

AWS Solutions Architect Exam



Welcome to the thirteenth lesson of the AWS Solutions Architect Associate level course—AWS Solutions Architect Exam.

By the end of the course we will be able to:

- Key information on AWS Solutions Architect exam
- Study tips for the exam
- Important exam topics

By the end of this lesson, you'll be able to:

- Understand the key information on the AWS Solutions Architect exam
- Review the study tips for the exam
- List the exam topics

AWS Solutions Architect Exam

In this section, we'll look at the key details of the AWS Solutions Architect Exam.

AWS Solutions Architect Exam

- AWS Solutions Architect is a computer-based exam with multiple choice questions and answers.
- The duration of the exam is 80 minutes.
- AWS doesn't report the number of questions as it can change. There are approximately 50–55 questions. The exam is available in English, Japanese, Simplified Chinese, Korean, German, Russian, Spanish, and Brazilian Portuguese.

AWS Solutions Architect is a computer-based exam with multiple choice questions and answers.

The duration of the exam is 80 minutes.

AWS doesn't report the number of questions as it can change. There are approximately 50–55 questions. The exam is available in English, Japanese, Simplified Chinese, Korean, German, Russian, Spanish, and Brazilian Portuguese.

AWS Solutions Architect Exam Registration

- Exam registration fee is \$150
- Exam is to be taken at an approved testing center
- Visit <https://www.aws.training/certification> to register, create an account, and register for the exam at the nearby exam center

The exam registration fee is \$150. The price is the same across the world. The exam has to be taken at an approved testing center.

You need to go <https://www.webassessor.com/> to register, create an account, and, then, register for the exam at the nearest exam center.

Existing AWS Solutions Architect Exam Breakdown

The exam is divided into the following four knowledge sections:

Domain	% of Examination
1.0 Designing highly available, cost-efficient, fault-tolerant, scalable systems	60%
2.0 Implementation/Deployment	10%
3.0 Data Security	20%
4.0 Troubleshooting	10%
TOTAL	100%

The exam is divided into four knowledge sections.

The first one is designing highly available, cost-efficient, fault-tolerant, scalable systems. This makes up 60% the exam.

The next section is implementation and deployment, which constitutes 10%.

Data security, the third section, takes up 20% of the exam, and, finally, troubleshooting, the fourth section comprises 10% of the exam.

Review the exam blueprint for more information.

New AWS Solutions Architect Exam Breakdown

The exam is divided into the following five sections:

Domain	% of Examination
1.0 Design Resilient Architectures	34%
2.0 Define Performant Architectures	24%
3.0 Specify Secure Applications and Architectures	26%
4.0 Design Cost-Optimized Architectures	10%
5.0 Define Operationally Excellent Architectures	6%
TOTAL	100%

Exam is broken down into 5 sections and focuses more on the five pillars of the Well-Architected framework.

Again review the exam blueprint for more information.

Domain

1: Design Resilient Architectures

- 1.1 Choose reliable/resilient storage.
- 1.2 Determine how to design decoupling mechanisms using AWS services.
- 1.3 Determine how to design a multi-tier architecture solution.
- 1.4 Determine how to design high availability and/or fault tolerant architectures.

Domain 2: Define Performant Architectures

- 2.1 Choose performant storage and databases.
- 2.2 Apply caching to improve performance.
- 2.3 Design solutions for elasticity and scalability.

Domain 3: Specify Secure Applications and Architectures

- 3.1 Determine how to secure application tiers.

