AWS-NECA: Networking Essentials for Cloud Applications on AWS

Course Code: AWS-NECA
Duration: 1 day
Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

OVERVIEW

The ***Networking Essentials for Cloud Applications on AWS*** course provides a comprehensive understanding of networking concepts and services within the Amazon Web Services (AWS) cloud environment. Designed for novice and experienced networking engineers, this course covers essential topics, best practices, and hands-on labs. Its purpose is to equip learners with the knowledge and skills that are required to design, configure, and optimize network infrastructure on AWS.

SKILLS COVERED

In this course, you will learn to:

- Design a networking infrastructure for a scalable production application, considering design trade-offs between different networking services.
- Configure networking services for a highly available, resilient, and scalable application.
- Implement the networking infrastructure according to evolving business requirements.
- Implement networking best practices to align towards AWS Well-Architected Framework.

WHO SHOULD ATTEND?

This course is intended for:

- Newly hired cloud engineers
- On-premises IT engineers
- Cloud architects
- Cloud engineers
- Network engineers

PREREQUISITES

We recommend that attendees of this course have:

- Basic knowledge of networking concepts
- Basic knowledge of AWS services
- ***AWS Technical Essentials or Cloud Practitioner Essentials***

MODULES

Module 0: Course Introduction

- Introductions
- Course overview
- Use case introduction

Module 1: Networking on AWS

- IP addressing
- Amazon Virtual Private Cloud (Amazon VPC) fundamentals
- Subnets
- Amazon VPC IP Address Manager (IPAM)
- Elastic Network Interfaces
- Elastic IP addressing
- Route table
- Internet and NAT gateways
- Basic traffic filtering mechanisms for a VPC
- Knowledge check

Module 2: Load Balancing and Scaling on AWS

- Elastic Load Balancing (ELB)
- Cross-zone load balancing
- Auto Scaling group (ASG) basics
- Knowledge check

- Use case part one
- Hands-on lab: Building a Multi-Availability Zone VPC Architecture

Module 3: VPC Interconnectivity and Content Delivery

- VPC interconnectivity
- VPC peering
- VPC Transit Gateway
- VPC endpoints
- Edge locations
- AWS Global Accelerator
- Knowledge check
- Use case part two
- Hands-on lab: Accelerating Performance with Amazon CloudFront

Module 4: High Availability with Amazon Route 53

- Amazon Route 53
- Knowledge check
- Use case part three
- Hands-on lab: Achieving Fault Tolerance and Global Traffic Optimization

Module 5: Course Wrap-Up

- Course reflection
- Use case labs recap
- Use case conclusion
- Course feedback survey

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