TECHLAN

INTERCONNECTING CISCO NETWORKING DEVICES (CCNAX)

ACADEMY

DATA: Da confermare   **CONTATTO: academy@techlan.it**   **PREZZO: Richiedi quotazione**

OBIETTIVI DEL CORSO:

Questo è un corso intensivo relativo ai percorsi formativi *Interconnecting Cisco Networking Devices, Part 1 (ICND1)* e *Interconnecting Cisco Networking Devices, Part 2 (ICND2)*. Gli studenti apprenderanno come installare, gestire, configurare e testare reti IPv4 e IPv6, configurare LAN switch, configurazione router IP, connessione a una WAN e l'identificazione delle minacce alla sicurezza. Durante il corso verranno evidenziati topics per un corretto troubleshooting delle reti locali e ROBO (Remote Office Branch Office).

Al termine del corso saprai come:
- Deploy, gestione e troubleshooting di reti di medie dimensioni e connessioni WAN
- Implementazione Network Security
- Descrivere tecnologie come IoE, IoT, IWAN e SDN.
- Creazione di network LAN
- Gestire le connettività Internet
- Creare network di medie dimensioni composte da switch, VLAN, trunking e spanning tree, ecc…
- Eseguire un corretto troubleshooting su connettività IP
- Configurare e risolvere le problematiche di EIGRP in un ambiente IPv4 e IPv6
- Configurare e risolvere le problematiche OSPF in un ambiente IPv4 e IPv6
- Analizzare le caratteristiche, le funzioni e i componenti di una WAN
- Gestire QoS, Virtualization e servizi cloud relativi agli apparati di rete WAN, Core ed Access

PREREQUISITI:

Si raccomanda, ma non è obbligatorio, che i partecipanti abbiano i seguenti prerequisiti:

- Conoscenza informatica di base
- Conoscenza di base dei sistemi operativi
- Conoscenza di base IP address
- Conoscenza di base delle reti
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Propedeutico all'ESAME:
200-125 CCNA

A CHI E INDIRIZZATO:
Network administrators
Network support engineers
Network engineer associate
Network specialist
Network analyst
Studenti che iniziano il percorso CCNA Routing

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CISCO PARTNER
Registered Partner

CONTENUTO DEL CORSO:

MODULO 1: Building a Simple Network
Exploring the Functions of Networking
Understanding the Host-to-Host Communications Model
Introducing LANs
Operating Cisco IOS Software
Starting a Switch
Understanding Ethernet and Switch Operation
Troubleshooting Common Switch Media Issues

MODULO 2: Establishing Internet Connectivity
Understanding the TCP/IP Internet Layer
Understanding IP Addressing and Subnets
Understanding the TCP/IP Transport Layer
Exploring the Functions of Routing
Configuring a Cisco Router
Exploring the Packet Delivery Process
Enabling Static Routing
Learning Basics of ACL
Enabling Internet Connectivity

MODULO 3: Summary Challenge
Establish Internet Connectivity
Troubleshoot Internet Connectivity

MODULO 4: Implementing Scalable Medium Sized Network
Implementing and Troubleshooting VLANs and Trunks
Building Redundant Switched Topologies
Improving Redundant Switched Topologies with EtherChannel
Routing Between VLANs
Using a Cisco IOS Network Device as a DHCP Server
Understanding Layer 3 Redundancy
Implementing RIPv2

MODULO 5: Introducing IPv6
Introducing Basic IPv6
Understanding IPv6 Operation
Configuring IPv6 Static Routes

MODULO 6: Troubleshooting Basic Connectivity
Troubleshooting IPv4 Network Connectivity
Troubleshooting IPv6 Network Connectivity

MODULO 7: Implementing Network Device Security
Securing Administrative Access
Implementing Device Hardening
Implementing Advance Security

MODULO 8: Implementing an EIGRP-Based Solution
Implementing EIGRP
Implementing EIGRP for IPv6

MODULO 9: Summary Challenge
Troubleshooting a Medium-Sized Network
Troubleshooting Scalable Medium-Sized Network

MODULO 10: Implement a Scalable OSPF-Based Solution
Understanding OSPF
Multiarea OSPF IPv4 Implementation
Implementing OSPFv3 for IPv6
Troubleshooting Multiarea OSPF

MODULO 11: Implementing Wide-Area Networks
Understanding WAN Technologies
Understanding Point-to-Point Protocols
Configuring GRE Tunnels
Configuring Single-Homed EBGP

MODULO 12: Network Device Management
Implementing Basic Network Device Management
Evolution of Intelligent Networks
Introducing QoS
Managing Cisco Devices - Licensing

MODULO 13: Summary Challenge
Troubleshooting Scalable Multiarea Network
Implementing and Troubleshooting Scalable Multiarea Network

LABS:

Lab 1. Configure IPv6 Static Routes
Lab 2. Get Started with Cisco CLI
Lab 3. Perform Basic Switch Configuration
Lab 4. Observe How a Switch Operates
Lab 5. Troubleshoot Switch Media and Port Issues
Lab 6. Inspect TCP/IP Applications
Lab 7. Start with Cisco Router Configuration
Lab 8. Configure Cisco Discovery Protocol
Lab 9. Configure Default Gateway
Lab 10. Exploration of Packet Forwarding
Lab 11. Configure and Verify Static Routes
Lab 12. Configure and Verify ACLs
Lab 13. Configure a Provider-Assigned IP Address
Lab 14. Configure Static NAT
Lab 15. Configure Dynamic NAT and PAT
Lab 16. Troubleshoot NAT
Lab 17. Configure VLAN and Trunk
Lab 18. Configure a Router on a Stick
Lab 19. Configure a Cisco Router as a DHCP Server
Lab 20. Troubleshoot DHCP Issues
Lab 21. Configure and Verify RIPv2
Lab 22. Troubleshoot RIPv2
Lab 23. Enhance Security of Initial Configuration
Lab 24. Limit Remote Access Connectivity
Lab 25. Configure and Verify Port Security
Lab 26. Configure and Verify NTP
Lab 27. Configure Syslog
Lab 28. Configure Basic IPv6 Connectivity