

Advanced Junos Troubleshooting (AJT)

Duration: 3 Days **Course Code: JUN_AJT** **Delivery Method: Virtual Learning**

Overview:

This three-day course provides students with the knowledge to troubleshoot switching, routing, and security features.

This course builds off the Juniper Technical Support Fundamentals (JTSF) and Junos Troubleshooting (JT) courses and helps network engineers further their network troubleshooting capabilities.

Key topics include troubleshooting dynamic routing protocols such as OSPF, IS-IS, BGP, switching protocols, Ethernet VPN–Virtual Extensible LAN (EVPN-VXLAN) network, MPLS, multicast, class of service (CoS), stateful firewall features, IPsec VPNs (site-to-site and remote access), chassis clusters, next-generation firewall features, and vSRX.

The course is based on Junos OS Release 23.1R1.

This is an advanced level course.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

This course benefits individuals responsible for troubleshooting Juniper devices running Junos OS, which includes network operators, engineers, administrators, support personnel, and reseller support personnel.

Objectives:

- After successfully completing this course, you should be able to:
- • Troubleshoot problems with OSPF routing protocol.
- • Troubleshoot problems with IS-IS routing protocol.
- • Troubleshoot problems with BGP routing protocol.
- • Troubleshoot routing loops and route oscillations.
- • Troubleshoot problems with switching protocols.
- • Troubleshoot an EVPN-VXLAN setup.
- • Demonstrate the ability to troubleshoot MPLS.
- • Demonstrate the ability to troubleshoot native multicast.
- • Demonstrate the ability to troubleshoot CoS.
- • Troubleshoot stateful firewall inspection.
- • Troubleshoot site-to-site IPsec VPNs.
- • Troubleshoot remote access VPNs using Juniper Secure Connect.
- • Troubleshoot chassis clusters.
- • Troubleshoot next-generation firewall features.
- • Troubleshoot vSRX.

Prerequisites:

Completion of the Junos Troubleshooting course, or equivalent experience.

Follow-on-Courses:

Delegates will receive e-kit courseware.

Content:

Day 1	<ul style="list-style-type: none">• Implement monitoring and troubleshoot Layer 2 networks	Troubleshooting IPsec VPNs
Introduction	Lab 5: Troubleshooting Switching Protocols	<ul style="list-style-type: none">• Describe general troubleshooting for IPsec VPNs
Troubleshooting OSPF	Troubleshooting EVPN-VXLAN network	<ul style="list-style-type: none">• Describe how to troubleshoot IKE Phase 1 and Phase 2
<ul style="list-style-type: none">• Troubleshoot OSPF adjacencies	<ul style="list-style-type: none">• Verify EVPN-VXLAN related configuration and run time issues	<ul style="list-style-type: none">• Configure and analyze logging for IPsec VPNs
<ul style="list-style-type: none">• Troubleshoot OSPF inconsistencies	Lab 6: Troubleshooting EVPN-VXLAN	<ul style="list-style-type: none">• Examine IPsec troubleshooting case studies
Lab 1: Troubleshooting OSPF	Troubleshooting MPLS	Lab 11: Troubleshooting IPsec VPNs
Troubleshooting IS-IS	<ul style="list-style-type: none">• Troubleshoot RSVP and LDP LSPs	Troubleshooting Chassis Clusters
<ul style="list-style-type: none">• Troubleshoot IS-IS adjacencies	Lab 7: Troubleshooting MPLS	<ul style="list-style-type: none">• Troubleshoot chassis clusters
Lab 2: Troubleshooting IS-IS	Troubleshooting Multicast	<ul style="list-style-type: none">• Review chassis cluster case studies
Troubleshooting BGP	<ul style="list-style-type: none">• Troubleshoot PIM sparse mode operation	Lab 12: Troubleshooting Chassis Clusters
<ul style="list-style-type: none">• Troubleshoot BGP neighbors	Lab 8: Troubleshooting Multicast	Troubleshooting Next-Generation Firewall Features
<ul style="list-style-type: none">• Troubleshoot BGP route advertisements	Troubleshooting CoS	<ul style="list-style-type: none">• Troubleshoot AppSecure services
Lab 3: Troubleshooting BGP	<ul style="list-style-type: none">• Perform class of service troubleshooting	Lab 13: Troubleshooting Next-Generation Firewall Features
Troubleshooting Routing Loops and Route Oscillations	Lab 9: Troubleshooting CoS	Troubleshooting vSRX
<ul style="list-style-type: none">• Troubleshoot routing loops and route oscillations	Day 3	<ul style="list-style-type: none">• Describe steps used to troubleshoot vSRX deployments
Lab 4: Troubleshooting Routing Loops and Route Oscillations	Troubleshooting Stateful Firewall Security	Lab 14: Troubleshooting vSRX
Day 2	<ul style="list-style-type: none">• Troubleshoot traffic flows through a stateful firewall	
Troubleshooting Switching Protocols	Lab 10: Troubleshooting Stateful Firewall Security	

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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