review

Learning by Quizzes

Simple Storage Service (S3)
V1.00

Course title

BackSpace Academy
AWS Certified Cloud Practitioner

BackSpace

Contents

PLEASE READ THIS

The purpose of Learning by Quizzes

Preparation for the AWS certification exams will require understanding of the AWS documentation. Unfortunately, this documentation is massive in size and, it is completely impractical to attempt to present this with video lectures. The "learning by quizzes" exercises select key points from the AWS documentation that you should know in the format of a question and an answer. We have found that this is the most effective way to get a large amount of information into memory.

How to use the Learning by Quizzes

1. Read the question and select the correct answer.
2. Check if your answer is correct.
3. If you don’t know why the answer is correct read the explanation.
4. If you still don’t understand why it is correct then read the link to the page in the AWS documentation.

Please note: Although it is requirement of AWS certification to have read and understood the AWS documentation, “learning by quizzes’ is designed to significantly reduce that requirement.

Introduction to Amazon S3

This "learning by quizzes" exercise will be based upon the videos and the following reference material:

Section: ***Introduction to Amazon S3***

Reference: Amazon Simple Storage Service (S3) Developer Guide

https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html

Question

Following are some of advantages of the Amazon S3 service:

- Create Buckets
- Store data in Buckets
- Download data
- Permissions
- Standard interfaces

Answers

A. True
B. False

A
See: https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html#features

Question

_____ consist of _____ data and metadata. The data portion is opaque to Amazon S3. The metadata is a set of name-value pairs that describe the _____.

Answers

A. Objects
B. Buckets
C. Keys
D. regions

A
Objects consist of object data and metadata. The data portion is opaque to Amazon S3. The metadata is a set of name-value pairs that describe the object. These include some default metadata, such as the date last modified, and standard HTTP metadata, such as Content-Type. You can also specify custom metadata at the time the object is stored.
https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html#BasicsObjects

Question

Every object in Amazon S3 can be uniquely addressed through the combination of the web service endpoint, region, bucket name, key, and optionally, a version.

Answers

A. True
B. False

B
Not region
Every object is contained in a bucket. For example, if the object named photos/puppy.jpg is stored in the johnsmith bucket, then it is addressable using the URL http://johnsmith.s3.amazonaws.com/photos/puppy.jpg
An object is uniquely identified within a bucket by a key (name) and a version ID.
https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html#BasicsObjects

Question

US Standard region provides eventual consistency for all S3 requests.

Answers

A. True
B. False

B
Since Aug 4, 2015, Amazon S3 now supports read-after-write consistency for new objects added to Amazon S3 in US Standard region. Prior to this announcement, all regions except US Standard supported read-after-write consistency for new objects uploaded to Amazon S3. With this enhancement, Amazon S3 now supports read-after-write consistency in all regions for new objects added to Amazon S3. Read-after-write consistency allows you to retrieve objects immediately after creation in Amazon S3.
https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html#ConsistencyModel

Question

South America (Sao Paulo) region provides read-after-write consistency for overwrite PUTS and DELETES.

Answers

A. True
B. False

B
Amazon S3 offers eventual consistency for overwrite PUTS and DELETES in all regions.
https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html#ConsistencyModel

Question

Eventually consistent reads can provide higher read throughput than consistent reads.

Answers

A. True
B. False

A
Eventually Consistent Read - Highest read throughput. See table at:
https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html#ConsistencyModel

Question

Unlike access control lists, which can add (grant) permissions only on individual objects, policies can either add or deny permissions across all (or a subset) of objects within a bucket.

Answers

A. True
B. False

A
See: https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html#BucketPolicies

Question

Amazon S3 charges you only for what you actually use, with no hidden fees although overage charges do apply.

Answers

A. True
B. False

B
Overage charges do not apply. Amazon S3 charges you only for what you actually use, with no hidden fees and no overage charges. This gives developers a variable-cost service that can grow with their business while enjoying the cost advantages of Amazon's infrastructure.
https://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html#PayingforStorage

Working with Amazon S3 Buckets

This "learning by quizzes" exercise will be based upon the videos and the following reference material:

Section: ***Working with Amazon S3 Buckets***

Reference: Amazon Simple Storage Service (S3) Developer Guide

https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingBucket.html

Question

Amazon S3 bucket names are globally unique, regardless of the AWS region in which you create the bucket.

Answers

A. True
B. False

A
Amazon S3 bucket names are globally unique, regardless of the AWS Region in which you create the bucket. You specify the name at the time you create the bucket.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingBucket.html

Question

You can create up to 64 buckets for each AWS account you own.

