

This 8-hour two-day live training course is designed to help you understand Amazon Web Services and serve as an introduction to cloud computing concepts and the core AWS services. It will also fully prepare you for the AWS Certified Cloud Practitioner exam. If you're wanting credibility as an AWS professional, there's no better place to start than Amazon's AWS Certified Cloud Practitioner certification. This course is perfect for anyone new to cloud and is designed for project managers, product managers, and any technical people who want to learn cloud technologies and skills. This course provides an understanding of Amazon Web Services at a high level, introduces cloud computing concepts and core AWS services, and prepares attendees for the exam according to the certification exam guide published by Amazon Web Services. There are also several live demonstrations at AWS.

Prior to attending the Live sessions, please sign up for an AWS Free Tier account at the following URL: <https://aws.amazon.com/free/>

Syllabus

Day 1

Part 1 – Cloud Concepts

- The Cloud Practitioner Certification
- Overview of the Exam
- Cloud computing technologies and enabling technologies
- Fundamentals of virtualization
- Overview of cloud types and models
- AWS Global Infrastructure
- The AWS Shared Responsibility Model
- AWS Cloud and its value proposition
- Key aspects of AWS cloud economics
- AWS Organizations

Part 2 – Core Networking Services

- Introduction to Virtual Private Clouds (VPC)
- VPC technology and design basics
- Options for accessing the VPC
 - *Demonstration*
- Core networking and CDN services
 - *Demonstration*
- AWS Site-to-Site VPN
 - *Demonstration*

Part 3 – AWS Technology

Creating your first AWS account

- Strategies and best practices
- AWS credential types
 - *Demonstration*
- Installing the AWS CLI
- Using a bastion (jump) host
- Advanced bastion services

Part 4 – Compute Technologies

- AWS EC2 and Amazon Machine Images (AMIs)
 - *Demonstration*
- Auto-scaling
- Amazon Elastic Container Registry (Amazon ECR)
- Amazon Lightsail
- AWS Elastic Beanstalk
- AWS Batch
- AWS Lambda
- AWS Outposts

Day 2

Part 1 – Storage, Database, and other Services

- Block storage vs. Object storage
- Amazon Elastic Block Storage (EBS)
 - *Demonstration*
- Amazon Simple Storage Service (S3)
 - *Demonstration*
- Amazon Elastic File System (Amazon EFS)
- AWS Storage Gateway
- Amazon Relational Database Service (RDS)
 - *Demonstration*
- Amazon Aurora
- Amazon DynamoDB
- Amazon ElastiCache
- Amazon Redshift
- AWS CloudFormation
- AWS CloudWatch

Part 2 - AWS Security Survey and IAM

- Cryptography basics review
- Client-side vs. Server-side encryption

- AWS Key Management Service (KMS)
 - *Demonstration*
- Using KMS with S3 buckets
- AWS EBS Encryption
- Identity and Access Management (IAM)
- Federated access and AWS Single Sign-on (SSO)

Part 3 – Infrastructure Security

- Network ACLs (NACLs)
- Security Groups
- Web Application Firewall (WAF)
- AWS Shield
- AWS Inspector
- AWS GuardDuty
- Assurance Programs, Auditing, and Compliance
- Vulnerability vs. Penetration Testing

Part 4 - Billing and Pricing

- The Free-Tier Model
- Service Pricing
- Cost Management
- AWS Calculators
- Cost Management Tools
- AWS Trusted Advisor
- AWS Support and Support Models
 - *Demonstration*

Instructor Bio:

Michael J. Shannon began his IT career when he transitioned from recording studio engineer to network technician for a major telecommunications company in the early 1990's. Throughout his 30 years in IT he has worked as an employee, contractor, and consultant for numerous companies including Platinum Technologies, Fujitsu, IBM, State Farm, MindSharp, CBT Nuggets, Thomson/NetG, and Skillsoft among others. Mr. Shannon has authored several books, training manuals, blog articles, and CBT modules over the years as well. He has attained the MCSE, CISSP, Security+, ITIL 4 Managing Professional (MP), Cisco CCNP-R&S and CCNP-Security, Palo Alto Networks Certified Network Security Engineer (PCNSE7), and OpenFAIR Foundations certifications. He also holds the Amazon Web Services Cloud Practitioner and SysOps Administrator-Associate certificates. He resides with his wife in Abilene Texas. His hobbies are playing guitar, songwriting, and golf.