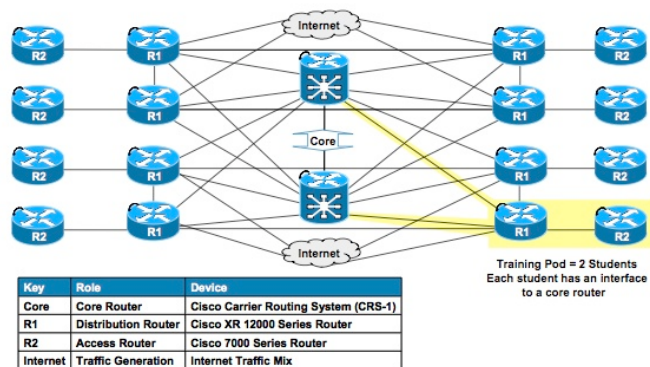


Advanced Services' Deploy, Maintain, and Troubleshoot Cisco IOS XR (DMTXR) Software Version 4.0.1

Length: 5-day Workshop

This course provides you with the advanced knowledge and skill sets required to successfully deploy, maintain, and troubleshoot Cisco IOS® XR Software Release 4.0.1 in a typical network environment. You will learn the fundamental concepts on which the operating system is based in order to understand how to troubleshoot problems relating to process crashes, stuck processes, high CPU and memory consumption, and interprocess communication (IPC). You will learn to interpret log messages and configure exception reporting and logging. Emergency recovery procedures for operating system recovery, Cisco® CRS-1 system recovery, Cisco XR 12000 Series system recovery, and Cisco IOS XR Software configuration and password recovery are covered. In addition, you will use system commands to monitor interfaces, controllers, and ASICs while troubleshooting traffic flow issues through both Cisco CRS-1 and XR 12000 series routers.



This course combines lecture materials and hands-on labs throughout to make sure that you are able to successfully deploy, maintain, and troubleshoot the Cisco IOS XR Software on Cisco CRS-1 and XR 12000 series routers in your network.

You will learn to:

Upon completion of this course, you should be able to:

- Describe the function of the system database (sysdb) and configuration manager
- Configure and monitor a TACACS+ AAA configuration on Cisco IOS XR Software
- Explain the architecture of the Cisco IOS XR Software operating system and the commands to monitor its operation
- Describe processes in Cisco IOS XR Software and the commands used to monitor process lifecycle
- Identify and explain the methods and mechanics of IPC
- Implement Network Time Protocol (NTP) in a Cisco IOS XR Software routed network
- Explain how to interpret logging messages and configure exception reporting and logging
- Use show commands to troubleshoot traffic flow issues in a Cisco IOS XR Software router
- Use show commands to trace packet flow through the Cisco CRS-1 line card and switching fabric to isolate and resolve fault conditions
- Describe emergency recovery procedures to perform operating system, system configuration, and password recovery on Cisco IOS XR Software routers
- Use show commands to trace packet flow through the Cisco XR 12000 line card and switching fabric to isolate and resolve fault conditions

Recommended for:

This course is intended for network professionals (including designers and implementers), network operations center (NOC) personnel, and support staff who are involved with the deployment, operations, maintenance, and troubleshooting of Cisco routers that run the Cisco IOS XR Software operating system.

Prerequisites:

Following are the prerequisites for this course.

- Ability to configure Cisco IOS XR Software
- Basic knowledge of the Cisco Carrier Routing System and the Cisco XR 12000 Series Router architecture and operations

These prerequisites may have been met by one of the following:

- Attending [Cisco CRS-1 Essentials](#) course
- Attending [Cisco XR 12000 Series Essentials](#) course
- Attending Introduction to Cisco IOS XR Software course
- At least 6 months of practical experience working with a platform operating with Cisco IOS XR Software