Answers

A. True
B. False

B
By default, you can create up to 100 buckets in each of your AWS accounts. If you need additional buckets, you can increase your bucket limit by submitting a service limit increase.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingBucket.html#create-bucket-intro

Question

Which is a valid bucket url for mybucket?

Answers

A. http://s3-sa-east-1.amazonaws.com/mybucket
B. http://s3.amazonaws.com/mybucket
C. All of the above

C
In a path-style URL, the bucket name is not part of the domain (unless you use a Region-specific endpoint). For example:
US East (N. Virginia) Region endpoint, http://s3.amazonaws.com/bucket.
Region-specific endpoint, http://s3-aws-region.amazonaws.com/bucket.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingBucket.html#access-bucket-intro

Question

What region is http://s3.amazonaws.com/mybucket in?

Answers

A. US West
B. US East
C. Sao Paulo
D. Global

B
US East (N. Virginia) Region endpoint, http://s3.amazonaws.com/bucket
Region-specific endpoint, http://s3-aws-region.amazonaws.com/bucket
https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingBucket.html#access-bucket-intro

Question

Using the Amazon S3 API, you can create and manage S3 subresources. You can also use the console or the AWS SDKs.

Answers

A. True
B. False

A
Amazon S3 supports subresources for you to store, and manage the bucket configuration information. That is, using the Amazon S3 API, you can create and manage these subresources. You can also use the console or the AWS SDKs.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingBucket.html#bucket-config-options-intro

Question

Bucket ownership is transferable to another AWS account.

Answers

A. True
B. False

B
AWS Support does not have access to copy Amazon S3 objects or manipulate any configuration options in AWS accounts. You can't separate an AWS account from an Amazon.com account or transfer resources between AWS accounts. It is possible to manually migrate Amazon S3 resources to a new AWS account by applying resource-based policies and delegating access to these resources across AWS accounts with IAM user (or group) policies.
https://aws.amazon.com/premiumsupport/knowledge-center/account-transfer-s3/

Question

There is no limit to the number of objects that can be stored in a bucket and no difference in performance whether you use many buckets or just a few.

Answers

A. True
B. False

A
Amazon S3 is cloud storage for the Internet. To upload your data (photos, videos, documents etc.), you first create a bucket in one of the AWS Regions. You can then upload any number of objects to the bucket.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingBucket.html

Question

Is .mybucket a valid bucket name?

Answers

A. Yes
B. No

B
Bucket name cannot start with a period (.). See table at:
https://docs.aws.amazon.com/AmazonS3/latest/dev/BucketRestrictions.html

Question

Is my.bucket a valid bucket name?

Answers

A. Yes
B. No

A
Bucket names must be a series of one or more labels. Adjacent labels are separated by a single period (.). Bucket names can contain lowercase letters, numbers, and hyphens. Each label must start and end with a lowercase letter or a number.
https://docs.aws.amazon.com/AmazonS3/latest/dev/BucketRestrictions.html

Question

Is 192.168.5.4 a valid bucket name?

Answers

Yes
No

B
Bucket names must not be formatted as an IP address (for example, 192.168.5.4).
https://docs.aws.amazon.com/AmazonS3/latest/dev/BucketRestrictions.html

Question

You can use cost allocation tagging to label Amazon S3 buckets so that you can more easily track their cost against projects or other criteria.

Answers

A. True
B. False

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A
To track the storage cost or other criteria for individual projects or groups of projects, label your Amazon S3 buckets using cost allocation tags. A cost allocation tag is a key-value pair that you associate with an S3 bucket. After you activate cost allocation tags, AWS uses the tags to organize your resource costs on your cost allocation report. https://docs.aws.amazon.com/AmazonS3/latest/dev/CostAllocTagging.html

Question

S3 Tag Values do not have to be unique in a tag set, and they can be null.

Answers

A. True
B. False

A
Each S3 bucket has a tag set. A tag set contains all of the tags that are assigned to that bucket. A tag set can contain as many as 10 tags, or it can be empty. Keys must be unique within a tag set, but values in a tag set don't have to be unique. For example, you can have the same value in tag sets named project/Trinity and cost-center/Trinity. https://docs.aws.amazon.com/AmazonS3/latest/dev/CostAllocTagging.html

Working with Amazon S3 Objects

This "learning by quizzes" exercise will be based upon the videos and the following reference material:

Section: ***Working with Amazon S3 Objects***

Reference: Amazon Simple Storage Service (S3) Developer Guide

https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingObjects.html

Question

An object consists of the following:

- Key
- Version
- Value
- Metadata
- Subresources
- Access Control

Answers

A. True
B. False

A
See: https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingObjects.html

Question

The following are examples of valid object key names?

