

# CCNP Enterprise: Advanced Routing and Services (ENARSI) Release Notes

**Last updated April 20, 2020**

## Purpose

The CCNP Enterprise: Advanced Routing and Services (CCNP ENARSI v8) course teaches students advanced concepts for configuring routers and services in the enterprise environment. These devices and services 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 services to build and configure enterprise-level local area networks (LANs) and wide area networks (WANs) that use IPv4 and IPv6 advanced routing protocols, advanced features of protocols to optimize network performance, route redistribution, and advanced tunneling technologies.

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

- Implement EIGRP to optimize network performance in both IPv4 and IPv6 networks.
- Troubleshoot issues with multi-area OSPFv2 and OSPFv3 implementation.
- Implement advanced features in BGP to optimize network performance.
- Implement conditional forwarding and route redistribution in a multi-protocol enterprise network.
- Implement secure access using advanced tunneling technologies.
- Troubleshoot device and network security.

The Cisco Networking Academy CCNP Enterprise: Advanced Routing and Services course is the second 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 ENARSI Release Notes Curriculum Content

Component	Description
<b>E-Learning Content</b>	23 chapters. The content for this course can be found in the Cisco Press CCNP Enterprise Advanced Routing ENARSI 300—410 Official Cert Guide.
<b>Videos</b>	2 videos
<b>Labs</b>	40 hands-on and paper-based labs. ENARSI 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>	23 Self-assessments that integrate concepts and skills learned throughout the series of topics presented in the chapter.
<b>Chapter Group Exams</b>	6 Instructor-Activated Assessments that assesses content from multiple chapters. These assessments 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	IPv4/IPv6 Addressing and Routing Review
2	EIGRP
3	Advanced EIGRP
4	Troubleshooting EIGRP for IPv4
5	EIGRPv6
6	OSPF
7	Advanced OSPF
8	Troubleshooting OSPFv2
9	OSPFv3
10	Troubleshooting OSPFv3
11	BGP
12	Advanced BGP
13	BGP Path Selection
14	Troubleshooting BGP
15	Route Maps and Conditional Forwarding
16	Route Redistribution
17	Troubleshooting Redistribution
18	VRF, MPLS, and MPLS Layer 3 VPNs
19	DMVPN Tunnels
20	Securing DMVPN Tunnels
21	Troubleshooting ACLs and Prefix Lists
22	Infrastructure Security
23	Device Management and Management Tools Troubleshooting

### Updates in CCNP ENARSI v8

The topics and design for ENARSI were updated to reflect the new Implementing Cisco Enterprise Advanced Routing and Services (300-410 ENARSI) 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://www.netacad.com)™ learning environment and clicking the Support question mark (?).