

# XJRoute Training

Training delivered by Xperts – Whether at the training center or at your own premises, whether it is training-on-the-job as part of a project or special training tailored to your requirements.

## Course description:

XJRoute training covers the operation, configuration and troubleshooting of Juniper M / T series and MX series routers. It covers the basic configuration of JUNOS™ as well as the functioning and implementation of routing protocols on Juniper routers.

The 5-day course contains lab exercises where theory can be put into practice. Each participant works on his own router and can carry out a multitude of configuration steps, from basic configuration through to complex network topologies.

To take part in the XJRoute training participants should be familiar with the TCP/IP family of protocols and have some basic knowledge of how routing protocols work. Some experience with the configuration of routers supplied by other manufacturers would be helpful but not required.

## Detail:

### JUNOS Routing Platform

- JUNOS Routing Platform Hardware Overview
- Platform Architecture and Components
- Packet Flow and ASIC Functionality

### JUNOS Software CLI

- Access to the JUNOS CLI
- CLI Operational Mode and Configuration Mode
- JUNOS Software Overview
- Software Installation
- Initial System Configuration

### Interface Configuration and Troubleshooting

- Interface Configuration Overview

### Protocol Independent Routing Properties

- JUNOS Software Routing Tables and Route Selection Process
- Static Routes
- Aggregate and Generated Routes
- Martian Routes

### Routing Policy

- Policy Overview
- Match Conditions and Route Manipulation Actions
- Route Filters
- Applying Policy

### OSPF Operation, Configuration and Troubleshooting

- OSPF Protocol Overview
- Adjacency Formation and DR Election
- OSPF Multiarea Operation
- Stub Areas and Summarization
- Configuring, Monitoring and Troubleshooting OSPF Operation

### IS-IS Operation, Configuration and Troubleshooting

- IS-IS Overview
- IS-IS PDUs
- Multiarea IS-IS
- Route Leaking
- Configuration and Monitoring IS-IS Operation

### Border Gateway Protocol Operation, Configuration and Troubleshooting

- BGP Protocol Overview
- BGP Attributes
- BGP Route Selection
- Route Reflection and Confederations
- Configuring and Monitoring BGP in JUNOS Software

### Firewall Filters

- Overview of Firewall Filter Syntax
- Match Conditions and Filter Actions
- Applying Firewall Filters

### Multicast Theory and Configuration

- Basic Concepts of IP Multicast
- Internet Group Membership Protocol (IGMP)
- Multicast Routing and Protocol Independent Multicast (PIM)
- Configuring IP Multicast