

The Challenge Labs Amazon Web Services (AWS) Library is A Challenge Labs 180-day subscription that includes access to close to 50 Challenge Labs related to AWS cloud-based products.

Challenge Labs are designed to extend and expand your learning experience with hands-on, scenario-based exercises. Challenge labs are goal oriented, short-duration, scenario-based hands-on exercises and an excellent way to provide additional skills development and assessment.

As new Challenge Labs are released, and you will gain automatic access to them for the duration of your subscription.

### Audience

- IT Professionals who are looking to keep up to date on features and functionality for a particular technology
- IT Professionals who are responsible for supporting multiple technologies
- IT Professional/Developers who are preparing for vendor certification exams

### Challenge Labs Topics

#### AWS: Cloud Practitioner

AWS CCP-000	Getting Started with AWS Certified Cloud Practitioner [Getting Started]
AWS CCP-001	Implement Elastic Load Balancing Between EC2 Instances [Guided]
AWS CCP-002	Create EC2 Instances by Using Auto Scaling [Guided]
AWS CCP-003	Can You Configure an Auto Scaling Group and a Load Balancer? [Advanced]
AWS CCP-004	Implement the Simple Storage Service [Guided]
AWS CCP-005	Implement Identity and Access Management [Guided]
AWS CCP-006	Can You Secure Access to an S3 Bucket? [Advanced]
AWS CCP-007	Implement a Network Access Control List [Guided]
AWS CCP-008	Configure a Security Group [Guided]
AWS CCP-009	Can You Implement Secure Access to a Service? [Advanced]
AWS CCP-010	Can You Implement a Highly Available Website? [Expert]

#### AWS: Elastic Cloud Compute (EC2)

AWS EC2-000	Getting Started with AWS Elastic Compute Cloud [Getting Started]
AWS EC2-001	Create and Configure an EC2 Instance with User Data [Guided]
AWS EC2-002	Create an Instance by Using a Custom AMI [Guided]
AWS EC2-003	Can You Create a Custom AMI Based on a New EC2 Instance? [Advanced]
AWS EC2-004	Create an EC2 Instance by Using a Launch Template [Guided]
AWS EC2-005	Create an Auto Scaling Group [Guided]

- AWS EC2-006 Can You Create a Resilient System by Using a Launch Template and an Auto Scaling Group? [Advanced]
- AWS EC2-007 Configure an Elastic Load Balancer [Guided]
- AWS EC2-008 Install a Web Server by Using AWS System Manager Run Command [Guided]
- AWS EC2-009 Can You Automate the Build of EC2 Instances Behind an Elastic Load Balancer? [Advanced]
- AWS EC2-010 Can You Configure a Resilient EC2 Server Farm? [Expert]

### **AWS: Simple Storage Services (S3)**

- AWS S3-000 Getting Started with Amazon Simple Storage Service (S3) [Getting Started]
- AWS S3-001 Create Buckets, Versioning, and Permissions with Amazon S3 [Guided]
- AWS S3-002 Host a Static Web Site with Amazon S3 [Guided]
- AWS S3-003 Can You Serve a Simple, Static Website with Amazon S3? [Advanced]
- AWS S3-004 Configure File Encryption and Access Logging [Guided]
- AWS S3-005 Configure Amazon S3 Event Logging and Handling [Guided]
- AWS S3-006 Can You Use Access Logging for Bucket Management and Monitoring? [Advanced]
- AWS S3-007 Configuring Cross Region Replication for an S3 Bucket [Guided]
- AWS S3-008 Use a Lifecycle Rule in an S3 Bucket [Guided]
- AWS S3-009 Can You Enable Cross-Region Replication and Archiving? [Advanced]
- AWS S3-010 Can You Create a Website with Cross Region Replication and Logging? [Expert]

