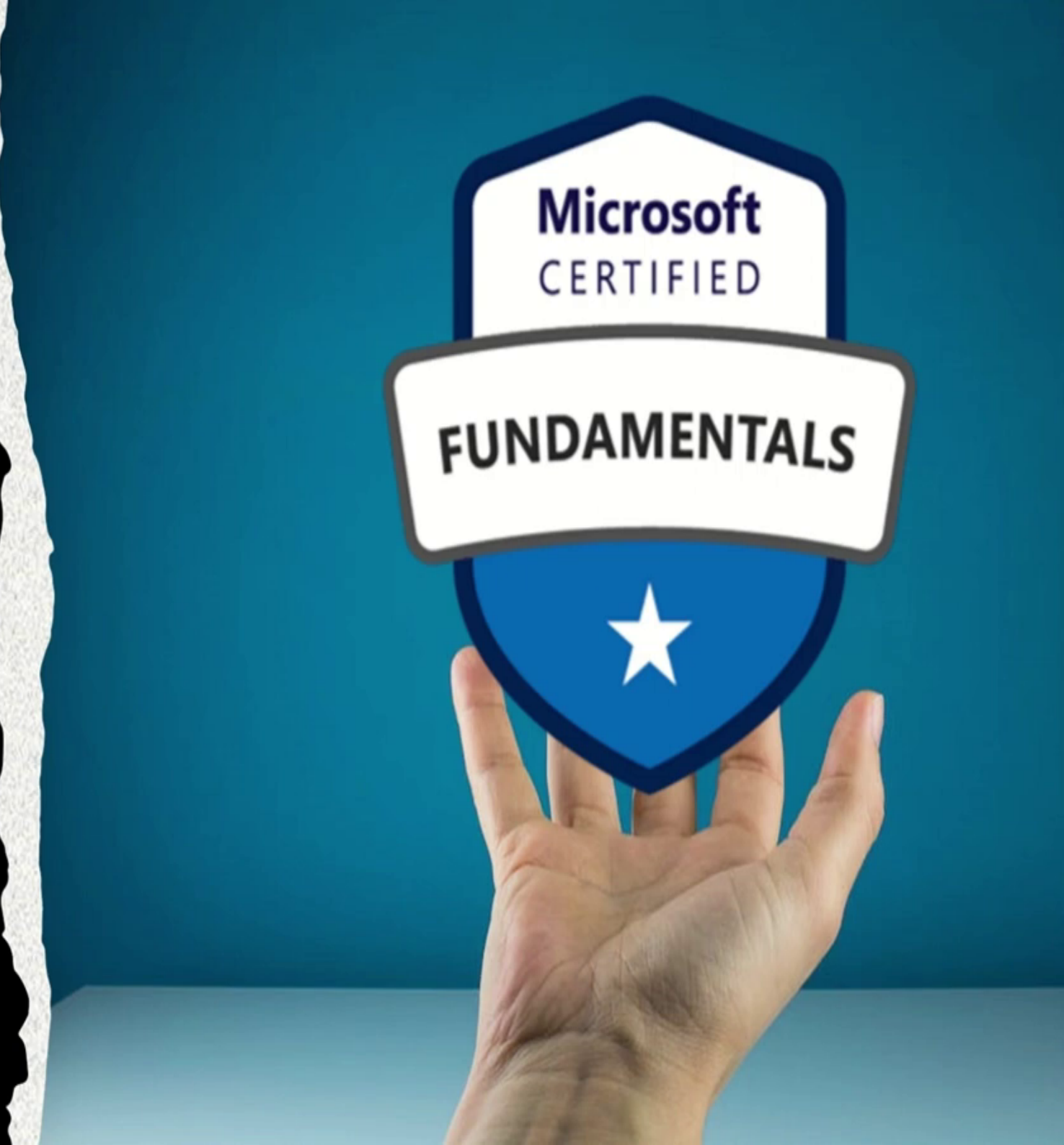
00:00:00

Azure



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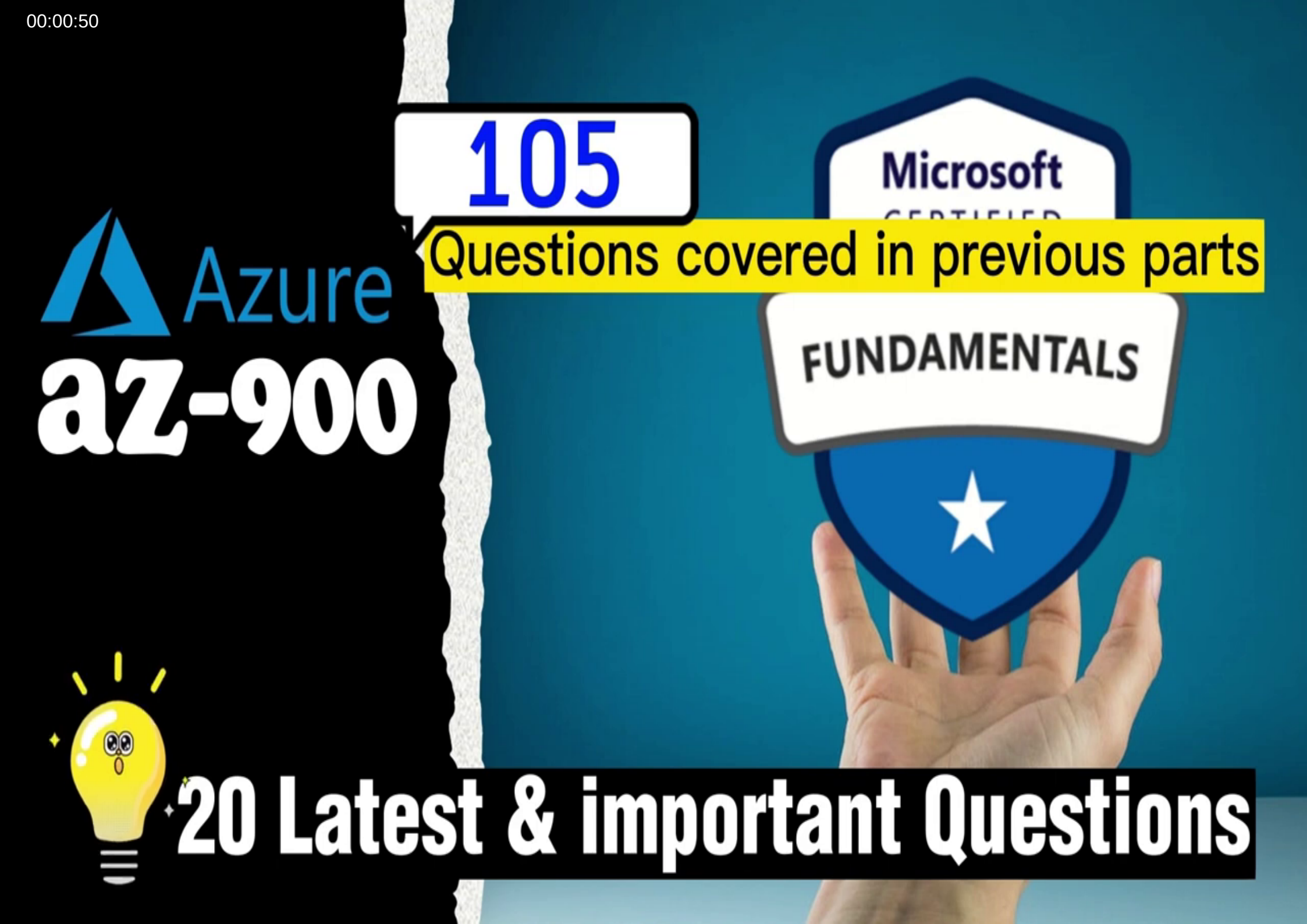
105
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00:00:53
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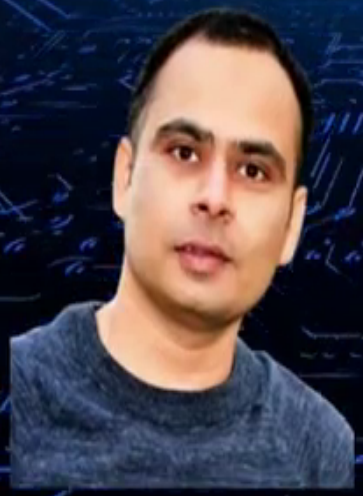
00:00:56



