



AWS DevOps Certification Accelerator

SysOps Administrator - Associate

[Register here](#)

Overview

The AWS DevOps Certification Accelerator consists of online video courses, instructor-led office hours, hands-on learning activities, and personal check-ins from the Talent Learning Programs Team. The Accelerated Learning Path will cover S3, VPC Networking, IAM, Terraform, the SysOps Administrator - Associate certification exam, and other important SysOps concepts. Upon completing this learning path, you will be ready to take the exam, and will be ready to take on a new job focusing on AWS DevOps.

You will need to create an account on AWS Partner Network with your Toptal email to take the courses for this program. There is no charge for this, and it only takes a few seconds. To register, please use this link: <https://partnercentral.awspartner.com/APNSelfRegister>

Estimated Time

2 Months at 2-8 hours per week

**Note: you may skip sections that do not apply to you to shorten the time duration.*

Prerequisites

- A basic level of experience in any programming language
- A basic level of understanding of networking
- A basic level of understanding of Linux or Windows

Curriculum

1. Learning Pathway on AWS

The main part of the Accelerator program is the thoughtfully designed AWS-based learning pathway with handpicked courses from AWS experts. This pathway will prepare you to take the certification exam and find a new job with this skillset.

2. Office Hours

Office hours are instructor-led guided sessions and are held once every week. They are facilitated by industry experts who have real time experience in AWS.

[\[Click here\]](#) for office hours schedule.

3. Hands-On Learning Activities

In addition to the AWS courses and Office Hours, you will be able to participate in hands-on learning activities sponsored by AWS experts. These activities will be scheduled and shared after the program begins.

4. Certification Exam

At the end of the Accelerator program, you will take the AWS Certified Developer - Associate exam. Toptal will reimburse you for the exam fee once you submit proof that you have passed.

Additional Resources:

1. Whitepaper - https://docs.aws.amazon.com/prescriptive-guidance/latest/backup-recovery/backup-recovery.pdf?trk=2e1f54a0-6a7b-4962-a184-ce751658174d&sc_channel=el
2. Video repository - <https://awsvideocatalog.com/compute/>
3. Deep dive into EC2 - <https://www.youtube.com/watch?v=mZy6E2l5Rek>

Foundational Course (Optional)

Estimated Time: 4 hours

Lesson	Time	Topics Covered	Link
AWS Technical Essentials	4 hours	<p>In this course, you will learn to:</p> <ul style="list-style-type: none">• Describe terminology and concepts related to AWS services• Navigate the AWS Management Console• Articulate key concepts of AWS security measures and AWS Identity and Access Management (IAM)• Distinguish among several AWS compute services, including Amazon Elastic Compute Cloud (Amazon EC2), AWS Lambda, Amazon Elastic Container Service (Amazon ECS), and Amazon Elastic Kubernetes Service (Amazon EKS)• Understand AWS database and storage offerings, including Amazon Relational Database Service (Amazon RDS), Amazon DynamoDB, and Amazon Simple Storage Service (Amazon S3)• Explore AWS networking services• Access and configure Amazon CloudWatch monitoring features	Click here

Week 1: AWS Fundamentals

Estimated Time: 2 hours 15 minutes

Lesson	Time	Topics Covered	Link
Week 1 Office Hours: Introduction to Office Hours by Toptal			
Introduction to AWS Billing and Cost Management	10 minutes	A basic overview of the AWS Billing and Cost Management service and dashboard. Different AWS cost tools, such as Cost Explorer and Budgets, are covered in this introduction. A discussion on the AWS Free Tier is also included in this course.	Click here