3.2 Determine how to secure data.

3.3 Define the networking infrastructure for a single VPC application.

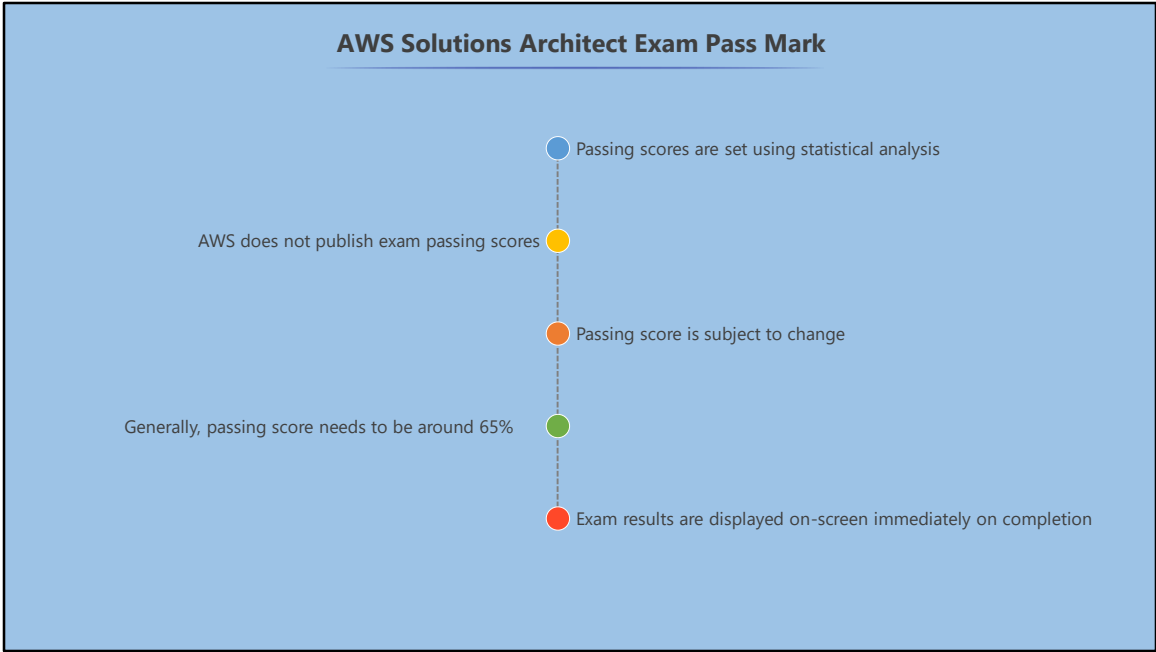
Domain 4: Design Cost-Optimized Architectures

4.1 Determine how to design cost-optimized storage.

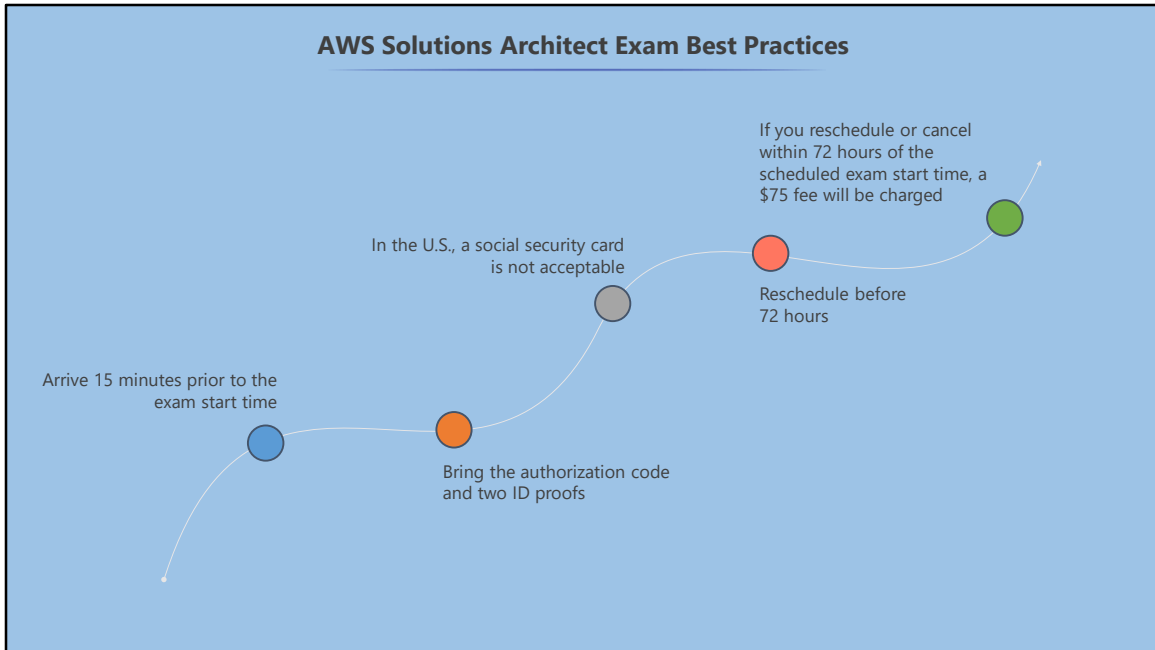
4.2 Determine how to design cost-optimized compute.

