

## CCNP Enterprise: Core Networking Release Notes

**Last updated March 13, 2020**

### Purpose

The CCNP Enterprise: Core Networking (CCNP ENCOR v8) course teaches students core concepts for configuring routers and switches in the enterprise environment. These devices facilitate the connection of devices, applications, and data through the internet and across other computer networks. By the end of the course, students can perform advanced configurations for routers and switches to build and configure enterprise-level local area networks (LANs) and wide area networks (WANs) that integrate IP addressing schemes, routing and switching protocols, network assurance, and network security.

By the end of the course, students will be able to:

- Configure L2 redundancy in an enterprise network.
- Configure EIGRP to optimize performance in an enterprise network.
- Implement advanced OSPF features to improve performance in both IPv4 and IPv6 enterprise networks.
- Configure eBGP in a single-homed remote access network.
- Explain the concepts of multicast operation and QoS in an enterprise network.
- Configure IP services and VPNs to support secure, managed site-to-site and remote-access networks.
- Explain how wireless topologies and antennas allow APs to pair with WLCs in an enterprise network.
- Implement secure wireless networks to manage and support wireless roaming.
- Implement advanced technologies to support a secure and scalable enterprise network architecture.
- Configure network technologies to provide secure infrastructure access.
- Explain the purposes and characteristics of virtualization and network automation.

The Cisco Networking Academy ENCOR course is the first course in the eighth major release of the CCNP curriculum. These notes provide detailed information about this release, including curriculum content, known issues, and support information.

This 70-hour, instructor-led course includes videos, hands-on labs, and a wide array of assessment types and tools throughout the curriculum.

## CCNP ENCOR Release Notes Curriculum Content

Component	Description
<b>E-Learning Content</b>	29 chapters. The content for this course can be found in the Cisco Press CCNP and CCIE Enterprise Core ENCOR 350—401 Official Cert Guide.
<b>Videos</b>	7 videos
<b>Labs</b>	40 hands-on and paper-based labs. ENCOR labs were written using Cisco 4331 and 4221 routers and 3650 switches. Previous equipment can be used, but some modifications for router interface names will be required.
<b>Packet Tracer Activities</b>	Cisco Packet Tracer (PT) simulation-based learning activities have been gathered from other courses and are provided as <b>OPTIONAL skills review features</b> in the CCNP courses. They are not required for this course. They can be found in the Instructor Resources. <b>PT version 7.3 is required at a minimum.</b> Instructors can use them in their courses as time and need allows. As a simulation, we are aware that Packet Tracer <b>does not</b> support all of the commands, devices and activities that are presented in the hands-on lab portion of the CCNP Enterprise courses.
<b>Chapter Quizzes</b>	29 Self-assessments that integrate concepts and skills learned throughout the series of topics presented in the chapter.
<b>Chapter Group Exams</b>	11 Instructor Activated Assessments that assesses content from multiple chapters. These assessment provide learners the opportunity to apply and validate knowledge learned throughout the course.
<b>Final Exam</b>	1 Final Exam with Secured Activation With Secured Activation, individual assessment item preview and review is disabled to improve validity and security of this summative assessment. Instructors are provided with a visual summary view of how students performed against the competencies outlined for the course.
<b>Skills Assessments</b>	2 Parts to the Hands-On Assessment to cover the variety of skills in this course.
<b>End-of-Course Feedback</b>	1 end-of-course survey to provide feedback for the course.
<b>Accessibility</b>	New UI complies with WCAG 2.1 Level AA Guidelines. All PDF files in the curriculum have been created with accessible features. Videos have closed captioning available. UI is screen reader and keyboard accessible.
<b>Certificate of Completion</b>	The successful completion of the end-of-course assessment and end-of-course survey are required for receiving the Certificate of Completion.

## Equipment List

The equipment list is contained in the scope and sequence document. The list can also be found on [netacad.com](https://www.netacad.com). Although the equipment list has been updated, routers and switches used in the previous versions of CCNP should also be sufficient to achieve the same fundamental CCNP skills for this course.

## Known Issues and Caveats

Known Issues and Caveats	Description
English Spelling	American-English spellings are interspersed in the text of the chapters.
Closed Captions	Use the external video link if you are having issues with the embedded videos.

## Course Outline

Chapter	Title
1	Packet Forwarding
2	Spanning Tree Protocol
3	Advanced Spanning Tree Tuning
4	Multiple Spanning Tree Protocol
5	VLAN Trunks and EtherChannel Bundles
6	IP Routing Essentials
7	EIGRP
8	OSPF
9	Advanced OSPF
10	OSPFv3
11	BGP
12	Advanced BGP
13	Multicast
14	QoS
15	IP Services
16	Overlay Tunnels
17	Wireless Signals and Modulation
18	Wireless Architecture Infrastructure
19	Understanding Wireless Roaming and Location Services
20	Authenticating Wireless Clients
21	Troubleshooting Wireless Connectivity
22	Enterprise Network Architecture
23	Fabric Technologies
24	Network Assurance
25	Secure Network Access Control
26	Network Device Access Control and Infrastructure Security
27	Virtualization
28	Foundational Network Programmability Concepts
29	Introduction to Automation Tools

## Updates in CCNP ENCOR v8

The topics and design for ENCOR were updated to reflect the new Implementing and Operating Cisco Enterprise Network Core Technologies (350-401 ENCOR) certification objectives.

## Support

For general assistance with curriculum, classroom, or program issues, please contact the Networking Academy™ Support Desk by signing into the [netacad.com](https://netacad.com)™ learning environment and clicking the Support question mark (?).