AWS Shared Responsibility Model	5 minutes	This course is an introduction to the AWS Shared Responsibility Model. AWS and the customer share responsibility for security and compliance, and this course helps clarify the division of those responsibilities. From the physical components of your stack all the way up to user data, we define what you are responsible for in terms of securing your application, and what AWS is responsible for.	Click here
How AWS Managed Services (AMS) Works Within Cloud Operating Models	15 minutes	In this course, you will learn how to: <ul style="list-style-type: none"> • Describe features of common operating models • Explain why leveraging multiple cloud operating models accelerates application modernization • Identify how AWS and AMS will work within existing cloud operating models to accelerate cloud adoption 	Click here
Introduction to AWS Managed Services	20 minutes	In this course, you will learn how to: <ul style="list-style-type: none"> • Explain the services provided by AMS and their value to customers • Identify the components of AMS • Understand both the business and technical challenges that AMS can solve 	Click here
AWS Identity and Access Management	15 minutes	In this course, you will learn to: <ul style="list-style-type: none"> • Define IAM users and groups • Define IAM policy structure, evaluation, and logic • Describe IAM roles, trust and permission policy • Describe Amazon Resource Names (ARNs) • Identify resource- and identity-based policies • Identify resource-level permissions 	Click here
Introduction to Amazon Virtual Private Cloud (VPC)	10 minutes	A basic overview of how Amazon Virtual Private Cloud (VPC) can be used to secure your AWS resources and provide full control over your network configuration. A sample Amazon VPC configuration will be covered in detail, along with its features and components.	Click here

Subnets, Gateways, and Route Tables Explained	20 minutes	In this course, we will use sample three-tiered architecture to better understand how certain network components can help you effectively network your application. We review the differences between public and private subnets and discuss how gateways and route tables can be used for network routing.	Click here
Amazon Route 53 – Basics (Network Administrator focus)	20 minutes	In this course, you will learn how to: <ul style="list-style-type: none"> • Define basic terminology and benefits of Amazon Route 53 • Describe key components of Amazon Route 53 • Explain basic Amazon Route 53 concepts such as public and private hosted zones, resource records, and routing policies 	Click here
Introduction to AWS Auto Scaling	10 minutes	AWS Auto Scaling enables you to centrally configure automatic scaling for the multiple scalable AWS resources used by your application from a single interface. In this course, we introduce you to this service and some of its benefits and main functionality. We also provide a demonstration of the service.	Click here
Introduction to AWS Command Line Interface (CLI)	10 minutes	AWS Command Line Interface (CLI) is one of several ways to access your AWS resources. In this course, we cover a brief overview and use cases regarding the AWS CLI. At the end of the course, a demonstration is performed to show how the AWS CLI can be used in day-to-day operations.	Click here

Week 2: Build a Foundation for Cloud Operations

Estimated Time: 4 hours 46 minutes

Lesson	Time	Topics Covered	Link
Week 2 Office Hours: Hosting a website with S3 S3 Replication			
Introduction to AWS Management Console	20 minutes	This introductory course will provide you with an overview of the AWS Management Console by walking you through the navigation of the console, its key features and how to get started using it. The course will also walk you through a demonstration of the AWS Management Console to give you a better understanding of how to log into your AWS account, switch regions, view grouped resources and edit tags and reviews.	Click here
Deep Dive into Amazon Simple Storage Service (Amazon S3) - Section 1	60 minutes	Getting Started on Amazon S3 <ul style="list-style-type: none">• Storage fundamentals• Amazon S3 fundamentals• Interfacing with Amazon S3• Amazon S3 data management• Data management and security	Click here
Deep Dive into Amazon Simple Storage Service (Amazon S3) - Section 3	1 hour 30 minutes	Securing and Protecting Amazon S3 <ul style="list-style-type: none">• Protecting data from unintended public access• Controlling access using access policies• Access policy evaluation logic• Managing access at scale using access points• Sharing objects using presigned URLs• Protecting sensitive data using encryption• Simplify access with Amazon VPC endpoints• Securing monitoring and dashboards	Click here
Udemy - Section 11: Storage and Data Management for SysOps	1 hour 56 minutes	<i>Please view Section 11 in this Udemy course to reinforce what you've already learned about Storage and Data Management.</i>	Click here