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Q106: Geo-zone-redundant storage (GZRS) includes both general-purpose v1 and general-purpose v2 storage accounts

True

False

Geo-zone-redundant storage

Geo-zone-redundant storage (GZRS) combines the high availability provided by redundancy across availability zones with protection from regional outages provided by geo-replication. Data in a GZRS storage account is copied across three Azure availability zones in the primary region and is also replicated to a secondary geographic region for protection from regional disasters. Microsoft recommends using GZRS for applications requiring maximum consistency, durability, and availability, excellent performance, and resilience for disaster recovery.

With a GZRS storage account, you can continue to read and write data if an availability zone becomes unavailable or is unrecoverable. Additionally, your data is also durable in the case of a complete regional outage or a disaster in which the primary region isn't recoverable. GZRS is designed to provide at least 99.99999999999999% (16 9's) durability of objects over a given year.

The following diagram shows how your data is replicated with GZRS or RA-GZRS:

Only standard general-purpose v2 storage accounts support GZRS. GZRS is supported by all of the Azure Storage services, including:

- Azure Blob storage (hot and cool block blobs, non-disk page blobs)
- Azure Files (all standard tiers: transaction optimized, hot, and cool)
- Azure Table storage
- Azure Queue storage

GZRS is available for a subset of Azure regions:

- (Africa) South Africa North
- (Asia Pacific) Australia East
- (Asia Pacific) East Asia
- (Asia Pacific) Japan East
- (Asia Pacific) Korea Central
- (Asia Pacific) Southeast Asia
- (Asia Pacific) Central India
- (Europe) France Central
- (Europe) Germany West Central

Q106: Geo-zone-redundant storage (GZRS) includes both general-purpose v1 and general-purpose v2 storage accounts

True

False

Q106: Geo-zone-redundant storage (GZRS) includes both general-purpose v1 and general-purpose v2 storage accounts

True | False

Q107: Geo-zone-redundant storage (GZRS) is supported by which of the following Azure Storage services:

a) Azure Blob storage
b) Azure Files
c) Azure Table storage
d) Azure Queue storage

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ific) Central India
France Central
) Germany Central

Q106: Geo-zone-redundant storage (GZRS) includes both general-purpose v1 and general-purpose v2 storage accounts

True | False

Q107: Geo-zone-redundant storage (GZRS) is supported by which of the following Azure Storage services:

a) Azure Blob storage
b) Azure Files
c) Azure Table storage
d) Azure Queue storage

Q108: Which property of your storage account should you check to determine which write operations have been replicated to the secondary region?

a) Last Modified Time property
b) Last Sync Time property
c) Last Update Time property

00:02:47

AZ 900: Questions and Answers – Part 7

Q109:	Statement	Yes	No
a)	Data that is stored in an Azure Storage account automatically has at least three copies.	☑	☐
b)	All data that is copied to an Azure Storage account is backed up automatically to another Azure data center.	☐	☐
c)	An Azure Storage account can contain up to 2 TB of data and up to one million files.	☐	☐

00:03:29

Data redundancy - Azure Storage

https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy

Filter by title

- recovery
- Data redundancy
- Customer-managed failover for disaster recovery
- Access tiers and lifecycle management
- Object replication
- Performance and scalability
- Cost planning and optimization
- Find, search, and understand blob data
- Data migration
- Monitoring
- Protocol support
- Event handling
- Page blob features

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Summary of redundancy options

The tables in the following sections summarize the redundancy options available for Azure Storage.

