

**LESSON**: Creating an AWS Free Tier Account

https://aws.amazon.com/free/

**LESSON**: Create an Admin Group and User

https://docs.aws.amazon.com/general/latest/gr/aws\_tasks-that-require-root.html

**LESSON**: AWS Global Infrastructure and VPC Overview

AWS links:

https://aws.amazon.com/vpc/

https://aws.amazon.com/about-aws/global-infrastructure/

Digital Cloud Training - Training Notes:

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/networking-and-content-delivery/amazon-vpc/



### **LESSON**: EC2 Security Group Lab

AWS links:

https://aws.amazon.com/ec2/features/ https://aws.amazon.com/ec2/faqs/

Digital Cloud Training - Training Notes:

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/compute/amazon-ec2/

### **LESSON**: Instance metadata

AWS links:

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-metadata.html

### **LESSON**: Instance user data

**AWS links:** 

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-metadata.html https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/user-data.html



## **LESSON**: Status Checks and Monitoring

AWS links:

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/monitoring-system-instance-status-check.html https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/monitoring-instances-status-check.html

### **LESSON: Private Subnets and Bastion Hosts**

AWS links:

https://aws.amazon.com/blogs/security/securely-connect-to-linux-instances-running-in-a-private-amazon-vpc/



## **LESSON**: Proxy Protocol, X-Forwarded-For and Logging

https://docs.aws.amazon.com/elasticloadbalancing/latest/classic/enable-proxy-protocol.html https://docs.aws.amazon.com/elasticloadbalancing/latest/classic/using-elb-listenerconfig-quickref.html

#### **Additional information**

#### AWS links:

https://aws.amazon.com/elasticloadbalancing/features/

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

https://docs.aws.amazon.com/autoscaling/ec2/userguide/what-is-amazon-ec2-auto-scaling.html

https://aws.amazon.com/ec2/autoscaling/faqs/

### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/compute/elastic-load-balancing/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/compute/aws-auto-scaling/



**LESSON**: Create a Custom VPC

https://docs.aws.amazon.com/vpc/latest/userguide/vpc-dns.html

**LESSON**: VPC Flow Logs

https://docs.aws.amazon.com/vpc/latest/userguide/flow-logs-cwl.html



### **Additional information**

#### AWS links:

https://aws.amazon.com/vpc/

https://aws.amazon.com/about-aws/global-infrastructure/

https://docs.aws.amazon.com/vpc/latest/peering/what-is-vpc-peering.html

https://aws.amazon.com/transit-gateway/

https://docs.aws.amazon.com/vpc/latest/userguide/endpoint-service.html

https://docs.aws.amazon.com/vpc/latest/userguide/flow-logs.html

https://aws.amazon.com/directconnect/features/

https://docs.aws.amazon.com/directconnect/latest/UserGuide/direct-connect-gateways-intro.html

### Digital Cloud Training - Training Notes:

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/networking-and-content-delivery/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/networking-and-content-delivery/aws-direct-connect/



### **LESSON: Route 53 Overview**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/networking-and-content-delivery/amazon-route-53/

### **Additional information**

#### AWS links:

https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html https://docs.aws.amazon.com/global-accelerator/latest/dg/what-is-global-accelerator.html

#### **Digital Cloud Training - Training Notes:**



### **LESSON**: Identity-Based Policy Examples

https://docs.aws.amazon.com/AmazonS3/latest/dev/example-policies-s3.html https://docs.aws.amazon.com/AmazonS3/latest/dev/walkthrough1.html

## **LESSON**: Resource-Based Policy Examples

https://docs.aws.amazon.com/AmazonS3/latest/dev/example-bucket-policies.html#example-bucket-policies-use-case-4

### **LESSON: Cross Account Access**

https://aws.amazon.com/premiumsupport/knowledge-center/cross-account-access-s3/

### **LESSON: Access Control Lists**

https://docs.aws.amazon.com/AmazonS3/latest/dev/acl-overview.html https://docs.aws.amazon.com/AmazonS3/latest/dev/acl-overview.html#permissions



## **LESSON**: Choosing Access Control Options

https://docs.aws.amazon.com/AmazonS3/latest/dev/access-policy-alternatives-guidelines.html#when-to-use-acl