### **AWS: Technical Essentials**

- AWS TE.1-001 Build a Network by Using the VPC Wizard [Guided]
- AWS TE.1-002 Build VPC Resources Manually [Guided]
- AWS TE.1-003 Can You Build a Network Foundation in AWS? [Advanced]
- AWS TE.1-004 Configure an S3 Bucket and Website [Guided]
- AWS TE.1-005 Configure Data Transfer and Storage Options for an S3 Bucket [Guided]
- AWS TE.1-006 Can You Build a Website by Using an Amazon S3 Bucket? [Advanced]
- AWS TE.1-007 Connect to an EC2 Instance by Using RDP [Guided]
- AWS TE.1-008 Configure Storage by Using EBS [Guided]
- AWS TE.1-009 Create a Custom AMI from an Existing EC2 Instance [Guided]
- AWS TE.1-010 Create a Launch Template [Guided]
- AWS TE.1-011 Can You Implement a Repeatable Compute Layer with EC2? [Advanced]
- AWS TE.1-012 Can You Deploy an End-to-End Solution in AWS? [Expert]
- AWS Net-001 Design a VPC and Associated Subnets in AWS [Guided]
- AWS Net-002 Establish Internet and NAT Gateways in AWS [Guided]
- AWS Net-003 Can You Design a Cloud Network in AWS? [Advanced]

### **AWS: Systems Operations**

- AWS SOA.1-001 Manage AWS Logs by Using CloudTrail [Guided]
- AWS SOA.1-002 Collect Metrics and Logs by Using the CloudWatch Agent [Guided]
- AWS SOA.1-003 Create a CloudWatch Alarm [Guided]
- AWS SOA.1-004 Create Metric Filters [Guided]
- AWS SOA.1-005 Create a CloudWatch Dashboard [Guided]
- AWS SOA.1-006 Configure an SNS Notification for a CloudWatch Alarm [Guided]
- WS SOA.1-007 Can You Implement Metrics, Alarms, and Filters? [Advanced]
- AWS SOA.1-008 Troubleshoot an EC2 Instance by Using a CloudWatch Alarm [Guided]
- AWS SOA.1-009 Configure an Amazon EventBridge Rule That Triggers an Action [Guided]
- AWS SOA.1-010 Perform Automatic Remediation by Using an AWS Config Rule [Guided]
- AWS SOA.1-011 Can You Remediate Issues by Using Monitoring and Metrics? [Advanced]
- AWS SOA.1-012 Can You Configure a Resilient Website That Uses Monitoring and Automatic Remediation? [Expert]
- AWS SOA.2-001 Configure AWS Auto Scaling [Guided]
- AWS SOA.2-002 Implement Caching in AWS by Using DAX [Guided]
- AWS SOA.2-003 Implement Scaling for an Amazon RDS Instance [Guided]
- AWS SOA.2-004 Can You Configure Scalability in AWS? [Advanced]
- AWS SOA.2-005 Implement Health Checks by Using ELB and Route 53 [GUIDED]
- AWS SOA.2-006 Implement a Fault Tolerant File Service by Using EFS [GUIDED]
- AWS SOA.2-007 Implement a Route 53 Routing Policy [Guided]
- AWS SOA.2-009 Automate Snapshots by Using DLM [Guided]
- AWS SOA.2-010 Perform Disaster Recovery with AWS Backup [Guided]
- AWS SOA.2-011 Implement a Multi-Region Lifecycle Management Strategy for S3 [Guided]
- AWS SOA.3-002 Use EC2 Image Builder to automate AMI creation [Guided]
- AWS SOA.3-004 Provision and Maintain AWS Resources by Using CloudFormation [Guided]
- AWS SOA.3-005 Use Elastic Load Balancing to Perform Blue/Green and Canary Application Updates [Guided]
- AWS SOA.3-007 Execute Commands and Automation Documents by Using the AWS Systems Manager Service [Guided]
- AWS SOA.3-008 Configure Maintenance Windows by Using AWS Systems Manager [Guided]
- AWS SOA.3-009 Configure AWS Systems Manager Patch Manager [Guided]
- AWS SOA.3-010 Configure an Amazon EventBridge Rule That Sends an Automated Email by Using the Simple Notification Service [Guided]
- AWS SOA.3-011 Can You Automate Processes by Using AWS Services? [Advanced]
- AWS SOA.3-012 Evaluate AWS Config Rules [Guided]