Domain 5: Define Operationally-Excellent Architectures

5.1 Choose design features in solutions that enable operational excellence.



AWS Certification passing scores are set using statistical analysis and are subject to change. AWS does not publish exam passing scores as exam questions and passing scores are subject to change without notice. You will need around 65% to pass. You will receive exam results on-screen immediately on completion.



Following are the best practices for the AWS Solutions Architect exam:

- Arrive 15 minutes prior to the exam start time.
- Bring your authorization code and two ID proofs, one of which must be a government-issued photo ID.
- In the U.S., a social security card is not acceptable.
- Reschedule before 72 hours.
- If you reschedule or cancel within 72 hours of the scheduled exam start time, a \$75 fee will be charged.

AWS Solutions Architect Exam Retakes

If you fail the exam, you can retake it, subject to the following conditions:

You must wait 14 days from the day you fail to schedule your next exam

You'll have to pay the full exam fee each time you retake it

You can attempt the exam up to three times in one year from the date of the first attempt

If you fail the exam, you can retake it, subject to the following conditions:

- You must wait 14 days from the day you fail to schedule your next exam.
- You can attempt the exam up to three times within a year from the date of the first attempt.
- You'll have to pay the full exam fee each time you retake it.

AWS Solutions Architect Exam Recertification

You need to recertify every two years, and the exam fee is \$75.



After certification, you'll need to recertify every 2 years; however, this exam fee is \$75.

Knowledge Check

©Simplelearn. All rights reserved.

1 **Which of the following sections of AWS Solutions Architect Associate Level exam carries the most weight?**

Troubleshooting

Designing highly available, cost-efficient, fault tolerant, scalable systems

Data Security

Implementation/Deployment

1 Which of the following sections of AWS Solutions Architect Associate Level exam carries the most weight?

Troubleshooting

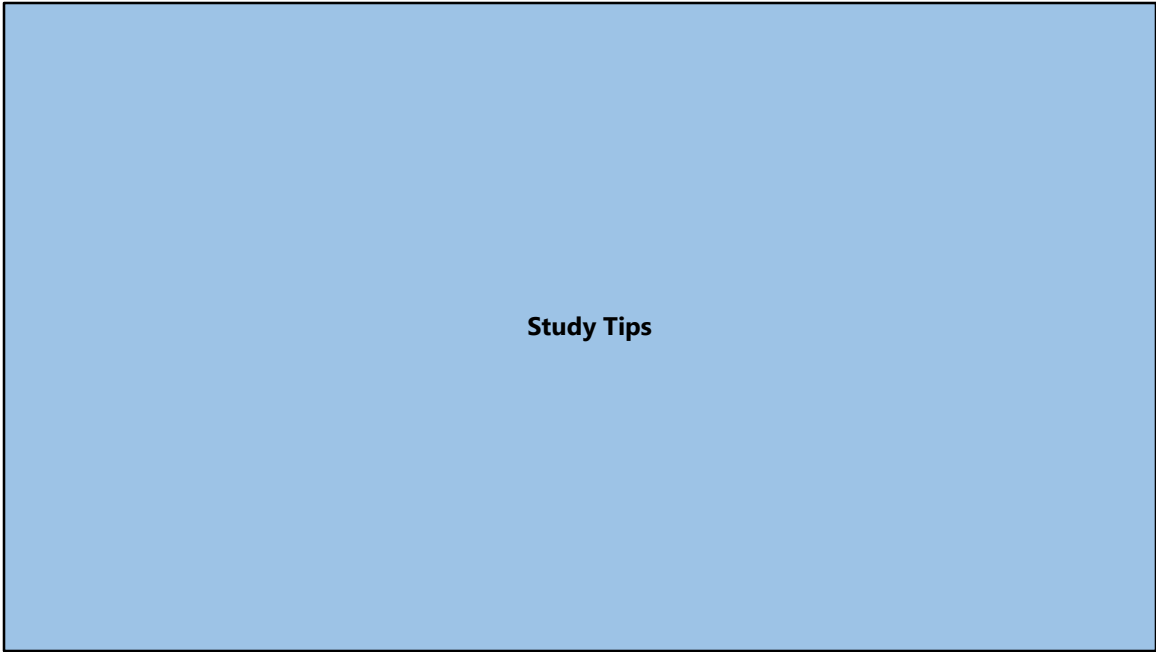
Designing highly available, cost-efficient, fault tolerant, scalable systems