## **LESSON**: Multipart Upload

https://docs.aws.amazon.com/AmazonS3/latest/dev/mpuoverview.html https://docs.aws.amazon.com/AmazonS3/latest/dev/uploadobjusingmpu.html https://aws.amazon.com/premiumsupport/knowledge-center/s3-multipart-upload-cli/

## **LESSON**: Query String Authentication

https://docs.aws.amazon.com/AmazonS3/latest/API/sigv4-query-string-auth.html

### **LESSON**: Transfer Acceleration

https://docs.aws.amazon.com/AmazonS3/latest/dev/transfer-acceleration.html https://docs.aws.amazon.com/AmazonS3/latest/user-guide/enable-transfer-acceleration.html



### **LESSON: Static Websites**

https://dctstaticwebsite.s3-website-ap-southeast-2.amazonaws.com http://dctstaticwebsite.s3-website-ap-southeast-2.amazonaws.com https://docs.aws.amazon.com/AmazonS3/latest/dev/website-hosting-custom-domain-walkthrough.html

## **LESSON: Versioning and MFA Delete**

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

## **LESSON**: Cross Region Replication

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

## **LESSON**: Lifecycle Management

https://docs.aws.amazon.com/AmazonS3/latest/dev/object-lifecycle-mgmt.html
https://docs.aws.amazon.com/AmazonS3/latest/dev/lifecycle-transition-general-considerations.html
https://docs.aws.amazon.com/AmazonS3/latest/dev/lifecycle-expire-general-considerations.html



**LESSON**: S3 Encryption

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

**LESSON**: Object Lock

https://docs.aws.amazon.com/AmazonS3/latest/dev/object-lock.html https://docs.aws.amazon.com/AmazonS3/latest/user-guide/object-lock.html



### **Additional information**

Digital Cloud Training - Training Notes:

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/storage/amazon-s3/ https://digitalcloud.training/certification-training/aws-solutions-architect-associate/networking-and-content-delivery/amazon-cloudfront/



## **LESSON**: Working with Snapshots

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-deleting-snapshot.html

**LESSON**: EBS Performance

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSOptimized.html#ebs-optimization-support

## **LESSON**: Create a User Home Directory

https://docs.aws.amazon.com/efs/latest/ug/accessing-fs-nfs-permissions-per-user-subdirs.html

#### **Additional information**

#### **AWS links:**

https://aws.amazon.com/ebs/features/ https://aws.amazon.com/ebs/faqs/ https://aws.amazon.com/efs/features/ https://aws.amazon.com/efs/faq/

#### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/compute/amazon-ebs/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/storage/amazon-efs/



## **LESSON**: Setting up for the Labs

https://docs.aws.amazon.com/AmazonECS/latest/developerguide/ECS\_CLI\_installation.html

## **LESSON**: Upload Image to ECR and create task on Fargate

https://docs.aws.amazon.com/AmazonECS/latest/userguide/docker-basics.html#install\_docker

### **Additional information**

#### AWS links:

https://aws.amazon.com/ecs/features/

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

https://aws.amazon.com/eks/features/

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

### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/compute/amazon-ecs/



**LESSON: Lambda Overview** 

https://docs.aws.amazon.com/lambda/latest/dg/getting-started-create-function.html https://docs.aws.amazon.com/lambda/latest/dg/intro-invocation-modes.html#non-streaming-event-source-mapping

**LESSON**: Preparing for the Labs

https://www.npmjs.com/get-npm

**LESSON**: Create function to resize images in S3

https://docs.aws.amazon.com/lambda/latest/dg/with-s3-example.html

**LESSON**: Create function to log event when records updated in DynamoDB

https://docs.aws.amazon.com/lambda/latest/dg/with-ddb-example.html

**LESSON**: Build a Hello World API with Lambda Proxy Integration

https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-create-api-as-simple-proxy-for-lambda.html



## **LESSON**: Create a Simple Microservice using Lambda and API Gateway

https://docs.aws.amazon.com/lambda/latest/dg/with-on-demand-https-example-configure-event-source\_1.html

### **Additional information**

#### **AWS links:**

https://aws.amazon.com/lambda/features/

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

https://aws.amazon.com/api-gateway/features/

https://aws.amazon.com/api-gateway/faqs/

#### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/compute/aws-lambda/

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/networking-and-content-delivery/amazon-api-gateway/