Durability and availability parameters

The following table describes key parameters for each redundancy option:

Parameter	LRS	ZRS	GRS/RA-GRS	GZRS/RA-GZ
Percent durability of objects over a given year	at least 99.999999999% (11 9's)	at least 99.9999999999% (12 9's)	at least 99.99999999999999% (16 9's)	at least 99.99999999 (16 9's)
Availability for read requests	At least 99.9% (99% for Cool or Archive access tiers)	At least 99.9% (99% for Cool or Archive access tiers)	At least 99.9% (99% for Cool or Archive access tiers) for GRS At least 99.99% (99.9% for Cool or Archive access tiers) for RA-GRS	At least 99.9% for Cool or Ar access tiers) f At least 99.99 (99.9% for Co Archive acces for RA-GZRS

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Data redundancy - Azure Storage

https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy

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Number of copies of data maintained on	Three copies within a single region	Three copies across separate availability zones within a single region	Six copies total, including three in the primary region and three in the secondary region	Six copies tot including thre separate avail zones in the p region and th

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Number of copies of data maintained on separate nodes	Three copies within a single region	Three copies across separate availability zones within a single region	Six copies total, including three in the primary region and three in the secondary region	Six copies tot including thre separate avail zones in the p region and th locally redunc copies in the secondary reg

For more information, see the SLA for Storage Accounts.

Durability and availability by outage scenario

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Durability and availability by outage scenario

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a)	Data that is stored in an Azure Storage account automatically has at least three copies.	☑	☐
b)	All data that is copied to an Azure Storage account is backed up automatically to another Azure data center.	☐	☑
c)	An Azure Storage a files.	☐	☐

AZ 900: Questions and Answers – Part 7

Q109:	Statement	Y
a) Data that is stored in an Azure Storage account automatically has at least three copies.		
b) All data that is copied to an Azure Storage account is backed up automatically to another Azure data center.		
c) An Azure Storage account can contain up to 2 TB of data and up to one million files.		

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c)	An Azure Storage account can contain up to 2 TB of data and up to one million files.	☐	☑

```
[--admin-password]
[--admin-username]
```

Q110: Which Azure Storage access tier has the highest storage costs, but the lowest access cost?.

a) Hot tier
b) Cool tier
c) Archive tier

Data stored in the cloud grows at an exponential pace. To manage costs for your expanding storage needs, it can be helpful to organize your data based on how frequently it will be accessed and how long it will be retained. Azure storage offers different access tiers so that you can store your blob data in the most cost-effective manner based on how it's being used. Azure Storage access tiers include:

- **Hot tier** - An online tier optimized for storing data that is accessed or modified frequently. The hot tier has the highest storage costs, but the lowest access costs.
- **Cool tier** - An online tier optimized for storing data that is infrequently accessed or modified. Data in the cool tier should be stored for a minimum of 30 days. The cool tier has lower storage costs and higher access costs compared to the hot tier.
- **Archive tier** - An offline tier optimized for storing data that is rarely accessed, and that has flexible latency requirements, on the order of hours. Data in the archive tier should be stored for a minimum of 180 days.

Azure storage capacity limits are set at the account level, rather than according to access tier. You can choose to maximize your capacity usage in one tier, or to distribute capacity across two or more tiers.

ⓘ Note

Achieve lower and consistent latencies for Azure Storage workloads that require fast and consistent response times.

Data redundancy - Azure Storage

Understand data redundancy in Azure Storage. Data in your Microsoft Azure Storage account is replicated for...

Set a blob's access tier - Azure Storage

Learn how to specify a blob's access tier when you upload it, or how to change the access tier for an existing blob.

Show 5 more

Q110: Which Azure Storage access tier has the highest storage costs, but the lowest access cost?.

a) Hot tier
b) Cool tier
c) Archive tier

Q110: Which Azure Storage access tier has the highest storage costs, but the lowest access cost?.

a) Hot tier
b) Cool tier
c) Archive tier

Q111: The archive tier is not supported as the default access tier for a storage account.

True | False

Q112: What is the minimum recommended data retention period for cool access tiers?

5	30	45	90

Q113: What is the minimum recommended data retention period for archive access tiers?

30	60	90	180

Hot, cool, and archive access tiers for blob data

Article • 12/14/2022 • 13 minutes to read • 7 contributors

Feedback

In this article

Data stored in the cloud grows at an exponential pace. To manage costs for your expanding storage needs, it can be helpful to organize your data based on how frequently it will be accessed and how long it will be retained. Azure

Additional resources

Training

Learning paths and modules

Optimize storage performance and costs using Azure Blob storage tiers - Training

Learn what the different storage tiers are for blob storage and how they can improve performance and reduce costs.