Data Security

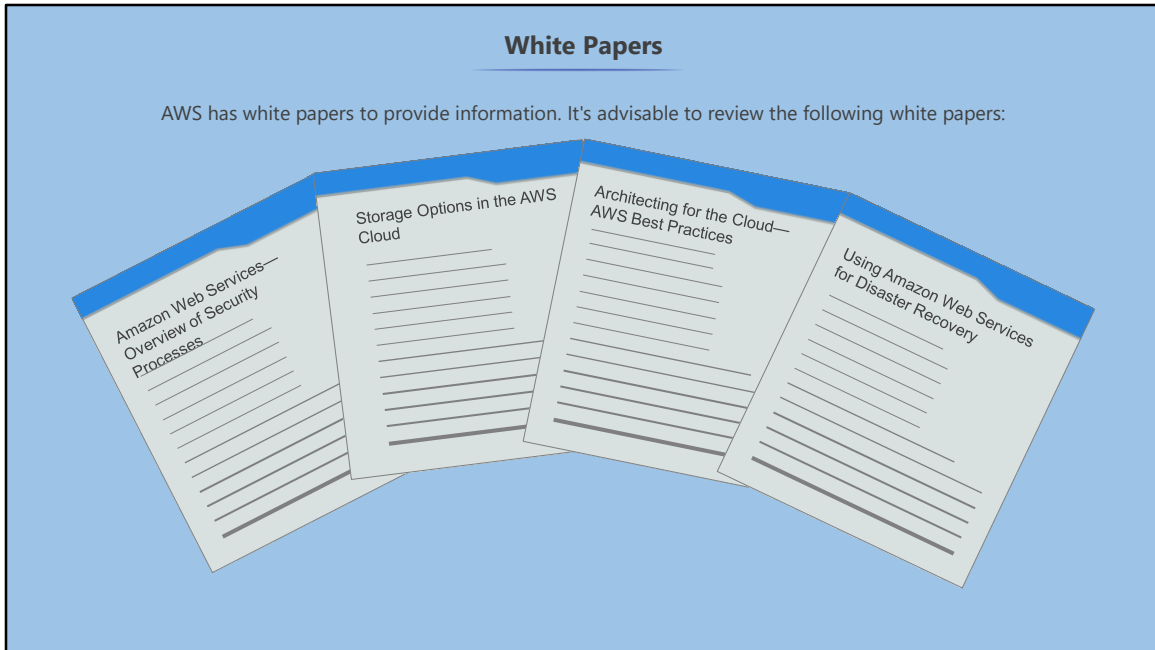
Implementation/Deployment

b

Designing highly available, cost-efficient, fault tolerant, scalable systems is 60% of the exam questions.



In this section, we'll take a look at some study tips for the exam, which are white papers, practice exams, and exam blueprint. We'll also review some popular exam questions.



AWS has white papers to provide information. It's advisable to review the following white papers:

- Amazon Web Services—Overview of Security Processes
- Storage Options in the AWS Cloud
- Architecting for the Cloud—AWS Best Practices
- Using Amazon Web Services for Disaster Recovery

Practice Exams

Take the practice exams provided with this course to understand the format of the AWS questions.


To protect S3 data from both accidental deletion and accidental overwriting, you should:

- Enable S3 versioning on the bucket
- Access S3 data using only signed URLs
- Disable S3 delete using an IAM bucket policy
- Enable S3 Reduced Redundancy Storage
- Enable Multi-Factor Authentication protected access

Take the practice exams provided with this course to understand the format of the AWS questions.

Exam Blueprint

Review the Exam Blueprint to ensure that you are comfortable with the course material. In case of queries, you can revisit the course material for relevant information.

**amazon**
webservices

Training and
Certification

**AWS Certified Solutions Architect
Associate Exam Blueprint**

Introduction

The AWS Certified Solutions Architect – Associate exam is intended for individuals who perform a Solutions Architect role. This exam validates an examinee's ability to:

- Identify and gather requirements in order to define a solution to be built using architecture best practices.
- Provide guidance on architectural best practices to developers and system administrators throughout the lifecycle of the project.

The knowledge and skills required at this level should include all of the following areas and objective components. The knowledge level can be defined as including the majority of the following skills or qualities:

Review the Exam Blueprint to ensure that you are comfortable with the course material. In case of queries, you can revisit the course material for relevant information.



Review Topics

In this section, we will discuss some important topics for the AWS Solutions Architect exam. Knowledge of these topics are essential for passing the exam. The topics are VPC, SWF versus SQS versus SNS, ELB, S3, EBS, EBS versus Ephemeral, AWS CloudFormation, AWS OpsWorks, Elastic Transcoder, and Instance Metadata.

