Cisco Carrier Routing System Hardware Overview - On Demand

Modality: On Demand

Duration: 8 Hours

CLC: 3 Units

Course Information

About this course:

This course introduces you to the hardware features and functions of Cisco CRS-1, CRS-3, and CRS-X carrier routing systems. You will learn and gain practical knowledge and skills to successfully deploy on you network the important hardware concepts on which the carrier routing system solution is based.

You will also be able to verify correct operation of various CRS hardware components, including switch fabric, route processors, physical layer interface modules (PLIMs) and line card chassis.

Duration

- The CRS-1 hardware overview is a 17 lessons course with 7 modules totaling almost 3 hours of video training.
- The CRS-3 hardware overview is a 21 lessons course with 11 modules totaling almost 4 hours of video training.
- The CRS-X hardware overview is 4 lessons course with 4 modules totaling more than 1 hour of video training.

Course Objective:

You will have the following skills upon completing this course:

- Define the Cisco Carrier Routing System
- Explain how these routers are powered
- Explain what a performance route processor is
- Explain what a switch fabric is
- Give examples of how line cards work and what kinds are available
- Define what a multishelf architecture is and how it works
- Explain how quality of service is implemented on the CRS
- List the physical design characteristics of line cards and chassis
- Enumerate the line card chassis and how they differ
- Explore the commonalities between chassis
- Describe how data flows across a chassis

Audience:

- This course is intended for network professionals, including designers, implementation staff, network operations center personnel, and support staff, who are involved with the deployment, operations, and maintenance of Carrier Routing Systems.

Prerequisite:

- There are no prerequisites required for this course

Course Outline:

The carrier routing system hardware overview includes three courses covering CRS-1, CRS-3, and CRS-X.

The CRS-1 Hardware Overview course outline:

- Course Overview (1:28)
- Module 1: Introduction to the CRS (12:39)
- Module 2: CRS 16-Slot LCC Hardware (33:05)
- Module 3: CRS 8-Slot LCC Hardware (29:47)
- Module 4: CRS 4-Slot LCC Hardware (36:10)
- Module 5: CRS LCC Common Elements (52:50)
- Module 6: Cisco CRS Multishelf Architecture (16:13)

The CRS-3 Hardware Overview course outline:

- Course Overview (1:29)
- Module 1: Introduction to the CRS (10:22)
- Module 2: CRS 16-Slot LCC Hardware (30:49)
- Module 3: CRS 8-Slot LCC Hardware (31:20)
- Module 4: CRS 4-Slot LCC Hardware (31:25)
- Module 5: CRS LCC Common Elements (55:35)
- Module 6: Modular Power Systems (13:15)
- Module 7: New Performance Route Processors (13:06)
- Module 8: 140 Gb/s Architecture (23:57)
- Module 9: Cisco CRS Multishelf Architecture (13:51)
- Module 10: CRS-3 B2B (10:57)

The CRS-X Hardware Overview course outline:

- Module 1: Introduction to the CRS-X (19:56)
- Module 2: CRS-X PLIMs (20:55)
- Module 3: CRS-X Line Cards (16:31)
- Module 4: Life of a Packet (11:09)