Week 3: Build a Foundation for Cloud Operations - Continued

Estimated Time: 5 hours 32 minutes

Lesson	Time	Topics Covered	Link
Week 3 Office Hours: VPC Networking and EC2 connectivity Operational RDS tips and tricks			
Deep Dive into Amazon Simple Storage Service (Amazon S3) - Section 5	60 minutes	Auditing Amazon S3 Security <ul style="list-style-type: none">Monitoring API callsAuditing configurationsMonitoring access policiesFollow best practices	Click here
Deep Dive into Amazon Simple Storage Service (Amazon S3) - Section 6	1 hour 30 minutes	Managing Amazon S3 <ul style="list-style-type: none">Keeping track of Amazon S3 activity with object-level and server access loggingUsing tagging in Amazon S3Auditing your storage with Amazon S3 inventoryWorking with Amazon S3 event notificationsExecuting complex operations on your S3 objects with batch operationsMonitoring Amazon S3 storage and performance using CloudWatch	Click here
<i>Other Sections in "Deep Dive into Amazon Simple Storage Service (Amazon S3)" are optional</i>			
Introduction to Amazon Elastic Compute Cloud (EC2)	10 minutes	This is an introduction to Amazon Elastic Compute Cloud or Amazon EC2, a web service that provides secure, resizable compute capacity in the cloud. In this course, we provide an overview of the service and demonstrate how to build and configure an Amazon EC2 instance.	Click here
Troubleshooting: Amazon Elastic Compute Cloud (Amazon EC2) for Linux	30 minutes	In this course, you will learn to: <ul style="list-style-type: none">Recognize and resolve issues with Amazon EC2 Linux instances.Employ best-practice troubleshooting methodologies when investigating issues with Amazon EC2 Linux	Click here

		<p>instances.</p> <ul style="list-style-type: none"> • Locate and apply available AWS Support documentation for issues with Amazon EC2 Linux instances. • Recognize and record relevant information to escalate Amazon EC2 Linux instance issues to the AWS Support team. 	
Amazon RDS Service Introduction	5 minutes	This course introduces you to Amazon Relational Database Service (Amazon RDS), the service that provides a relational database for AWS customers. This course introduces you to the service and its core features and capabilities.	Click here
Amazon RDS Service Primer	20 minutes	This course introduces you to Amazon Relational Database Service (Amazon RDS) and its core features and capabilities. The course describes how this service integrates with other AWS services, introduces important terminology and technology concepts, and includes a demonstration of the service.	Click here
Udemy - Section 3: EC2 for SysOps	1 hour 57 minutes	<i>Please view Section 3 in this Udemy course to reinforce what you've already learned about EC2.</i>	Click here

Week 4: Enterprise Governance and Control & Monitoring and Observability

Estimated Time: 2 hours 35 minutes

Lesson	Time	Topics Covered	Link
<p>Week 4 Office Hours: AWS Resource Access Manager Cross Account with IAM</p>			
Introduction to AWS Organizations	10 minutes	This course introduces you to AWS Organizations, the service that offers policy-based management for multiple AWS accounts. We discuss key features and terminology, review how to access and use the service, and provide a demonstration.	Click here

AWS Managed Services Console Walkthrough	15 minutes	<p>In this course, you will learn how to:</p> <ul style="list-style-type: none"> • Find information on the AMS console dashboard • Submit a request for change (RFC) and read the current status of existing RFCs • Send and receive service requests and information • Send an incident report and read the current status of any existing incidents 	Click here
AWS Managed Services (AMS): Provisioning	30 minutes	<p>In this course, you will learn how to:</p> <ul style="list-style-type: none"> • Define key AMS provisioning terms • Describe three different provisioning methods • Identify the circumstance in which you would use a provisioning method • Deploy AWS resources using each provisioning method 	Click here
Introduction to Amazon CloudWatch	10 minutes	<p>Amazon CloudWatch is a monitoring service for AWS cloud resources and the applications you run on AWS. In this introductory course on Amazon CloudWatch, you will learn about the capabilities and key terms of the service. Amazon CloudWatch alarms, events and logs will be covered, as well as the Amazon CloudWatch dashboard.</p>	Click here
Introduction to Amazon CloudWatch Logs	10 minutes	<p>This is an introductory course on Amazon CloudWatch Logs – a service that helps you monitor, store, and access your log files from Amazon Elastic Compute Cloud (Amazon EC2) instances, AWS CloudTrail, Amazon Route 53, and other sources. We give an overview of the service, discuss common use cases, and demonstrate the service.</p>	Click here
Introduction to Amazon CloudWatch Logs Insights	10 minutes	<p>Amazon CloudWatch Logs Insights provides fully managed, highly scalable log analytics capabilities in Amazon CloudWatch. You can use it to search, analyze, and visualize your logs, to understand and improve your applications, and to resolve operational issues more effectively. The service is fully integrated with Amazon CloudWatch, so you can manage and analyze your logs in a single place. This course introduces you to the service's features and query syntax, and includes a demo using common querying scenarios.</p>	Click here

