Designing and Implementing Cloud Connectivity (ENCC)

Category: Networking & Security | **Vendor:** Cisco

Duration: 32.00 hours (4 days) **26.0 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	Cisco Certified Specialist–Enterprise Cloud Connectivity, Cisco Certified Network Professional (CCNP) Enterprise
Related Exam:	300-440

Course Overview

The Designing and Implementing Cloud Connectivity (ENCC) 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.

This training prepares you 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.

How You'll Benefit

This training 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
- Earn 32 CE credits toward recertification

What to Expect in the Exam

300-440 ENCC: Designing and Implementing Cloud Connectivity is a 90-minute exam associated with the Cisco Certified Specialist–Enterprise Cloud Connectivity certification and satisfies the concentration exam requirement for the CCNP Enterprise certification.

The multiple-choice format tests your knowledge of designing and implementing cloud connectivity, including:

- Architecture models
- IPsec
- SD-WAN
- Operation
- Design

About This Course

The Designing and Implementing Cloud Connectivity (ENCC) 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.

This training prepares you 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.

How You'll Benefit

This training 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
- Earn 32 CE credits toward recertification

What to Expect in the Exam

300-440 ENCC: Designing and Implementing Cloud Connectivity is a 90-minute exam associated with the Cisco Certified Specialist–Enterprise Cloud Connectivity certification and satisfies the concentration exam requirement for the CCNP Enterprise certification.

The multiple-choice format tests your knowledge of designing and implementing cloud connectivity, including:

- Architecture models
- IPsec
- SD-WAN
- Operation
- Design

Who Should Attend

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

Prerequisites & Entry Requirements

General Prerequisites:

The knowledge and skills you are expected to have before attending this training are:

- 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

These skills can be found in the following Cisco Learning Offerings:

- Implementing and Administering Cisco Solutions (CCNA)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)
- Cisco SDWAN Fundamentals (SDWFND)
- Implementing Cisco SD-WAN Security and Cloud Solutions (SDWSCS)

Learning Outcomes

Upon successful completion of this course, participants will be able to:

- Describe the fundamental components and concepts of cloud computing, including deployment models, cloud services, and cloud providers, to provide learners with a comprehensive overview of the subject
- Describe the options available for establishing connectivity to public cloud services, including point-to-point IPsec VPN and various Cisco Catalyst SD-WAN Cloud OnRamp deployment options
- Describe private connectivity options to public cloud provider infrastructure
- Describe the available options for connectivity to SaaS applications from a geographically distributed organization’s premises
- Describe various cloud connectivity options and explore high availability, resiliency, and scalability capabilities with Cisco cloud connectivity
- Describe and explore public cloud security and its components comprehensively
- Describe regulatory compliance requirements
- Explain the available options and describe the procedures for implementing IPsec-driven internet-based public cloud connectivity
- Introduce overlay routing
- Introduce the Cisco Catalyst SD-WAN capabilities for internet-based public cloud connectivity
- Describe Cisco SD-WAN native and cloud security capabilities
- Introduce the Cloud OnRamp for SaaS
- Introduce the Catalyst Cisco SD-WAN Policies
- Introduce AppQoE
- Describe how to diagnose and troubleshoot common issues for connectivity to public cloud environments using internet-based connectivity
- Troubleshoot OSPF, BGP, route redistribution, and static routes deployed in cloud environments
- Describe Cisco SD-WAN and connectivity to public cloud providers

Detailed Course Outline

- Public Cloud Fundamentals
- Internet-Based Connectivity to Public Cloud
- Private Connectivity to Public Cloud

- SaaS Connectivity
- Resilient and Scalable Public Cloud Connectivity
- Cloud-Native Security Policies
- Regulatory Compliance Requirements
- Internet-Based Public Cloud Connectivity
- Overlay Routing Deployment
- Cisco SD-WAN Internet-Based Cloud Connectivity
- Cisco SD-WAN Cloud Security
- Cloud OnRamp for Saas
- Cisco SD-WAN Policies
- Application Quality of Experience
- Internet-Based Public Cloud Connectivity Diagnostics
- Overlay Routing Diagnostics
- Cisco SD-WAN Public Cloud Connectivity Diagnostics

□□ Certification Path

Cisco Certified Specialist–Enterprise Cloud Connectivity, Cisco Certified Network Professional (CCNP) Enterprise

Exam: 300-440

Skills You Will Learn:

- Describe the fundamental components and concepts of cloud computing, including deployment models, cloud services, and cloud providers, to provide learners with a comprehensive overview of the subject
- Describe the options available for establishing connectivity to public cloud services, including point-to-point IPsec VPN and various Cisco Catalyst SD-WAN Cloud OnRamp deployment options
- Describe private connectivity options to public cloud provider infrastructure
- Describe the available options for connectivity to SaaS applications from a geographically distributed organization’s premises
- Describe various cloud connectivity options and explore high availability, resiliency, and scalability capabilities with Cisco cloud connectivity
- Describe and explore public cloud security and its components comprehensively
- Describe regulatory compliance requirements
- Explain the available options and describe the procedures for implementing IPsec-driven internet-based public cloud connectivity
- Introduce overlay routing
- Introduce the Cisco Catalyst SD-WAN capabilities for internet-based public cloud connectivity
- Describe Cisco SD-WAN native and cloud security capabilities
- Introduce the Cloud OnRamp for SaaS
- Introduce the Catalyst Cisco SD-WAN Policies
- Introduce AppQoE
- Describe how to diagnose and troubleshoot common issues for connectivity to public cloud environments using internet-based connectivity
- Troubleshoot OSPF, BGP, route redistribution, and static routes deployed in cloud environments
- Describe Cisco SD-WAN and connectivity to public cloud providers

Frequently Asked Questions

Q: What delivery options are available for Designing and Implementing Cloud Connectivity (ENCC)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The Designing and Implementing Cloud Connectivity (ENCC) course helps prepare you for the Cisco Certified Specialist–Enterprise Cloud Connectivity, Cisco Certified Network Professional (CCNP) Enterprise certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the 300-440 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 4-day Designing and Implementing Cloud Connectivity (ENCC) course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Designing and Implementing Cloud Connectivity (ENCC) training?

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Designing and Implementing Cloud Connectivity (ENCC)?

Yes, we provide corporate training, dedicated training, and closed classes for Designing and Implementing Cloud Connectivity (ENCC). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Designing and Implementing Cloud Connectivity, Cisco Professional Level Networking - CCNP, ENCC

Q: Why choose Nexus Human for Designing and Implementing Cloud Connectivity (ENCC)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Designing and Implementing Cloud Connectivity (ENCC) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

© 2026 Nexus Human. All rights reserved. This brochure was generated on 13/11/2026.