

## Designing and Implementing Cloud Connectivity (ENCC)

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The Designing and Implementing Cloud Connectivity (ENCC) v 1.1 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, such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP). You will explore the basic concepts surrounding public cloud infrastructure and how services like Software as a Service (SaaS), Direct Internet Access (DIA), and Cisco Umbrella can be integrated. You will practice how to analyze and recommend connectivity models that are scalable, resilient, secure, and 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). You will also implement control and data policies across the SD-WAN fabric and integrate Cisco Umbrella cloud security. Finally, you will practice troubleshooting cloud connectivity issues relating to IPsec, SD-WAN, routing, application performance, and policy application.

#### How you'll benefit

This class will help you:

- Develop the skills required to design and implement enterprise cloud connectivity solutions
- Learn how to apply the virtual private network (VPN) and overlay networking technology, including Cisco Catalyst SD-WAN to extend the enterprise network to cloud providers, such as AWS, Microsoft Azure, and GCP using both private connectivity services and public internet as an underlay
- Examine the solutions for optimizing access to SaaS cloud providers and the workflows for diagnosing and troubleshooting cloud connectivity issues
- Gain knowledge for protocols, solutions, and designs to acquire professional-level and expert-level enterprise roles
- Prepare for the 300-440 ENCC v1.0 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.
- Earn 32 CE credits toward recertification

#### Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

#### Who Should Attend

The primary audience for this course is as follows:

- Cloud Architects
- Cloud Administrators

#### Course Duration

4 days

#### Course Price

\$3,295.00 or 33 CLCs

#### Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

- Cloud Engineers
- Cloud Network Engineers
- Cloud Automation Engineers
- Cloud Systems Engineers
- Cloud Security Managers
- Cloud Consultants
- Cloud Application Developers
- Systems Engineers
- Technical Solutions Architect

### **Prerequisites**

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Good understanding of enterprise routing
- Good understanding of WAN networking
- Good understanding of VPN technology
- Good understanding of Cisco Catalyst SD-WAN
- Good understanding of Public Cloud services, such as AWS, Microsoft Azure, and GCP

### **OUTLINE**

- **Module 1: Public Cloud Fundamentals**
- **Module 2: Internet-Based Connectivity to Public Cloud**
- **Module 3: Private Connectivity to Public Cloud**
- **Module 4: SaaS Connectivity**
- **Module 5: Resilient and Scalable Public Cloud Connectivity**
- **Module 6: Cloud-Native Security Policies**
- **Module 7: Regulatory Compliance Requirements**
- **Module 8: Internet-Based Public Cloud Connectivity**
- **Module 9: Overlay Routing Deployment**
- **Module 10: Cisco SD-WAN Internet-Based Cloud Connectivity**
- **Module 11: Cisco SD-WAN Cloud Security**
- **Module 12: Cloud OnRamp for SaaS**
- **Module 13: Cisco SD-WAN Policies**
- **Module 14: Application Quality of Experience**

- **Module 15: Internet-Based Public Cloud Connectivity Diagnostics**
- **Module 16: Overlay Routing Diagnostics**
- **Module 17: Cisco SD-WAN Public Cloud Connectivity Diagnostics**

#### **Lab Outline**

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