**LESSON**: Databases Overview

https://aws.amazon.com/relational-database/ https://aws.amazon.com/nosql/



**LESSON: Amazon Aurora Overview** 

https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/Aurora.Replication.html https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/Aurora.Managing.Backups.html#Aurora.Managing.FaultTolerance

**LESSON:** Create DynamoDB DAX Cluster and Test Cache

https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DAX.client.run-application.html

**LESSON**: ElastiCache Overview

https://aws.amazon.com/elasticache/redis-vs-memcached/

**LESSON: RedShift Overview and Create Cluster** 

https://docs.aws.amazon.com/redshift/latest/mgmt/authorizing-redshift-service.html



### **Additional information**

#### AWS links:

https://aws.amazon.com/rds/features/

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

https://aws.amazon.com/dynamodb/features/

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

https://aws.amazon.com/elasticache/redis/

https://aws.amazon.com/elasticache/memcached/

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

https://aws.amazon.com/redshift/features/

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

#### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/database/amazon-rds/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/database/amazon-dynamodb/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/database/amazon-elasticache/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/database/amazon-redshift/



### **LESSON: Consume events in Lambda from a Kinesis Stream**

https://docs.aws.amazon.com/lambda/latest/dg/with-kinesis-example.html

### **Additional information**

#### **AWS links:**

https://aws.amazon.com/emr/features/

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

https://aws.amazon.com/kinesis/

https://aws.amazon.com/kinesis/data-streams/faqs/

https://aws.amazon.com/kinesis/data-firehose/faqs/

https://aws.amazon.com/kinesis/data-analytics/faqs/

#### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/analytics/amazon-emr/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/analytics/amazon-kinesis/



**LESSON**: AWS Step Functions

https://docs.aws.amazon.com/step-functions/latest/dg/sample-project-transfer-data-sqs.html

**LESSON**: Simple Queue Service

https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-configure-lambda-function-trigger.html

https://docs.aws.amazon.com/lambda/latest/dg/getting-started-create-function.html

https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-subscribe-queue-sns-topic.html



#### **Additional information**

#### AWS links:

https://aws.amazon.com/step-functions/features/

https://aws.amazon.com/step-functions/faqs/

https://aws.amazon.com/sns/features/

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

https://aws.amazon.com/sqs/features/

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

https://aws.amazon.com/amazon-mq/features/

https://aws.amazon.com/amazon-mq/faqs/

https://aws.amazon.com/swf/

### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/application-integration/aws-step-functions/

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/application-integration/amazon-sns/

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/application-integration/amazon-sqs/

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/application-integration/amazon-swf/

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/application-integration/amazon-mq/



### **LESSON: Create HA WordPress with Elastic Beanstalk and RDS**

https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/php-hawordpress-tutorial.html

### **Additional information**

#### AWS links:

https://aws.amazon.com/cloudformation/features/

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

https://aws.amazon.com/elasticbeanstalk/details/

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

#### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/management-tools/aws-cloudformation/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/compute/aws-elastic-beanstalk/



### **Additional information**

#### AWS links:

https://aws.amazon.com/cloudwatch/features/

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

https://aws.amazon.com/cloudtrail/features/

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

### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/management-tools/amazon-cloudwatch/https://digitalcloud.training/certification-training/aws-solutions-architect-associate/management-tools/aws-cloudtrail/



**LESSON: CloudHSM** 

https://docs.aws.amazon.com/cloudhsm/latest/userguide/getting-started.html

**LESSON**: AWS WAF and Shield

https://aws.amazon.com/answers/networking/aws-ddos-attack-mitigation/



### **Additional information**

#### AWS links:

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

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

https://aws.amazon.com/cognito/details/

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

https://aws.amazon.com/kms/features/

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

https://aws.amazon.com/cloudhsm/features/

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

https://aws.amazon.com/waf/features/

https://aws.amazon.com/waf/fags/

https://aws.amazon.com/shield/features/

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

#### **Digital Cloud Training - Training Notes:**

https://digitalcloud.training/certification-training/aws-solutions-architect-associate/security-identity-compliance/aws-iam/ https://digitalcloud.training/certification-training/aws-solutions-architect-associate/security-identity-compliance/aws-kms/ https://digitalcloud.training/certification-training/aws-solutions-architect-associate/security-identity-compliance/aws-cloudhsm/