*Optional Amazon EventBridge Overview and Integration with SaaS Applications	30 minutes	In this course, you will learn how to: <ul style="list-style-type: none"> • Set up a CloudWatch Events rule, and create an EventBridge bus • Use the EventBridge bus with a partner SaaS application • Learn about scenarios in which EventBridge can integrate with other AWS services 	Click here
Introduction to AWS Trusted Advisor	10 minutes	This course is an introduction to AWS Trusted Advisor, the AWS service that provides real-time guidance to help you provision your resources following AWS best practices. In this course, we will walk through a case study that highlights the usage of the service, and we will give you a demonstration of the service.	Click here

Week 5: Centralized Operations Management

Estimated Time: 4 hours 40 minutes

Lesson	Time	Topics Covered	Link
Week 5 Office Hours: AWS Secrets Manager Data Lifecycle Management for EBS			
AWS Systems Manager	190 minutes	In this course, you will learn how to: <ul style="list-style-type: none"> • Understand Systems Manager capabilities and related use cases • Identify best practices for Systems Manager • Define how third-party tools and services integrate with Systems Manager • Differentiate between various Systems Manager capabilities 	Click here
CloudEndure Disaster Recovery Technical Training	90 minutes	In this course, you will learn to: <ul style="list-style-type: none"> • Explain the benefits of CloudEndure Disaster Recovery into AWS • Recognize CloudEndure Disaster Recovery lifecycle phases and key concepts • Configure CloudEndure Disaster Recovery to replicate workloads to AWS and recover on AWS in the event of a disaster 	Click here

		<ul style="list-style-type: none"> • Troubleshoot issues in order to achieve successful implementation throughout the disaster recovery lifecycle • Adopt best practices for successful setup, operation, and recovery 	
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Week 6: Configuration, Compliance, Auditing, Provisioning and Orchestration

Estimated Time: 4 hours 38 minutes

Lesson	Time	Topics Covered	Link
Week 6 Office Hours: Migrating from Cloudformation to Terraform Building re-usable infrastructure blocks with Terraform			
Introduction to AWS CloudTrail	10 minutes	This course is an introduction to AWS CloudTrail, the service that enables governance, compliance, operational auditing, and risk auditing of your AWS account. Throughout the course, we will highlight how AWS CloudTrail works, as well as discuss the service's features, benefits and potential use cases.	Click here
Configuration, Compliance, and Auditing with AWS Config and AWS CloudTrail	25 minutes	In this course, you will learn to: <ul style="list-style-type: none"> • Understand AWS Config features and capabilities • Understand AWS Config use cases and best strategies for implementation • Understand how to implement AWS Config Rules • Understand CloudTrail features and capabilities • Identify best practices for CloudTrail 	Click here
Introduction to AWS CloudFormation	10 minutes	A basic overview of how AWS CloudFormation can be used to automate resource provision. Use cases where AWS CloudFormation is used to repeatedly and predictably create groups of resources is covered in this course. A demonstration in designing an AWS CloudFormation template for resource provisioning is also covered.	Click here
Troubleshooting:	30	In this course, you will learn to:	Click here

