Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå oss här

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Engineering Cisco Meraki Solutions

CODE:	LENGTH:	PRICE:
CIS_ECMS	32 Hours (4 days)	kr45,450.00

Description

The Engineering Cisco Meraki Solutions (ECMS) training helps you gain the core knowledge and skills needed to deploy, plan, design, implement, and operate complex Cisco Meraki solutions. This training combines Engineering Cisco Meraki Solutions Part 1 and 2 trainings. This training helps prepare you for roles focused on implementing, securing, and managing Cisco® Meraki™ based networks from a centralized dashboard. Topics covered include Cisco Meraki's cloud-based solutions, understanding of network security protocols, design of scalable architectures, and application of troubleshooting strategies.

This training prepares you for the Cisco Meraki Solutions Specialist (ECMS 500-220) v1.0 exam. If passed, you earn the Cisco Meraki Solutions Specialist certification. This training also earns you 24 Continuing Education (CE) credits toward recertification.

Technology areas
• Networking
This training will help you:
• Gain a comprehensive understanding of the Cisco Meraki platform
• Develop expertise in designing, implementing, and securing Cisco Meraki networks
• Operate and manage networks using Cisco Meraki's cloud-based tools and features
• Apply advanced monitoring and troubleshooting techniques
• Prepare for the ECMS 500-220 v1.0 exam
• Earn 24 CE credits toward recertification

Objectives

• Describe Cisco Meraki cloud architecture, administration, and licensing
• Describe the hardware and features of Cisco Meraki product families
• Describe best practices for troubleshooting and when to contact Cisco Meraki support
• Plan new Cisco Meraki architectures and expand existing deployments
• Design the network for scalable management and high availability
• Describe how to automate and scale Cisco Meraki deployments with dashboard tools
• Use dynamic routing protocols to expand networks and improve wide-area network (WAN) performance
• Describe proper quality of service (QoS), policy, and performance-based routing configurations across a Cisco Meraki network and WAN optimization through traffic shaping
• Describe virtual private network (VPN) and WAN topologies and how to integrate them
• Secure, expand, and shape the network
• Implement switched network concepts and practices, and configure guest networks
• Implement wireless configuration practices and concepts
• Describe endpoint management concepts and practices using Cisco Meraki Systems Manager
• Describe physical security concepts and practices
• Gain network insight by monitoring applications
• Describe how to prepare monitoring, logging, and alerting services
• Set up reporting and auditing capabilities in the Cisco Meraki dashboard
• Monitor and troubleshoot issues using Cisco Meraki tools

Audience

This training is designed for anyone seeking the Cisco Meraki Solution Specialist certification. The training provides foundational knowledge and skills to engineer Cisco Meraki solutions, including cloud management, design, implementation, monitoring, troubleshooting, and the comprehensive features of the Cisco Meraki product suite.

The job roles best suited to the material in this training are:
• Consulting Systems Engineers
• Deployment Engineers

• Network Administrators
• Network Engineers
• Network Managers
• Site Reliability Engineers
• Systems Engineers
• Technical Solutions Architects
• Wireless Design Engineers
• Wireless Engineers
• Sales Engineers
• Account Managers

Prerequisites

Before taking this offering, you should have earned a Cisco Certified Networking Associate (CCNA) certification or be familiar with:

General Networking
• Be actively engaged in the design, deployment, scaling, configuration, and management of enterprise networks, IPsec, and associated VPN technologies
• Be experienced with hierarchical network segmentation (access, distribution, and core layer) design and best practices
• Strong fundamental knowledge of internet protocol (IP) addressing and subnetting schemas necessary to build local area networks (LANs)
• A foundational understanding of network authentication, authorization, and accounting services
• Strong fundamental knowledge of dynamic routing protocols with focus and emphasis on open shortest path first (OSPF) and border gateway protocol (BGP)
• A foundational understanding of wired and wireless QoS mechanisms, packet queue operations, and practical implementations
• A foundational understanding of threat modeling concepts and methodologies and the ability to apply them to identify, analyze, and respond to cybersecurity threats
• A foundational understanding of network security controls and protocols, network management best practices, and data security
• Intermediate fundamental knowledge of radio frequency (RF) concepts, terminology, design principles, and practical implementations as they apply to wireless networking and current 802.11 wireless standards
• A foundational understanding of wireless security best practices centered on access control (802.1x) and spectrum security through wireless intrusion detection system (WIDS) and prevention system (WIPS)
• A foundational understanding of standard logging and monitoring protocols with a focus and emphasis on simple network management protocol (SNMP), syslog, and webhooks, and related implementation components or tools
• Be familiar with and have basic knowledge of Application Programming Interface (APIs) and related languages and formats, such as representational state transfer (REST) and JavaScript Object Notation (JSON)

