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Engineering Cisco Meraki Solutions (ECMS) V1.0

The **Engineering Cisco Meraki Solutions** 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) exam. If passed, you earn the Cisco Merak Solutions Specialist certification.

This training also earns you 24 Continuing Education (CE) credits towards recertification.

How you'll benefit

This class 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

Use this course towards your Cisco Continuing (CE) Education Credits (24)

Pay by using your Cisco (CLCs) Learning Credits (38) click schedule below

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Price :

$3795.00

Duration :

4 Days

Certification Exam:

500-220

CE Credit: 24

Objective

Upon completing this course, the student will be able to meet these 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

Who Should Attend

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)

The following recommended Cisco offerings may help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)

Course Outline

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Module 1: Introducing the Cloud and the Cisco Meraki Dashboard

Module 2: Introducing Cisco Meraki Products and Administration

Module 3: Introducing Cisco Meraki Troubleshooting

Module 4: Planning New Cisco Meraki Architectures and Expanding Existing Deployment

Module 5: Designing for Scalable Management and High Availability

Module 6: Automating and Scaling Cisco Meraki Deployments

Module 7: Designing Routing on the Cisco Meraki Platform

Module 8: Introducing QoS and Traffic Shaping Design

Module 9: Building VPN and WAN Topologies

Module 10: Securing, Expanding, and Shaping the Network

Module 11: Introducing Switched Network Concepts and Practices

Module 12: Implementing Wireless Configuration Practices and Concepts

Module 13: Introducing Endpoint Management Concepts and Practices

Module 14: Introducing Physical Security Concepts and Practices

Module 15: Gaining Network Insight by Monitoring Applications

Module 16: Preparing, Monitoring, Logging, and Alerting Services

Module 17: Setting Up Reporting and Auditing Capabilities in the Cisco Meraki Dashboard

Module 18: Gaining Visibility and Resolving Issues Using Cisco Meraki Tools

Lab Outline

1. Configure the Cisco Meraki Dashboard
2. Enable Advanced Features and Optimize Networking
3. Troubleshoot the Network Using the Cisco Meraki Dashboard

4. Configure Tags, Link Aggregation, Port Mirroring, and High-Density SSIDs
5. Configure Routing on the Cisco Meraki Platform
6. Configure QoS, Traffic Shaping, and Load Balancing
7. Configure Network Security
8. Configure Access Policies and Wireless Guest Access
9. Configure SSIDs, RF Profiles, and Air Marshal
10. Implement Endpoint Management
11. Deploy and Configure Physical Security Devices
12. Enable Alerts and Configure Monitoring and Reporting
13. Troubleshoot a Cisco Meraki Network