- 4my-organization
- my.great_photos-2014/jan/myvacation.jpg
- videos/2014/birthday/video1.wmv

Answers

A. True
B. False

A
The following character sets are generally safe for use in key names:

Alphanumeric characters [0-9a-zA-Z]

Special characters !, -, _, ., *, ', (, and)

The following are examples of valid object key names:

4my-organization

my.great_photos-2014/jan/myvacation.jpg

videos/2014/birthday/video1.wmv

https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingMetadata.html#object-keys

Question

When you create objects, you can configure values of system-controlled metadata items or update the values when you need.

Answers

A. True
B. False

B
Metadata such as object creation date is system controlled where only Amazon S3 can modify the value.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingMetadata.html#object-metadata

Question

When uploading an object, you can also assign user-defined metadata to the object.

Answers

A. True
B. False

A
User-Defined Metadata
When uploading an object, you can also assign metadata to the object. You provide this optional information as a name-value (key-value) pair when you send a PUT or POST request to create the object.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingMetadata.html#object-metadata

Question

The S3 Standard storage class provides 99.999999999% availability of objects over a given year. It is designed to sustain the concurrent loss of data in two facilities.

Answers

A. True
B. False

B
Durability not availability
https://docs.aws.amazon.com/AmazonS3/latest/dev/storage-class-intro.html

Question

The S3 RRS storage class provides 99.99% durability of objects over a given year. It is designed to sustain the concurrent loss of data in two facilities.

Answers

A. True
B. False

B
RRS is not designed to sustain the concurrent loss of data in two facilities. It can sustain the loss of one only.
https://docs.aws.amazon.com/AmazonS3/latest/dev/storage-class-intro.html

Question

By default, S3 bucket versioning is enabled

Answers

A. True
B. False

B
You must explicitly enable versioning on your bucket. By default, versioning is disabled.
https://docs.aws.amazon.com/AmazonS3/latest/dev/ObjectVersioning.html

Question

When you DELETE an object, all versions remain in the bucket and Amazon S3 inserts a delete marker.

Answers

A. True
B. False

A
A delete marker is a placeholder (marker) for a versioned object that was named in a simple DELETE request. Because the object was in a versioning-enabled bucket, the object was not deleted. The delete marker, however, makes Amazon S3 behave as if it had been deleted.
https://docs.aws.amazon.com/AmazonS3/latest/dev/DeleteMarker.html

Question

You can add lifecycle configuration to versioning-enabled buckets only.

Answers

A. True
B. False

B
https://docs.aws.amazon.com/AmazonS3/latest/dev/object-lifecycle-mgmt.html

Question

You can use a lifecycle configuration rule to convert the storage class of an object from GLACIER to Standard or RRS.

Answers

A. True
B. False

B
Transition actions – In which you define when objects transition to another storage class or archive TO Glacier.
https://docs.aws.amazon.com/AmazonS3/latest/dev/object-lifecycle-mgmt.html

Question

GLACIER storage class S3 objects are visible and available only through Amazon S3, not through Amazon Glacier.

Answers

A. True
B. False

A
The GLACIER storage class is suitable for archiving data where data access is infrequent. Archived objects are not available for real-time access. You must first restore the objects to S3 before you can access them.
https://docs.aws.amazon.com/AmazonS3/latest/dev/storage-class-intro.html

Question

You can upload objects of up to 5 GB in size in a single operation. For objects greater than 5 GB you must use the multipart upload API.

Answers

A. True
B. False

A
With a single PUT operation, you can only upload objects up to 5 GB in size. Using the multipart upload API, you can upload large objects, up to 5 TB. The multipart upload API is designed to improve the upload experience for larger objects. You can upload objects in parts. These object parts can be uploaded independently, in any order, and in parallel. You can use a multipart upload for objects from 5 MB to 5 TB in size.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UploadingObjects.html

Question

Using the multipart upload API you can upload objects up to 5 GB each.

Answers

A. True
B. False

B
With a single PUT operation, you can only upload objects up to 5 GB in size. Using the multipart upload API, you can upload large objects, up to 5 TB. The multipart upload API is designed to improve the upload experience for larger objects. You can upload objects in parts. These object parts can be uploaded independently, in any order, and in parallel. You can use a multipart upload for objects from 5 MB to 5 TB in size.
https://docs.aws.amazon.com/AmazonS3/latest/dev/UploadingObjects.html

Question

Cross-origin resource sharing (CORS) defines a way for client web applications that are loaded in one domain to interact with resources in a different domain.