Review Topics: VPC




- Know how to configure and troubleshoot a VPC
- Know concepts such as Subnets, ACLs, Route Tables, and Internet Gateways
- You can't pass this exam without a thorough understanding of a VPC
- Review the lesson and the demo on VPC



Ensure you know how to configure and troubleshoot a VPC and are well-versed in its different concepts including Subnets, ACLs, Route Tables, and Internet Gateways. You can't pass this exam without a thorough understanding of VPC, so it's advisable to review the lesson and the demo on VPC.

Review Topics: SWF versus SQS versus SNS

- Simple Workflow (SWF)
- Simple Queue Services (SQS)
- Simple Notification Services (SNS)




The diagram shows a vertical line on the left with a blue circle at the top and a green circle below it. A horizontal line extends from the green circle to the left side of the white box containing the list of topics. Below the list, the three AWS service icons are displayed side-by-side.

Revisit the lesson on Application Services to know the different use cases between:

- Simple Workflow (SWF)
- Simple Queue Services (SQS)
- Simple Notification Services (SNS)

Review Topics: ELB

- Better Fault Tolerance
- Better Availability
- Better Cost Management



Ensure that you understand how an Elastic Load Balancer (ELB) interacts with auto-scaling groups in a high-availability deployment. This provides better fault tolerance, availability, and cost management.

Review Topics: S3

- Identity and Access Management (IAM) policies
- Bucket Policies
- Access Control
- Query String Authentication



It is essential to know how to properly secure a S3 bucket in different usage scenarios including Identity and Access Management (IAM) policies, Bucket policies, Access Control Lists, and query string authentication.


Bucket policies are created to add or deny permissions across some or all of the objects within an S3 single bucket.

Define access by creating and keeping Access Control Lists up-to-date.

Using query string authentication you can share Amazon S3 objects through URLs that are valid for a specified period of time.

Review Topics: EBS

- Know how to use various EBS volume configurations and snapshots appropriately to optimize I/O performance and data durability
- Know about different storage types and IOP limits
- Know how to use EBS to create RAID 0 volumes



You would need to know how to use various EBS volume configurations and snapshots appropriately to optimize I/O performance and data durability. You would also need to know the different storage types, IOP limits, and how to use EBS to create RAID 0 volumes.

Review Topics: EBS versus Ephemeral

- Know when it would be appropriate to use either EBS-backed or ephemeral instances

Characteristic	Amazon EBS-Backed	Amazon Instance Store-Backed
Boot time	Usually less than 1 minute	Usually less than 5 minutes
Size limit	16 TiB	10 GiB
Root device volume	Amazon EBS volume	Instance store volume
Data persistence	By default, the root volume is deleted when the instance terminates.* Data on any other Amazon EBS volumes persists after instance termination by default. Data on any instance store volumes persists only during the life of the instance.	Data on any instance store volumes persists only during the life of the instance. Data on any Amazon EBS volumes persists after instance termination by default.
Upgrading	The instance type, kernel, RAM disk, and user data can be changed while the instance is stopped.	Instance attributes are fixed for the life of an instance.
Charges	You're charged for instance usage, Amazon EBS volume usage, and storing your AMI as an Amazon EBS snapshot.	You're charged for instance usage and storing your AMI in Amazon S3.
AMI creation/bundling	Uses a single command/call	Requires installation and use of AMI tools
Stopped state	Can be placed in stopped state where instance is not running, but the root volume is persisted in Amazon EBS	Cannot be in stopped state; instances are running or terminated

You would need to know when it would be appropriate to use either EBS-backed or ephemeral/instance store instances.

Remember the following facts:


EBS are persistent, even after EC2 instance stops.

Instance store are ephemeral; they not persistent, and data is lost after instance stop.

EBS can be attached and reattached, while instance store cannot.

Review Topics: AWS CloudFormation


- Have a basic understanding of AWS CloudFormation
- AWS CloudFormation provides developers and systems administrators with an easy way to create and manage a collection of related AWS resources



It is essential to have a basic understanding of AWS CloudFormation.
AWS CloudFormation provides developers and systems administrators with an easy way to create and manage a collection of related AWS resources.

Review Topics: AWS OpsWorks

- Have a basic understanding of AWS OpsWorks
- AWS OpsWorks is a configuration management service that helps you configure and operate applications of all shapes and sizes using Chef



You need to have a basic understanding of AWS OpsWorks.

AWS OpsWorks is a configuration management service that helps you configure and operate applications of all shapes and sizes using Chef.

