Designing and Implementing Cloud Connectivity

- 4 Days
- Lecture and Hands-on Labs

Course Overview

The Designing and Implementing Cloud Connectivity training helps you develop the skills required to design and implement enterprise cloud connectivity solutions. You will learn how to leverage both private and public internet-based connectivity to extend the enterprise network to cloud providers. You will explore the basic concepts surrounding public cloud infrastructure and how services like Software as a Service (SaaS) can be integrated. You will practice how to analyze and recommend connectivity models that provide the best quality of experience for users. You will learn to implement both Internet Protocol Security IPsec) and Software-Defined Wide-Area Network (SD-WAN) cloud connectivity, as well as build overlay routing with Open Shortest Path First (OSPF) and Border Gateway Protocol (BGP). Finally, you will practice troubleshooting cloud connectivity issues relating to IPsec, SD-WAN, routing, application performance, and policy application.

This training prepares you for the 300-440 ENCC exam. If passed, you earn the Cisco Certified Specialist–Enterprise Cloud Connectivity certification and satisfy the concentration exam requirement for the Cisco Certified Network Professional (CCNP) Enterprise certification.

Review this course online at https://www.alta3.com/courses/encc

Who Should Attend

- Cloud Architects
- Cloud Engineers
- Security Analysts
- Systems Engineers

What You'll Learn

- Design and Deploy Secure Hybrid Cloud Connectivity
- Implement Internet and Private-Based SD-WAN Extensions
- Optimize SaaS Access, Routing, and Application Performance
- Troubleshoot Multicloud Networks and Enforce Policy

Outline

1. Public Cloud Fundamentals
2. Internet-Based Connectivity to Public Cloud
3. Private Connectivity to Public Cloud
4. SaaS Connectivity
5. Resilient and Scalable Public Cloud Connectivity
6. Cloud-Native Security Policies
7. Regulatory Compliance Requirements
8. Internet-Based Public Cloud Connectivity
9. Overlay Routing Deployment

10. Cisco SD-WAN Internet-Based Cloud Connectivity
11. Cisco SD-WAN Cloud Security
12. Cloud OnRamp for SaaS
13. Cisco SD-WAN Policies
14. Application Quality of Experience
15. Internet-Based Public Cloud Connectivity Diagnostics
16. Overlay Routing Diagnostics
17. Cisco SD-WAN Public Cloud Connectivity Diagnostics

Lab Outline

1. Initial Lab Network Exploration
2. Implement IPsec Connectivity to Public Cloud Gateways
3. Implement IPsec Connectivity to Cloud-Hosted Cisco IOS-XE Routers
4. Implement Overlay Routing
5. Deploy Cloud OnRamp for Multicloud
6. Deploy Umbrella Cloud Security
7. Implement Cloud OnRamp for SaaS
8. Troubleshoot Underlay Connectivity
9. Troubleshoot Overlay Routing
10. Diagnose Cloud OnRamp for Multicloud

Prerequisites

- Basic understanding of enterprise routing
- Basic understanding of WAN networking
- Basic understanding of VPN technology
- Basic understanding of Cisco Catalyst SD-WAN
- Basic understanding of Public Cloud services