Answers

A. True
B. False

A
Cross-origin resource sharing (CORS) defines a way for client web applications that are loaded in one domain to interact with resources in a different domain. With CORS support in Amazon S3, you can build rich client-side web applications with Amazon S3 and selectively allow cross-origin access to your Amazon S3 resources.
https://docs.aws.amazon.com/AmazonS3/latest/dev/cors.html

Question

To configure your bucket to allow cross-origin requests, you create a CORS configuration, an HTML document with rules that identify the origins that you will allow to access your bucket, the operations (HTTP methods) will support for each origin, and other operation-specific information.

Answers

A. True
B. False

B
To configure your bucket to allow cross-origin requests, you create a CORS configuration, an XML document with rules that identify the origins that you will allow to access your bucket, the operations (HTTP methods) will support for each origin, and other operation-specific information.
https://docs.aws.amazon.com/AmazonS3/latest/dev/cors.html#how-do-i-enable-cors

Question

You can optionally share objects with others by creating a pre-signed URL, using your security credentials, to grant time-limited permission to download the objects.

Answers

A. True
B. False

A
A pre-signed URL gives you access to the object identified in the URL, provided that the creator of the pre-signed URL has permissions to access that object. That is, if you receive a pre-signed URL to upload an object, you can upload the object only if the creator of the pre-signed URL has the necessary permissions to upload that object.
https://docs.aws.amazon.com/AmazonS3/latest/dev/PresignedUrlUploadObject.html

Question

Using multipart upload provides the following advantage:

- Improved throughput
- Quick recovery from any network issues
- Pause and resume object uploads
- Begin an upload before you know the final object size

Answers

A. True
B. False

A
https://docs.aws.amazon.com/AmazonS3/latest/dev/uploadobjusingmpu.html

Question

When your object size is over 100 MB, you should use multipart uploads instead of uploading the object in a single operation.

Answers

A. True
B. False

A
In general, when your object size reaches 100 MB, you should consider using multipart uploads instead of uploading the object in a single operation.
https://docs.aws.amazon.com/AmazonS3/latest/dev/uploadobjusingmpu.html

AWS S3 FAQs

This "learning by quizzes" exercise will be based upon the videos and the following reference material:

Reference: AWS S3 FAQs

https://aws.amazon.com/s3/faqs/

Question

AWS S3 prices are the same across all regions.

Answers

A. True
B. False

B
We charge less where our costs are less. Some prices vary across Amazon S3 Regions and are based on the location of your bucket.
https://aws.amazon.com/s3/faqs/#billing

Question

Customers may use mechanisms for controlling access to Amazon S3 resources:

- Identity and Access Management (IAM) policies
- bucket policies
- Access Control Lists (ACLs)
- Query string authentication

Answers

A. True
B. False

A
Customers may use four mechanisms for controlling access to Amazon S3 resources: Identity and Access Management (IAM) policies, bucket policies, Access Control Lists (ACLs) and query string authentication.
https://aws.amazon.com/s3/faqs/#security

Question

Amazon S3 uses a combination of Content-MD5 checksums and cyclic redundancy checks (CRCs) to detect data corruption

Answers

A. True
B. False

A
Amazon S3 uses a combination of Content-MD5 checksums and cyclic redundancy checks (CRCs) to detect data corruption. Amazon S3 performs these checksums on data at rest and repairs any corruption using redundant data. In addition, the service calculates checksums on all network traffic to detect corruption of data packets when storing or retrieving data.
https://aws.amazon.com/s3/faqs/#data-protection

Question

Most Glacier restore jobs initiated via the Amazon S3 APIs or Management Console to complete in less than 1 hour.

Answers

A. True
B. False

B
The access time of your request depends on the retrieval option you choose: Expedited, Standard, or Bulk retrievals. For all but the largest objects (250MB+), data accessed using Expedited retrievals are typically made available within 1 – 5 minutes. Objects retrieved using Standard retrievals typically complete between 3 – 5 hours. Lastly, Bulk retrievals typically complete within 5 – 12 hours. https://aws.amazon.com/s3/faqs/#glacier

Question

There is no additional charge for hosting static websites on Amazon S3.

Answers

- True
- False

A
There is no additional charge for hosting static websites on Amazon S3. The same pricing dimensions of storage, requests, and data transfer apply to your website objects. https://aws.amazon.com/s3/faqs/#hosting