Documentation

Premium block blob storage accounts - Azure Storage

Achieve lower and consistent latencies for Azure Storage workloads that require fast and consistent response times.

most cost-effective manner based on how it's being used. Azure Storage access tiers include:

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Azure storage capacity limits are set at the account level, rather than according to access tier. You can choose to maximize your capacity usage in one tier, or to distribute capacity across two or more tiers.

> ⓘ Note
>
> Setting the access tier is only allowed on Block Blobs. They are not supported for Append and Page Blobs.

An overview of Azure page blobs and their advantages, including use cases with sample scripts.

Set a blob's access tier - Azure Storage

Learn how to specify a blob's access tier when you upload it, or how to change the access tier for an existing blob.

Show 5 more

Q114: If you have Azure resources deployed to every region, you can implement availability zones in all the regions.

True

False

Q115: You have an Azure subscription named Subscription1. You sign into the Azure portal and create a resource group named RG1. From Azure documentation, you have the following command that creates a virtual machine named VM1.

```
az vm create --resource-group RG1 --name VM1 --image UbuntuLTS --generate-ssh-keys
```

You need to create VM1 in Subscription1 by using the command.

Solution: From a computer that runs Windows 10, install Azure CLI. From a command prompt, sign into Azure and then run the command. Does this meet the goal?

Yes | No

Q116: You have an Azure subscription named Subscription1. You sign into the Azure portal and create a resource group named RG1. From Azure documentation, you have the following command that creates a virtual machine named VM1.

```
az vm create --resource-group RG1 --name VM1 --image UbuntuLTS --generate-ssh-keys
```

You need to create VM1 in Subscription1 by using the command.

Solution: From a computer that runs Windows 10, install Azure CLI. From PowerShell, sign into Azure and then run the command. Does this meet the goal?

Yes | No

Q117: You have an Azure subscription named Subscription1. You sign into the Azure portal and create a resource group named RG1. From Azure documentation, you have the following command that creates a virtual machine named VM1.

```
az vm create --resource-group RG1 --name VM1 --image UbuntuLTS --generate-ssh-keys
```

You need to create VM1 in Subscription1 by using the command.

Solution: From the Azure portal, launch Azure Cloud Shell and select Bash. Run the command in Cloud Shell. Does this meet the goal?

Yes | No

Q118: Building a data center infrastructure is an example of operational expenditure (OpEx) costs.

- True
- False

Q119: Monthly salaries for technical personnel are an example of operational expenditure (OpEx) costs.

True | False

Q120: Leasing software is an example of operational expenditure (OpEx) costs.

True | False

Q121: North America is represented by a single Azure region.

True | False

North America has several Azure regions, including West US, Central US, South Central US, East Us, and Canada East.

Q122: Every Azure region has multiple datacenters.

- True
- False

Q123: Data transfers between Azure services located in different Azure regions are always free.

True

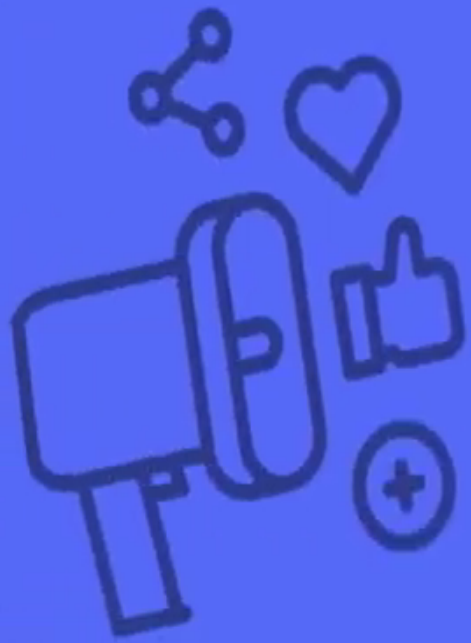
False

Q124: Data that is copied to an Azure Storage account is maintained automatically in at least three copies.

True

False

00:16:20



Q125: Availability zones are used to replicate data and applications to multiple regions.

True | False

Availability Zones protects your applications and data from datacenter failures.