review

Lear

Identity and Access Management (IAM)
V1.03

Course title

BackSpace Academy
AWS Certified Cloud Practitioner

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.

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

Section: What is IAM?

Reference: IAM User Guide

Question

AWS IAM is:

Answers

A. A web service that enables Amazon Web Services (AWS) customers to manage users and user permissions in AWS.
B. A secure database service that enables Amazon Web Services (AWS) customers to manage users and user permissions in AWS.
C. A security service that enables Amazon Web Services (AWS) customers to secure AWS resources.
D. A network security service that enables Amazon Web Services (AWS) customers to secure AWS infrastructure.

A
http://docs.aws.amazon.com/IAM/latest/UserGuide/introduction.html

Question

IAM credentials are used to:

Answers

A. manage your AWS account credentials, such as your password, access keys (access key ID and secret access key).
B. manage multi-factor authentication devices.
C. create security credentials for your users as needed.
D. allow users to access account billing pages.
E. allow applications that run on Amazon EC2 to access to AWS resources

E
Secure access to AWS resources for applications that run on Amazon EC2.
You can use IAM features to securely give applications that run on EC2 instances the credentials that they need in order to access other AWS resources, like S3 buckets and RDS or DynamoDB databases.
http://docs.aws.amazon.com/IAM/latest/UserGuide/introduction.html#intro-features

Question

A _____ is an entity that has a set of permissions, and that another entity assumes to make calls to access your AWS resources

Answers

A. Role
B. Credential
C. Resource
D. Policy

A
An IAM role is similar to a user, in that it is an AWS identity with permission policies that determine what the identity can and cannot do in AWS. However, instead of being uniquely associated with one person, a role is intended to be assumable by anyone who needs it. Also, a role does not have standard long-term credentials (password or access keys) associated with it. Instead, if a user assumes a role, temporary security credentials are created dynamically and provided to the user.
https://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles.html

Question

Which is a valid Amazon Resource name (ARN) for IAM?

Answers

A. aws:iam::123456789012:instance-profile/Webserver
B. arn:aws:iam::123456789012:instance-profile/Webserver
C. 123456789012:aws:iam::instance-profile/Webserver
D. arn:aws:iam:us-east-1:123456789012::instance-profile/Webserver

B
IAM is global service so it will not have a region specified in the ARN.

arn:aws:iam::account:resource
See: http://docs.aws.amazon.com/IAM/latest/UserGuide/reference_identifiers.html

Question

You create an IAM user named David. Your company uses AWS S3 and has a bucket with folders for each employee; the bucket has an IAM resource policy (a bucket policy) that lets users access only their own folders in the bucket. Suppose that the employee named David leaves your company and you delete the corresponding IAM user. But later another employee named David starts and you create a new IAM user named David. If the resource policy on the bucket is set using the IAM unique id, could the policy end up granting the new David access to information in the AWS S3 bucket that was left by the former David.

Answers

A. Yes
B. No

B
No because the Unique IDs for the IAM users are different

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

Section: IAM Best Practices and Use Cases

Reference: IAM User Guide

Question

What is not an IAM best practice?

Answers

A. Use roles for applications that run on AWS EC2 instances
B. Keep a history of activity in your AWS account
C. Store aws credentials securely inside server side application code
D. Grant least privilege

C
Never store AWS credentials inside application code!
https://docs.aws.amazon.com/IAM/latest/UserGuide/best-practices.html

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

Section: The IAM Console and the Sign-in Page

Reference: IAM User Guide

https://docs.aws.amazon.com/IAM/latest/UserGuide/console.html

Question

If you want the URL for your sign-in page to contain your company name (or other friendly identifier) instead of your AWS account ID, you can create an alias for your AWS account ID.

Answers

A. True
B. False

A
See: http://docs.aws.amazon.com/IAM/latest/UserGuide/console_account-alias.html

Question

https://123456789012.signin.aws.amazon.com/console/ is a valid sign in page url?

