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## Advanced Junos Enterprise Switching Troubleshooting

**Duración: 1 Días**    **Código del Curso: AJEXT**

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### Temario:

This one-day course is designed to provide students with information about troubleshooting EX Series hardware, the Junos operating system, and more obscure problems like packet loss and latency, Virtual Chassis, spanning tree protocols, Q-in-Q tunneling, port security features, multicast, and class of service. Students will gain experience in monitoring and troubleshooting these topics through demonstration as well as hands-on labs. The course exposes students to common troubleshooting commands and tools used to troubleshoot various intermediate to advanced issues.

This course uses Juniper Networks EX Series Switches for the hands-on component, but the lab environment does not preclude the course from being applicable to other Juniper hardware platforms running the Junos OS. This course is based on Junos OS Release 12.3R1.7.

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### Dirigido a:

**The primary audiences for this course are the following:** Individuals responsible for configuring and monitoring devices running the Junos

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### Objetivos:

- **After successfully completing this course, you should be able to:**
  - Determine the right questions to ask when troubleshooting an issue.
  - Identify general outputs and the type of information found in outputs.
  - Simplify a complex network and recreate an issue in the lab environment.
  - Describe packet loss in a network.
  - List the general chassis components.
  - Identify different methods for troubleshooting major chassis components.
  - Troubleshoot redundant Routing Engine and Control Board communication.
  - Isolate problems with interfaces.
  - Troubleshoot IPv4 interfaces.
  - Identify an issue with software and the process of events to recreate the issue.
  - Define a problem report (PR) and identify relevant information contained in a PR.
  - Find relevant topics within the Juniper Networks Knowledge Base.
  - Verify and troubleshoot Spanning Tree Protocol (STP).
  - Verify and troubleshoot Rapid Spanning Tree Protocol (RSTP).
  - Verify and troubleshoot Multiple Spanning Tree Protocol (MSTP).
  - Verify and troubleshoot VLAN Spanning Tree Protocol (VSTP).
  - Verify and troubleshoot Q-in-Q tunneling.
  - Verify and troubleshoot port authentication and security.
  - Verify and troubleshoot multicast.
  - Verify and troubleshoot class of service (CoS).
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### Prerequisites:

**The following are the prerequisites for this course:**

- Junos Troubleshooting in the NOC (JTNOG); and
  - Advanced Junos Switching (AJEXT).
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## Contenido:

### Day 1

Chapter 1: Course Introduction

Chapter 2: Advanced Troubleshooting Methodology

- The Troubleshooting Process
- Gathering Relevant Details
- Reproducing a Problem in a Lab Environment
- Root Cause Analysis
- Troubleshooting Packet Loss
- Troubleshooting Latency
- Troubleshooting Packet Loss Lab

Chapter 3: Hardware and Interface Troubleshooting

- General Chassis Components
- Redundancy
- Hardware Case Study
- Interface Overview
- General Interfaces
- Layer 3
- Interface Case Study
- Troubleshooting Interfaces Lab

Chapter 4: Troubleshooting Software

- Identifying the Problem
- PR Searches
- KB Searches
- Identifying Workarounds and Permanent Fixes
- Case Studies

Chapter 5: Troubleshooting Spanning Tree Protocols

- Spanning Tree Protocols Overview
- STP
- RSTP
- MSTP
- VSTP
- Troubleshooting Spanning Tree Protocols Lab

Chapter 6: Troubleshooting Port Security

- Port Security Features
- Authentication and Access Control
- Troubleshooting Port Security Lab

Chapter 7: Troubleshooting Advanced Features

- Q-in-Q Tunneling
- Multicast
- Class of Service
- Troubleshooting Advanced Features Lab

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## Información Adicional:

### Level

Advanced Junos Enterprise Switching Troubleshooting is an advanced-level course.

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## Más información:

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

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