

Days: 4

Description: The Cisco Prime® Network Registrar (PNR) Version 8.x/9.x instructor-led course provides you with the advanced knowledge and skill sets required to successfully deploy, maintain, and troubleshoot Cisco Prime Network Registrar in a typical network environment. You will learn the fundamental concepts upon which the DHCP and DNS servers are based – this solidifies your understanding of how to troubleshoot and solve problems relating to installation and configuration. You will configure Dynamic Host Configuration Protocol (DHCP) and Domain Name System (DNS) servers. In addition, you will use a system command line interface (CLI) to monitor the health, status, and functionality of DHCP, DNS, Trivial File Transfer Protocol (TFTP), and other servers.

Prerequisites:

The following are the recommended prerequisites for this technical training course:

Students should have foundational knowledge and/or experience with –

- The Internet and IPv4/IPv6
- Cisco IOS Command Line Interface (CLI)

Audience:

This course is designed for technical professionals who need to know how to deploy, maintain, and troubleshoot Cisco Prime Network Registrar in their network environments.

The primary audience for this course includes:

- System engineers and Integrators
- Technical-support personnel
- Channel partners and Resellers

Course Objectives:

After completing this course, the student should be able to:

- Describe the function of the regional Cisco Prime Network Registrar server and local DHCP, authoritative DNS, caching DNS, and TFTP servers
- Configure DHCP servers with class-of-service options for IPv4 and IPv6
- Configure DHCP failover
- Configure PNR authoritative DNS servers
- Configure dynamic DNS and high-availability DNS pairs
- Configure PNR caching DNS servers

CPNR 10.0 – Cisco Prime Network Registrar

OUTLINE:

COURSE OUTLINE (22 MODULES)

- Introduction to Cisco Prime Network Registrar
- Cisco Prime Network Registrar User Interfaces
- Regional Cluster Functions
- Cisco Prime Network Registrar Synchronization and Replication
- Management of Administrators, Groups, and Roles
- DHCP Protocol Review
- DHCPv4 Configuration
- Client Class and Client Configuration
- DHCPv6 Configuration
- DHCP Failover
- DHCP Troubleshooting
- DNS Protocol Overview
- Authoritative DNS
- Dynamic and High-Availability DNS
- Cisco PNR Caching DNS
- DHCP Expressions and Extensions
- Address Space Management and Lease History Reporting
- Cisco PNR Command Line Interface
- SNMP, LDAP, and TFTP Servers
- Cisco PNR Server Database Management
- Migration
- Service Provider Section
- Configuring Dynamic DNS and High-Availability DNS
- Installing a PNR Caching DNS Server
- Using DHCP Extensions and Expressions
- Cisco Prime Network Registrar Database Recovery
- Performing Address Space Management

LAB OUTLINE – VERSION 9.1 (14 LABS)

- Installing Cisco Prime Network Registrar on Linux
- Navigating the Regional GUI
- Using the Cisco Prime Network Registrar CLI
- Configuring Cisco PNR DHCPv4
- Configuring Client Classes and Clients
- Configuring DHCPv6
- Using Cisco Prime Network Registrar DHCP Server Logs
- Configuring DHCP Failover
- Configuring PNR Authoritative DNS