

Course Outline



Tel: +44 (0) 118 979 4000 Fax: +44 (0) 118 979 4000

Email: training@ptr.co.uk Web: www.ptr.co.uk

(SWITCH) Implementing Cisco IP Switched Networks

Course Description:

This course is a component of the Cisco CCNP Routing and Switching curriculum designed to help delegates to configure, and verify the implementation of complex enterprise switching solutions for campus environments using the Cisco Enterprise Campus Architecture.

Upon completion of this course, the delegate will be able to:

- Analyze campus network designs
- Implement VLANs in a network campus
- Implement spanning tree
- Implement inter-VLAN routing in a campus network
- Implement a highly available network
- Implement high-availability technologies and techniques using multilayer switches in a campus environment
- Implement security features in a switched network
- Integrate WLANs into a campus network
- Accommodate voice and video in campus networks

Pre-requisites:

This course is a component of the Cisco CCNP Routing and Switching curriculum designed to help delegates to configure, and verify the implementation of complex enterprise switching solutions for campus environments using the Cisco Enterprise Campus Architecture.

Delegates are required to meet the following pre-requisites:

- Completion of the Cisco ICND Part 1 & 2 courses or equivalent knowledge
- Have a basic knowledge of the Windows operating system

Course Content:

- **Analyzing Campus Network Designs**
- Enterprise Campus Architecture
- Cisco Lifecycle Services and Network Implementation

21a Peach Street Wokingham Berkshire RG40 1XJ

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Registered Office: Grenville Court Britwell Road Burnham Bucks SL1 8DF Company Registered No: 2442290 – VAT registration No:532 1929 56

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- **Implementing VLANs in Campus Networks**
 - Applying Best Practices for VLAN Topologies
 - Configuring Private VLANs (PVLANS)
 - Configuring Link Aggregation with EtherChannel
- **Implementing Spanning Tree**
 - Spanning Tree Protocol (STP) Enhancements
 - STP Stability Mechanisms
- **Implementing Inter-VLAN Routing**
 - Routing Between VLANs
 - Deploying Multilayer Switching with Cisco Express Forwarding
- **Implementing a Highly Available Network**
 - High Availability
 - Implementing High Availability
 - Implementing Network Monitoring
- **Implementing Layer 3 High Availability**
 - Configuring Layer 3 Redundancy with HSRP
 - Configuring Layer 3 Redundancy with VRRP and GLBP
- **Minimizing Service Loss and Data Theft in a Campus Network**
 - Switch Security Issues
 - Protecting Against VLAN Attacks
 - Protecting Against Spoofing Attacks
 - Securing Network Services
- **Accommodating Voice and Video in Campus Networks**
 - Planning for Support of Voice in a Campus Network
 - Integrating and Verifying VoIP in a Campus Infrastructure
 - Working with Specialists to Accommodate Voice and Video on Campus Switches

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- **Integrating Wireless LANs into a Campus Network**
- This course cover the topics required for the switching exam 642-813.
- Comparing WLANs with Campus Networks
- Assessing the Impact of WLANs on Campus Networks
- Preparing the Campus Infrastructure for WLAN

Course Duration:

4 Days

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