

# **Cisco ASR 9000 Series IOS XR 64-Bit Software Migration and Operational Enhancements (IOSXR211) v1.0 - On Demand**

**Modality: Self-Paced Learning**

**Duration: 40 Hours**

**CLC: 15 Units**

## **Course Information**

### **About this course:**

This course covers two major topics, the architecture and software features of the Cisco IOS XR 64-Bit operating system, and the migration from classic Cisco IOS XR Software to Cisco IOS XR 64-Bit Software. It will also investigate data models and show you how to implement telemetry, model-driven programmability, and application hosting services.

This course will examine the software architecture, boot process, and auto-provisioning of the Cisco IOS XR 64-bit Software. It will also help you learn how to migrate a Cisco Aggregation Services Router (Cisco ASR) 9000 Series router from classic Cisco IOS XR Software to 64-bit Cisco IOS XR Software and install Cisco IOS XR and third-party software packages.

### **Course Objective:**

You will develop the following skills after completing this course

- Migrate a Cisco ASR 9000 Series router from classic Cisco IOS XR Software to Cisco IOS XR 64-bit Software
- Perform and explain Cisco IOS XR 64-bit Software installations
- Configure and describe Cisco IOS XR 64-bit Software features
- Describe the Cisco IOS XR 64-bit Software architecture and Linux system fundamentals
- Describe the major differences on the Cisco ASR 9000 Series routers between classic Cisco IOS XR Software and Cisco IOS XR 64-bit Software

### **These roles will benefit the most from this course:**

- Solutions designers
- System installers, integrators, and administrators
- Network administrators

### **Prerequisite:**

You should have the following knowledge and skills to take full advantage of the course:

- The Introduction to Cisco IOS XR (IOSXR100) course (or equivalent knowledge)
- The Cisco Aggregation Services Router 9000 Series Essentials (ASR9KE) course (or equivalent knowledge)
- Familiarity with implementing routing protocols on Cisco IOS XR based network devices
- Experience working with Cisco IOS XR CLI-based network devices

## **Course Outline:**

### **Software Architecture and Linux Fundamentals**

- Cisco IOS XR 64-Bit Software Fundamentals
- Cisco ASR 9000 Series IOS XR 64-Bit Software vs. Classic 32-Bit Software
- Exploring Linux Fundamentals
- Creating User Profiles

### **Cisco IOS XR 64-Bit Software Installation**

- Examining Resource Allocations and Media Mappings
- Migrating to Cisco IOS XR 64-Bit Software
- Examining the Boot Process
- Performing Disaster Recovery
- Installing Software Packages

### **Cisco IOS XR 64-Bit Software Features**

- Investigating Data Models
- Implementing Telemetry
- Exploring Model-Driven Programmability
- Employing Application Hosting