

Implementing Secure Converged Wide Area Networks

Cursusduur: 5 Dagen **Cursuscode: ISCW**

Beschrijving:

This course will introduce delegates to techniques and features for enabling or enhancing WAN and remote access solutions. The course focuses on using one or more of the available WAN connection technologies for remote access between enterprise sites. Key topics included are cable-modems and Digital Subscriber Line (DSL) with Network Address Translation (NAT), Multi Protocol Label Switching (MPLS) virtual private networks (VPNs), and network security using VPNs with IPsec encryption and Internet Key Exchange (IKE) keys. Delegates will be able to secure the network environment using existing Cisco IOS security features, and configure the three primary components of the Cisco IOS Firewall Feature set (Firewall, Intrusion Prevention System [IPS], and Authentication, Authorization, and Accounting [AAA]). This task-oriented course teaches the knowledge and skills needed to secure Cisco IOS router networks using features and commands in Cisco IOS software, and using a router configuration application.

Doelgroep:

This course is required for delegates looking to achieve the Cisco CCNP®, Certification, as well as network administrators and technicians responsible for implementing and troubleshooting complex routed network environments.

Doelstelling:

- **After you complete this course you will be able to:**
- Describe the remote connectivity requirements for secured access and explain the alignment of these requirements with Cisco network architectures
- Describe and implement teleworker broadband connectivity
- Implement and verify frame mode MPLS
- Describe and configure a site-to-site IPsec VPN
- Describe and configure Cisco device hardening
- Describe and configure IOS firewall features

Vereiste kennis en vaardigheden:

Attendees should meet the following prerequisites:

- [ICND1](#) Interconnecting Cisco Network Devices Part 1
- [ICND2](#) Interconnecting Cisco Network Devices Part 2
- Or
- [CCNABC](#) Cisco CCNA Certification Fast Track Programme

Examens en certificering:

Recommended preparation for exam(s):

- [642-825](#) ISCW - Implementing Secure Converged Wide Area Networks

This exam is required for those delegates wishing to achieve the Cisco Certified Network Professional Certification

Vervolg cursussen:

The following courses are recommended for further study:

- BCMSN Building Cisco Multilayer Switched Networks (CCNP,CCDP)
- ONT Optimizing Converged Cisco Networks (CCNP)
- BSCI Optimizing Converged Cisco Networks (CCNP)

Cursusinhoud:

Describe Network Requirements

- Describing Network Requirements

Connect Teleworkers

- Describing Topologies for Facilitating Remote Connections
- Describing Cable Technology
- Describing DSL Technology
- Configuring the CPE as the PPPoE or PPPoA Client
- Verifying Broadband ADSL Configurations

Frame Mode MPLS Implementation

- Introducing MPLS Networks
- Assigning MPLS Labels to Packets
- Implementing Frame Mode MPLS
- Describing MPLS VPN Technology

IPsec VPNs

- Understanding IPsec Components and IPsec VPN Features
- Implementing Site-to-Site IPsec VPN Operations
- Configuring IPsec Site-to-Site VPN Using SDM
- Configuring GRE Tunnels over IPsec
- Configuring High Availability Options
- Configuring Cisco Easy VPN and Easy VPN Server Using SDM
- Implementing the Cisco VPN Client

Cisco Device Hardening

- Mitigating Network Attacks
- Disabling Unused Cisco Router Network Services and Interfaces
- Securing Cisco Router Installations and Administrative Access
- Mitigating Threats and Attacks with Access Lists
- Securing Management and Reporting Features
- Configuring AAA on Cisco Routers

Cisco IOS Threat Defense Features

- Introducing the Cisco IOS Firewall
- Implementing Cisco IOS Firewalls
- Introducing Cisco IOS IPS
- Configuring Cisco IOS IPS

Labs

- Lab 3-1: Configuring Frame Mode MPLS
- Lab 4-1: Configuring Site-to-Site IPsec VPNs
- Lab 4-2: Configuring GRE Tunnels over IPsec Using SDM
- Lab 4-3: Configuring IPsec VPN to Back Up a WAN Connection
- Lab 4-4: Configuring Cisco Easy VPN Server Using SDM
- Lab 5-1: Securing Cisco Routers
- Lab 5-2: Securing Cisco Router Management
- Lab 5-3: Configuring AAA Login Authentication and Exec Authorization on Cisco Routers
- Lab 6-1: Configuring a Cisco IOS Firewall
- Lab 6-2: Configuring Cisco IOS IPS
- Lab 6-3: Troubleshooting Security

Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

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