Implementing Cisco Switched Networks

Duración: 5 Días Código del Curso: SWITCH

Temario:

This is a five-day course designed to help students prepare to plan, configure, and verify the implementation of complex enterprise switching solutions for campus environments using the Cisco Enterprise Campus Architecture. Hands-on labs are incorporated along with lab debrief sessions to ensure delegates obtain the full benefit from the practice scenarios.

Dirigido a:

This course is intended for Network Professionals who need to implement and support switch based solutions within a given network design using Cisco IOS services and features.

Objetivos:

- **After you complete this course you will be able to:**
- Analyze Campus Network Designs
- Implement VLANs in campus networks
- 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

Prerequisitos:

Attendees should meet the following prerequisites:

- Interconnecting Cisco Network Devices Part 1 (ICND1)
- Interconnecting Cisco Network Devices Part 2 (ICND2)
  Or
- Cisco CCNA Certification Fast Track Programme (CCNABC)

Practical experience in installing, operating and maintaining Cisco routers & switches in an enterprise environment is recommended.

Exámenes y certificación

Recommended preparation for exam(s):

- 642-813 SWITCH - Implementing Cisco Switched Networks

This exam is required for those delegates wishing to achieve either the Cisco Certified Network Professional or the Cisco Certified Design Professional Certifications

Siguientes cursos recomendados:

The following courses are recommended for further study:

ROUTE- Implementing Cisco IP Routing(CCNP,CCDP,CCIP)

TSHOOT- Troubleshooting and Maintaining Cisco IP Networks(CCNP)

ARCH- Designing Cisco Network Architectures (CCDP))

Contenido:

Analyzing Campus Network Designs

- Enterprise Campus Architecture
- Cisco Lifecycle and Network Implementation
- Lab 1-1 debrief

Implementing VLANs in Campus Networks

- Applying Best Practices for VLAN Topologies
- Configuring Private VLans
- Configuring Link Aggregation with EtherChannel
- Lab 2-1 debrief
- Lab 2-2 debrief
- Lab 2-3 debrief

Implementing Spanning Tree

- Spanning Tree Protocol Enhancements
- Describing STP Stability Mechanisms
- Lab 3-1 debrief
- Lab 3-2 debrief
- Lab 3-3 debrief

Implementing Inter-VLAN Routing

- Describing Routing Between VLANs
- Deploying Multilayer Switching with Cisco Express Forwarding
- Lab 4-1 debrief
- Lab 4-2 debrief

Implementing a Highly Available Network

- Understanding High Availability
- Implementing High Availability
- Implementing Network Monitoring
- Lab 5-1 debrief

Implementing Layer 3 High Availability

- Configuring Layer 3 Redundancy with HSRP
- Configuring Layer 3 redundancy with VRRP and GLBP
- Lab 6-1 debrief
- Lab 6-2 debrief

Minimizing Service Loss and Data Theft in a campus Network

- Understanding Switch Security Issues
- Protecting Against VLAN Attacks
- Protecting Against Spoof Attacks
- Securing Network Services
- Lab 7-1 debrief

Accomodating 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 Accomodate Voice and Video on campus Switches
- Lab 8-1 debrief

Integrating Wireless LANs into a Campus Network

- Comparing WLANs with Campus Networks
- Assessing the impact of WLANs on Campus Infrastructure
- Preparing the Campus Infrastructure for WLANs
- Lab 9-1 debrief

Labs

- Lab 1-1: New Hire Test
- lab 2-1: Design and implement VLANs, trunks, and EtherChannel
- Lab 2-2: Troubleshoot Common VLAN Configuration and Security Issues
- Lab 2-3: Implement Private VLANs
- Lab 3-1: Implement Multiple Spanning Tree
- Lab 3-2: Implement PVRST+
- Lab 3-3: Troubleshoot Spanning Tree Issues
- Lab 4-1: Implement Inter-VLAN Routing
- Lab 4-2: Troubleshooting Inter-VLAN Routing
- lab 5-1: Implementing High Availability and Reporting in a Network Design
- Lab 6-1: Implement and Tune HSRP
- Lab 6-2: Implementing VRRP
- Lab 7-1: Secure Network Switches to Mitigate Security Attacks
- Lab 8-1: Plan implementation and Verification of VoIP in a Campus Network
- Lab 9-1: Integrating Wireless in the Campus

Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

info.cursos@globalknowledge.es

www.globalknowledge.es

Global Knowledge Network Spain, C/ Retama 7, 6ª planta, 28045 Madrid