

## CPNR 8.x/9.x - Cisco Prime Network Registrar

### COURSE OVERVIEW:

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.

### WHO WILL BENEFIT FROM THIS COURSE?

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

### 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)

### 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

### COURSE 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

#### **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
- 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

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Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their cloud technology investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

#### **Premiere World Class Instruction Team**

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience.
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

#### **Enhanced Learning Experience**

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

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- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

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- Enthusiastic Student Services team available to answer any questions and ensure a quality training experience