
Juniper Networks Design-WAN

Varighet: 5 Days Kurskode: JND-WAN

Beskrivelse:

This five-day course is designed to cover best practices, theory, and design principles for Wide Area Networks (WAN) design including WAN interconnects, security considerations, virtualization, and management/operations. This course covers both service provider and enterprise WAN design.

Målgruppe:

This course is targeted specifically for those who have a solid understanding of operation and configuration and are looking to enhance their skill sets by learning the principles of WAN design.

Agenda:

■ **After you complete this course you will be able to:**

- Describe high level concepts about the different WAN architectures
 - Identify key features used to interconnect WANs
 - Describe key high level considerations about securing and monitoring a WAN deployment
 - Outline high level concepts for implementing WANs
 - Explain various methods of WAN connectivity
 - Describe basic MPLS concepts as they are related to WANs
 - Identify basic Ethernet concepts as they are related to WANs
 - Describe key concepts of network availability
 - Explain high availability features and protocols
 - Describe the key aspects of class of service
 - Describe how core WAN technologies are used to solve specific problems facing network designers
 - Discuss core routing requirements
 - Explain how to design a high performance MPLS WAN core
 - Define CoS requirements for the WAN core
 - Discuss BGP peering and path selection
 - Design MPLS Layer 2 and Layer 3 services
 - Design metro Ethernet networks
 - Understand role of class of service in provider edge
 - Describe Next-generation MVPNs
 - Explain how enterprise WAN technologies are used to solve specific problems facing network designers
 - Outline various solutions regarding campus and branch WANs
 - Explain how data centers are interconnected through WANs
 - Identify various solutions regarding data center WAN interconnection
 - Describe the benefits and use cases for EVPN
 - Describe security concepts regarding WANs
 - Explain the differences between LAN security concepts and WAN security concepts
 - Explain VPN-related concepts regarding WANs
 - Describe methods to manage WANs
 - Discuss key concepts related to WAN management
 - Explain how virtualization and SDN can be leveraged in the WAN
 - Describe various SDN products and how they are used in the WAN
 - Describe MX, SRX, T, PTX, ACX, QFX, EX, and NFX Series devices and the basics of how they relate to WAN solutions
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Forkunnskaper:

Test og sertifisering

Attendees should meet the following prerequisites:

- Knowledge of routing and switching architectures and protocols.
- Knowledge of Juniper Networks products and solutions.
- Understanding of infrastructure security principles.
- Juniper Networks Design Fundamentals (JNDF)
- JNDF - Juniper Networks Design Fundamentals

- This course is recommended training for the Juniper Networks Certified Design Specialist WAN (JNCDS-WAN) exam

Innhold:

Course Introduction

Overview of WAN Design

- WAN Design Overview
- WAN Domains
- Management, Operations, and Security
- Implementation Considerations

WAN Connectivity

- Public and Private
- Service Provider
- Enterprise

Network Availability and Traffic Prioritization

- Network Availability
- Class of Service
- Lab: Network Availability and CoS Design

Service Provider Core WAN

- WAN Core Overview
- Core Routing
- MPLS Design
- Class of Service Considerations
- Lab: WAN Core Design

Service Provider Edge WAN

- Provider Edge
- Lab: Service Provider Edge—VPN Design
- Access and Aggregation Edge
- Services
- Class of Service Considerations
- Multicast
- Lab: Service Provider Edge—Services Design

Enterprise WAN

- Enterprise WAN Overview
- WAN Topologies
- Campus and Branch
- Class of Service Considerations
- Large Enterprise Designs
- Lab: Enterprise WAN Design

Data Center WAN

- WAN Overview
- EVPN
- Lab: Data Center WAN Design

WAN Security

- Security Overview
- WAN Versus LAN
- Service Provider Core WAN Security
- Service Provider Edge WAN Security
- Enterprise WAN Security
- Lab: Security Design

WAN Management

- Best Practices and Considerations
- OoB Management Design
- Junos Space
- Juniper WAN Automation
- Lab: WAN Management Design

WAN Virtualization and SDN

- SDN Overview
- NorthStar
- Contrail
- SD-WAN
- Lab: SDN Design

WAN Device Portfolio

- Platform and Junos Overview
- MX Series
- SRX Series
- PTX and T Series
- ACX Series
- QFX Series
- EX Series
- NFX Series

Ytterligere informasjon:

For mer informasjon eller kursbooking, vennligst ring oss 22 95 66 00

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