Review Topics: Elastic Transcoder

- Have a basic understanding of AWS Elastic Transcoder
- This is used to convert media files from the original format into other formats that will play on different devices such as smartphones and tablets



Amazon Elastic Transcoder is media transcoding in the cloud. It is used to convert media files from the original format into other formats that will play on different devices such as smartphones and tablets.

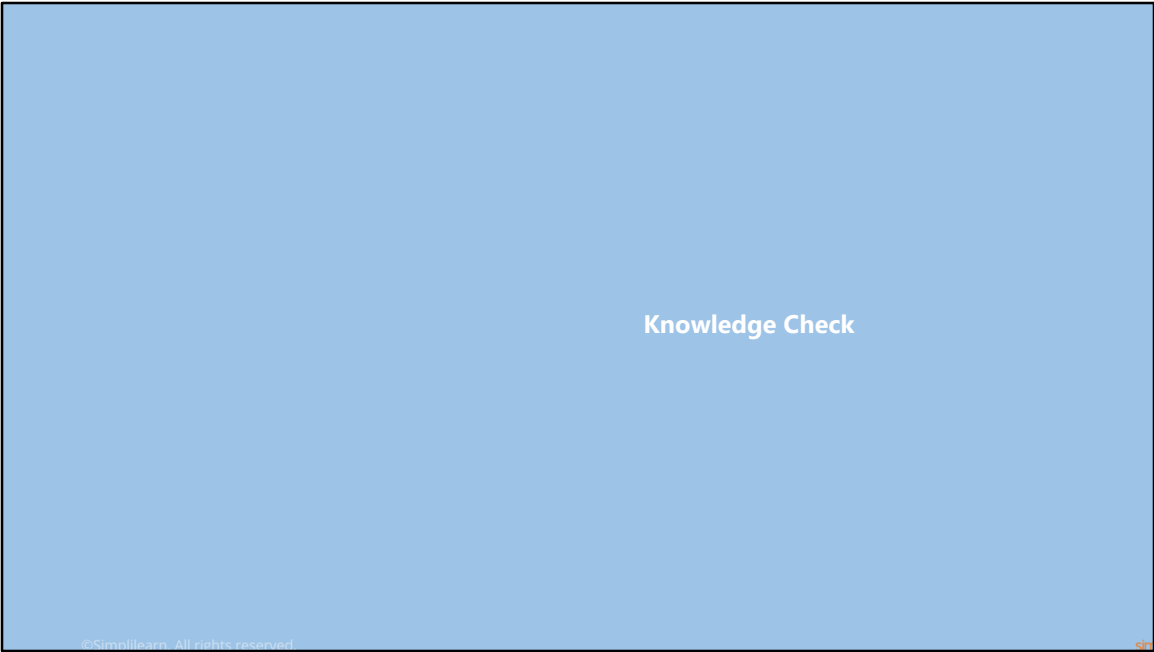
Review Topics: Instance Metadata

- Ensure that you know the URL to obtain instance metadata.
- On your running instances, you can run obtain instance metadata and user data using a specific URL: `http://169.254.169.254/latest/meta-data/`

Ensure that you know the URL to obtain instance metadata.

On your running instances, you can run obtain instance metadata and user data using a specific URL:

`http://169.254.169.254/latest/meta-data/`



1

Where can you find the list of topics for the AWS Solutions Architect Associate Level exam?

AWS White Papers

Practice exams

AWS Exam Blueprint

AWS Web Management Console

1 **Where can you find the list of topics for the AWS Solutions Architect Associate Level exam?**

AWS White Papers

Practice exams

AWS Exam Blueprint

AWS Web Management Console

c

The AWS Exam Blueprint, which can be found on the AWS website, lists the topics for the exam.

- ☐ AWS Solutions Architect is a computer-based exam with multiple choice questions and answers.
- ☐ The duration of the exam is 80 minutes.
- ☐ The exam is divided into four knowledge sections: designing highly available, cost-efficient, fault-tolerant, scalable systems; implementation and deployment; data security; and troubleshooting.
- ☐ Review the Exam Blueprint to ensure that you are comfortable with the course material.

- AWS Solutions Architect is a computer-based exam with multiple choice questions and answers.
- The duration of the exam is 80 minutes.
- The exam is divided into four knowledge sections: designing highly available, cost-efficient, fault-tolerant, scalable systems; implementation and deployment; data security; and troubleshooting.
- Review the Exam Blueprint to ensure that you are comfortable with the course material.