Junos Enterprise Switching (ELS)

Learn via: **Classroom**

Duration: **2 Gün**

https://bilginc.com/tr/egitim/junos-enterprise-switching-els-3032-egitimi/

Overview

Junos Enterprise Switching is a two-day course that provides students with introductory switching knowledge and configuration examples. This course includes an overview of switching concepts and operations, virtual LANs (VLANs), the Spanning Tree Protocol (STP), port and device security features, and high availability (HA) features.

Through demonstrations and hands-on labs, students will gain experience in configuring and monitoring the Junos OS and in monitoring device operations.

Prerequisites

- Students should have basic networking knowledge and an understanding of the Open Systems Interconnection (OSI) reference model and the TCP/IP protocol suite.

- Students should also attend the 'Introduction to the Junos Operating System' (IJOS) and the 'Junos Routing Essentials' (JRE) courses prior to attending this

Participants

- This course benefits individuals responsible for configuring and monitoring EX Series switches.

What You Will Learn

- List the benefits of implementing switched LANs.
- Describe transparent bridging concepts and operations.
- Describe terms and design considerations for switched LANs.
- List enterprise platforms that support Layer 2 switching.
- Configure interfaces for Layer 2 switching operations.
- Display and interpret the Ethernet switching table.
- Explain the concept of a VLAN.
- Describe access and trunk port modes.
- Configure and monitor VLANs.
- Describe voice VLAN and native VLAN concepts.
- Explain inter-VLAN routing operations.
- Configure and monitor inter-VLAN routing.
- Explain when a spanning tree is required.
- Describe STP and Rapid Spanning Tree Protocol (RSTP) operations.
- List some advantages of using RSTP over STP.
- Configure and monitor RSTP.
- Describe the bridge protocol data unit (BPDU), Loop, and Root protection features.
- Configure and monitor the BPDU, Loop, and Root protection features.
- List and describe various port security features.
- Configure and monitor port security features.
- Describe the storm control feature.
- Configure and monitor storm control.
- Describe firewall filter support for EX Series Ethernet Switches.
- Implement and monitor the effects of a firewall filter.
- List and describe some features that promote high availability.
- Configure and monitor high availability features.
- Describe the basic concepts and operational details of a virtual chassis.
- Implement a virtual chassis with multiple EX4200 switches.

Outline

Day 1

Chapter 1: Course Introduction

Chapter 2: Layer 2 Switching

- Ethernet Bridging Basics
- Terminology and Design Considerations
- Overview of Enterprise Switching Platforms
- Enabling and Monitoring Layer 2 Switching Operations
- Lab 1: Implementing Layer 2 Switching

Chapter 3: Virtual Networks

- Overview of VLANs
- Configuring and Monitoring VLANs
- Voice VLAN
- Native VLAN
- Routed VLAN Interfaces
- Lab 2: Implementing Virtual Networks

Chapter 4: Spanning Tree

- Spanning Tree Protocol
- Rapid Spanning Tree Protocol
- Configuring and Monitoring STP and RSTP
- Protection Features: BPDU Protection
- Protection Features: Loop Protection
- Protection Features: Root Protection
- Lab 3: Implementing Spanning Tree

Day 2

Chapter 5: Port Security

- MAC Limiting
- DHCP Snooping
- Dynamic ARP Inspection (DAI)
- IP Source Guard
- Lab 4: Implementing Port Security

Chapter 6: Device Security and Firewall Filters

- Storm Control
- Firewall Filters
- Lab 5: Implementing Storm Control and Firewall Filters

Chapter 7: High Availability

- Overview of High Availability Networks
- Link Aggregation Groups
- Redundant Trunk Groups
- Lab 6: Configuring LAGs and RTG
- Overview of Virtual Chassis
- Configuring and Monitoring a Virtual Chassis
- Lab 7: Implementing a Virtual Chassis System