Answers

A. True
B. False

A
Your sign-in page URL has the following format, by default:
https://Your_AWS_Account_ID.signin.aws.amazon.com/console/

http://docs.aws.amazon.com/IAM/latest/UserGuide/console_account-alias.html

Question

https://beefiecakes.signin.aws.amazon.com/console/ is a valid sign in page url?

Answers

A. True
B. False

A
If you create an AWS account alias for your AWS account ID, your sign-in page URL will look like the following example: https://Your_Alias.signin.aws.amazon.com/console/

http://docs.aws.amazon.com/IAM/latest/UserGuide/console_account-alias.html

Question
Your AWS account can have more than one alias.

Answers

A. True
B. False

B
Your AWS account can have only one alias. If you create a new alias for your AWS account, the new alias overwrites the old alias, and the URL containing the old alias stops working.
https://docs.aws.amazon.com/IAM/latest/UserGuide/console_account-alias.html

Question

IAM Groups let you specify permissions for a collection of users, which can make it easier to manage the permissions for those users.

Answers

A. True
B. False

A
An IAM group is a collection of IAM users. Groups let you specify permissions for multiple users, which can make it easier to manage the permissions for those users. For example, you could have a group called Admins and give that group the types of permissions that administrators typically need. Any user in that group automatically has the permissions that are assigned to the group. If a new user joins your organization and needs administrator privileges, you can assign the appropriate permissions by adding the user to that group. Similarly, if a person changes jobs in your organization, instead of editing that user's permissions, you can remove him or her from the old groups and add him or her to the appropriate new groups.
https://docs.aws.amazon.com/IAM/latest/UserGuide/id_groups.html

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

Section: AWS Security Credentials

Reference: IAM User Guide

https://docs.aws.amazon.com/general/latest/gr/aws-security-credentials.html

Question

Users need their own access keys to make programmatic calls to AWS using the AWS Command Line Interface (AWS CLI), the AWS SDKs, or direct HTTP calls using the APIs for individual services.

Answers

A. True
B. False

A
Users need their own access keys to make programmatic calls to AWS from the AWS Command Line Interface (AWS CLI), Tools for Windows PowerShell, the AWS SDKs, or direct HTTP calls using the APIs for individual AWS services. To fill this need, you can create, modify, view, or rotate access keys (access key IDs and secret access keys) for IAM users.
https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_access-keys.html

Question

You can generate and download a credential report that lists all users in your account and the status of their various credentials, including passwords, access keys, MFA devices, and signing certificates. You can get a credential report using the AWS Management Console, the AWS Command Line Interface (AWS CLI), or the IAM API.

Answers

A. True
B. False

A
https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_getting-report.html

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

Section: IAM Roles

Reference: IAM User Guide

https://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles.html

Question

What ways can you create roles?

Answers

A. in the IAM console
B. programmatically with AWS CLI
C. programmatically with AWS API
D. Tools for Windows PowerShell
E. All of the above

E
To create a role, you can use the AWS Management Console, the AWS CLI, the Tools for Windows PowerShell, or the IAM API.
https://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles_create.html

Question

Non-AWS user access via identity federation between your authorization system and AWS is used when?

Answers

A. You want to add users under the umbrella of your AWS account, and you want to use IAM to create users and manage their permissions.
B. You have non-AWS users in your identity and authorization system, and they need access to your AWS resources.
C. You want to share access to certain AWS resources with users under other AWS accounts.
D. None of the above.

B
Your users might already have identities outside of AWS, such as in your corporate directory. If those users need to work with AWS resources (or work with applications that access those resources), then those users also need AWS security credentials. You can use an IAM role to specify permissions for users whose identity is federated from your organization or a third-party identity provider (IdP).
https://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles_common-scenarios_federated-users.html

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

Reference: IAM FAQs

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

Question

IAM entities support only ASCII characters

Answers

True
False

A
You can only use ASCII characters for IAM entities.
http://docs.aws.amazon.com/IAM/latest/UserGuide/reference_iam-limits.html