Cisco Meraki Knowledge
• Be able to describe the security, reliability, scalability, and licensing of the Cisco Meraki dashboard cloud architecture, structure, delineation or privileges, overarching administrative processes, and its out-of-band control plane
• Have the knowledge and ability to deploy advanced security features on Cisco Meraki MX security appliances, including intrusion detection/prevention, advanced malware protection (AMP), and Layer 3 and 7 firewall rules
• Fundamental understanding of Auto VPN and its purpose when used in a software-defined, wide-area network (SD-WAN) deployment
• Be experienced at navigating, configuring, and applying configurations to Cisco Meraki MS switches through the virtual stack interface in the dashboard
• Be able to describe the concepts behind a cloud-based wireless local-area network (WLAN) solution and the features that can be delivered, including Layer 7 traffic shaping and various guest access authentication methods
• Fundamental understanding of device profile containerization and remote management capabilities as managed through the Cisco Meraki Systems Manager platform © 2024 Cisco and/or its affiliates. All rights reserved.
• Fundamental understanding of the edge architecture as implemented using Cisco Meraki MV security cameras and its implications for video retention through various configurable options
• Be able to effectively use the live tools and monitoring capabilities of the Cisco Meraki dashboard when troubleshooting device or application performance issues

These skills can be found in the following Cisco Learning Offerings:
• Implementing and Administering Cisco Solutions (CCNA)
• Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)

Programme

• Introducing the Cloud and the Cisco Meraki Dashboard
• Introducing Cisco Meraki Products and Administration
• Introducing Cisco Meraki Troubleshooting
• Planning New Cisco Meraki Architectures and Expanding Existing Deployment
• Designing for Scalable Management and High Availability
• Automating and Scaling Cisco Meraki Deployments

• Designing Routing on the Cisco Meraki Platform
• Introducing QoS and Traffic Shaping Design
• Building VPN and WAN Topologies
• Securing, Expanding, and Shaping the Network
• Introducing Switched Network Concepts and Practices
• Implementing Wireless Configuration Practices and Concepts
• Introducing Endpoint Management Concepts and Practices
• Introducing Physical Security Concepts and Practices
• Gaining Network Insight by Monitoring Applications
• Preparing, Monitoring, Logging, and Alerting Services
• Setting Up Reporting and Auditing Capabilities in the Cisco Meraki Dashboard
• Gaining Visibility and Resolving Issues Using Cisco Meraki Tools
Lab Outline
• Configure the Cisco Meraki Dashboard
• Enable Advanced Features and Optimize Networking
• Troubleshoot the Network Using the Cisco Meraki Dashboard
• Configure Tags, Link Aggregation, Port Mirroring, and High-Density SSIDs
• Configure Routing on the Cisco Meraki Platform
• Configure QoS, Traffic Shaping, and Load Balancing
• Configure Network Security
• Configure Access Policies and Wireless Guest Access
• Configure SSIDs, RF Profiles, and Air Marshal
• Implement Endpoint Management
• Deploy and Configure Physical Security Devices
• Enable Alerts and Configure Monitoring and Reporting
• Troubleshoot a Cisco Meraki Network

Test and Certification

What to expect on the exam Cisco Meraki Solutions Specialist (ECMS 500-220) is a 90-minute exam associated with the Cisco Meraki Solutions Specialist certification.
The exam tests your knowledge and skills to engineer Meraki solutions, including:
• Cloud management
• Design
• Implementing
• Monitoring
• Troubleshooting

Session Dates

På begäran, kontakta oss

Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.