Course No: (TWI-JUN-JRE)
Length: One day

About this Course

This one-day course provides students with foundational routing knowledge and configuration examples and includes an overview of general routing concepts, routing policy and firewall filters, and class of service (CoS). This course is based on Junos operating system Release 10.3R1.9.

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

Objectives

After successfully completing this course, you should be able to:

- Explain basic routing operations and concepts.
- View and describe routing and forwarding tables.
- Configure and monitor static routing.
- Configure and monitor OSPF.
- Describe the framework for routing policy and firewall filters.
- Explain the evaluation of routing policy and firewall filters.
- Identify instances where you might use routing policy.
- Write and apply a routing policy.
- Identify instances where you might use firewall filters.
- Write and apply a firewall filter.
- Describe the operation and configuration for unicast reverse path forwarding (RPF).
- Explain the purpose and benefits of CoS.
- List and explain the various components of CoS.
- Implement and verify proper operation of CoS.

Intended Audience

This course benefits individuals responsible for configuring and monitoring devices running the Junos OS.

Course Level

JRE is an introductory-level course.

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) course prior to attending this class.

Course Contents

Day 1

Chapter 1: Course Introduction

Chapter 2: Routing Fundamentals

- Routing Concepts: Overview of Routing
- Routing Concepts: The Routing Table
- Routing Concepts: Routing Instances
- Static Routing
- Dynamic Routing
- Lab 1: Routing Fundamentals

Chapter 3: Routing Policy and Firewall Filters

- Routing Policy Overview
- Case Study: Routing Policy
- Lab 2: Routing Policy
- Firewall Filters Overview
- Case Study: Firewall Filters
- Unicast Reverse-Path-Forwarding Checks
- Lab 3: Firewall Filters

Chapter 4: Class of Service

- CoS Overview
- Traffic Classification
- Traffic Queuing
- Traffic Scheduling
- Case Study: CoS
- Lab 4: Class of Service