AWS CloudFormation Stacks	minutes	<ul style="list-style-type: none"> • Explain the value of using JSON and YAML validators to troubleshoot CloudFormation issues • Recognize and resolve issues with CloudFormation templates and stacks • Employ best-practice troubleshooting methodologies when investigating CloudFormation issues • Locate and apply available AWS Support documentation for CloudFormation issues • Recognize and record relevant information to escalate CloudFormation issues to the AWS Support team 	
Introduction to AWS Marketplace	10 minutes	This course is an introduction to AWS Marketplace – the online store that helps you discover, purchase, migrate and immediately start using the software and services you need to build products and run your businesses. Throughout this course, we will cover how AWS Marketplace works, as well as the benefits to using the service. An overview of some use cases for AWS Marketplace will also be provided.	Click here
Introduction to AWS Service Catalog	10 minutes	This course is an introduction to AWS Service Catalog, the AWS service that helps you create and manage catalogs of IT services that are approved for use on AWS. In this course, we will walk through how the service is used and the user types that can access the service. Benefits, best practices and use cases will also be provided.	Click here
Introduction to AWS Identity and Access Management	10 minutes	In this course, you will be introduced to AWS Identity and Access Management (IAM). The course will highlight how IAM can be used for authentication and authorization to AWS services. Discussions around IAM policies and roles will also be included, as well as potential use cases for the service. The course will wrap up with a demonstration on how to create an IAM group and user, attach a policy and add a user to a group.	Click here
Udemy - Section 8: Cloudformation for SysOps	2 hours 23 minutes	<i>Please view Section 8 in this Udemy course to reinforce what you've already learned about Cloudformation.</i>	Click here

Week 7: AWS Identity and Access Management

Estimated time: 8 hours

Lesson	Time	Topics Covered	Link
Week 7 Office Hours: Introduction to IAM Resource fencing using IAM and Terraform			
Deep Dive with Security: AWS Identity and Access Management	8 hours	In this course, you will learn to: <ul style="list-style-type: none">• Use and differentiate between role-based and attribute-based access controls• Leverage global and IAM condition keys according to best practices• Interact with AWS Security Token Service (AWS STS) for temporary credentials• Manage IAM session policies and duration to scope down permissions• Create an IAM identity provider• Demonstrate how you can use AWS Single Sign-On in identity federation• Troubleshoot IAM access issues	Click here

Week 8: Prepare for the Certification Exam

Estimated Time: 3 hours 18 minutes

Lesson	Time	Topics Covered	Link
Week 8 Office Hours: Review and Exam Prep			
Exam Prep: AWS Certified SysOps Administrator - Associate	180 minutes	After completing this course, you should be able to: <ul style="list-style-type: none">• Identify how questions on the AWS Certified SysOps Administrator – Associate exam relate to concepts about SysOps on AWS• Interpret the concepts that are being tested by an AWS Certification exam	Click here

		question <ul style="list-style-type: none"> • Apply best practices for allocating your time when you study for the AWS Certified SysOps Administrator – Associate exam 	
Udemy - Section 23: Preparing for the Exam	18 minutes	<i>Please view Section 23 in this Udemy course to reinforce what you've already learned about preparing for the certification exam.</i>	Click here
Udemy - SysOps Practice Exams	Variable	<i>Please use these practice exams to prepare for your own certification exam!</i>	Click here

Frequently Asked Questions

Do I have to watch every assigned video? Can I skip some if I feel ready?

If you are familiar with some parts of the classwork, you may skip the videos covering any topics you're already familiar with.

How do I get reimbursed for the certification exam?

You will need to successfully pass the exam, and then fill out [this form](#). You will be asked to provide proof of payment and a screenshot of the certification page.

Where can I find practice exam questions?

The best place to find sample exam questions are the [sample questions provided by AWS](#). There are other websites that provide sample exam questions, but they are not always accurate questions or answers.

Do I need to attend all the office hours?

The office hours are one of the most important components of this Accelerator, so you should plan to attend each one. If you are unable to join one of the office hours, it will be recorded and you can watch the recording afterwards.

How do I sign up for the Accelerator?

Please complete this form to register: <https://toptalcommunity.typeform.com/to/at8oTxRG>