

## **AWS Certified SysOps Administrator - Associate Level**

This course is designed to prepare individuals who have computer knowledge and experience or administrators and engineers for implementing, managing resources on the AWS cloud also to prepare for *AWS Certified SysOps Administrator – Associate exam*. It covers all the areas & objectives listed below and in the *exam blueprint* and goes above and beyond with real world, hands-on instructions.

I have designed this course considering dozens of enquires that I am getting every week and their background. Most of them were Non-IT / fresher's, wanted to start their career / expand their skill set and get paid well or continue in IT with long lasting career.

With my experience, I have mixed different things as one course as the take away of the course is job targeted which is also the interest of people, and this may look different from other individual / institutes course outline you have seen also you might know few things that I am going to teach but ***idea is to teach "everything that you need to know" to start with AWS and go complete with expert level knowledge.***

### ***High-Level Course Outline:***

1. Basics 101: everything you need to know to start with AWS  
(This module will prepare you for "Fundamentals of AWS Training")
2. AWS Fundamentals for System Administrators
3. AWS Certified SysOps Administrator

## **Basics 101: everything you need to know to start with AWS**

<b>Topic</b>	<b>Duration</b>
<b>Introduction</b> <ul style="list-style-type: none"><li>• Introduction to the Course modules</li></ul>	
<b>Fundamentals of Server Hardware</b> <ul style="list-style-type: none"><li>• What is a server</li><li>• Server form factors</li><li>• Overview of server hardware components</li></ul>	
<b>Fundamentals of Server Administration</b> <ul style="list-style-type: none"><li>• Server Operations system</li><li>• Basic administration tasks</li><li>• Enterprise class application and use cases of server OS etc..</li></ul>	
<b>Network 101</b> <ul style="list-style-type: none"><li>• OSI Layer, IPv4 concepts</li><li>• Switch, Router, Firewall, Load balancer, VPN etc..</li></ul>	
<b>Storage 101</b> <ul style="list-style-type: none"><li>• Disks, controllers, RAID</li><li>• SAN, NAS, FCoE &amp; iSCSI</li><li>• Replication, Deduplication etc..</li><li>• Backups</li></ul>	
<b>Virtualization 101</b> <ul style="list-style-type: none"><li>• What is virtualization</li><li>• Types of virtualization</li><li>• Server virtualization</li><li>• Hypervisor &amp; types</li></ul>	
<b>Fundamentals of Cloud Computing</b> <ul style="list-style-type: none"><li>• What is cloud computing</li><li>• Private, Public &amp; Hybrid Cloud</li><li>• Delivery Model: IAAS, PAAS, SAAS</li><li>• Cloud Costing Model</li></ul>	

## **AWS Fundamentals for System Administrators**

Topic	Duration
Introduction to AWS <ul style="list-style-type: none"> <li>• AWS History</li> <li>• On-premises Components</li> <li>• Do-it-yourself vs. AWS</li> <li>• Understanding AWS Global Infrastructure</li> <li>• What Is Elastic Computing?</li> <li>• Regions and Availability Zones</li> </ul>	
Understanding AWS Security Measures <ul style="list-style-type: none"> <li>• The Physical Access</li> <li>• Shared Security Responsibility Model</li> <li>• Identity and Access Management (IAM)</li> </ul>	
The AWS Free Tier <ul style="list-style-type: none"> <li>• The AWS Free Tier</li> <li>• How to Sign Up</li> <li>• Provision Free Tier Resources</li> </ul>	

## **AWS Certified SysOps Administrator - Associate Level**

Topic	Topic
1) Understanding Virtual Networking on AWS <ol style="list-style-type: none"> <li>a) What Is Virtual Private Cloud?</li> <li>b) AWS Reference Model for VPC</li> <li>c) VPC Architecture and Characteristics</li> <li>d) Creating a VPC</li> <li>e) VPC Access Methods</li> <li>f) VPC Configuration</li> <li>g) VPC Peering</li> <li>h) Module Summary</li> <li>i) In-depth VPC Configuration</li> <li>j) In-depth VPC Configuration</li> </ol>	2) Working with Security Groups and NACLs <ol style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Layered Security</li> <li>c) Configuring Security Groups</li> <li>d) Understanding NACLs</li> <li>e) Configuring NACLs</li> <li>f) Module Summary</li> </ol>
3) Understanding and Configuring VPC Access <ol style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) AWS VPC Access</li> <li>c) AWS Direct Connect</li> <li>d) Configuring VPN</li> <li>e) Understanding VPC Peering</li> <li>f) Configuring VPC Peering</li> <li>g) Module Summary</li> </ol>	4) EC2 Instance Types <ol style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Understanding EC2 Instance Types</li> <li>c) EC2 Instance Types Walkthrough in the AWS Management Console</li> <li>d) Module Summary</li> </ol>

<p>5) Working with Elastic Block Storage</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Understanding AWS Storage Types</li> <li>c) Increasing IOPS Performance</li> <li>d) Configuring Optimized Instances</li> <li>e) Module Summary</li> </ul>	<p>6) EBS Snapshots and Replication</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) EBS Snapshots Characteristics</li> <li>c) Working with Snapshots in the AWS Management Console</li> <li>d) Module Summary</li> </ul>
<p>7) Working with Amazon S3</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Amazon S3 Characteristics</li> <li>c) Working with Amazon S3 via the AWS Management Console</li> <li>d) Module Summary</li> </ul>	<p>8) Amazon S3 Website Hosting</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Static Website Hosting</li> <li>c) Configure Amazon S3 Static Website Hosting</li> <li>d) Module Summary</li> </ul>
<p>9) Configuring Elastic Load Balancer (ELB)</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) ELB Characteristics</li> <li>c) ELB Deployment Scenarios</li> <li>d) Configuring ELB via the AWS Management Console</li> <li>e) Module Summary</li> </ul>	<p>10) Configuring Auto Scaling</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Auto Scaling Features</li> <li>c) How Auto Scaling Works</li> <li>d) Configuring Auto Scaling Part</li> <li>e) Module Summary</li> </ul>
<p>11) Configuring Route</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Route 53 Characteristics</li> <li>c) DNS Record Types</li> <li>d) Routing Policies</li> <li>e) Configuring Route 53 from the AWS Management Console</li> <li>f) Module Summary</li> </ul>	<p>12) Working with Identity and Access Management (IAM)</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Introduction to Identity and Access Management (IAM)</li> <li>c) Configuring IAM via the AWS Management Console</li> <li>d) AWS Security Token Service (STS)</li> <li>e) Module Summary</li> </ul>
<p>13) Monitoring with Amazon CloudWatch and Trusted Advisor</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) Amazon CloudWatch Characteristics</li> <li>c) Configuring CloudWatch from the AWS Management Console</li> <li>d) Trusted Advisor</li> <li>e) Module Summary</li> </ul>	<p>14) RDS HA and Load Sharing</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) RDS Characteristics</li> <li>c) Configuring RDS via the AWS Management Console</li> <li>d) Module Summary</li> </ul>
<p>15) Understanding Backup Options</p> <ul style="list-style-type: none"> <li>a) Module Introduction</li> <li>b) EBS Options</li> <li>c) S3 and RDS Backup Options</li> <li>d) Module Summary</li> </ul>	