

Administering and Troubleshooting Meraki Full Stack (MX,MS,MR,MV,MI,SM,MT) Technologies (MER-FS-ADMIN)

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This five-day instructor-led Hands-on Meraki Full Stack Course covers MX SDWAN/Security, Meraki and Catalyst Switches, Meraki and Catalyst Access Points, Meraki Smart Camera, Meraki Sensors, and Meraki Systems Manager. Students learn how to deploy, manage, and secure a network infrastructure using Cisco Meraki's integrated Full Stack technologies. This extensive training program addresses the specific challenges and compliance standards administrators face, ensuring that participants can build and maintain a secure, efficient, and resilient network environment.

By the conclusion of this course, participants will be well-equipped with the necessary knowledge and skills to ensure the reliability, security, and efficiency of networks using Cisco Meraki MX Security Appliances, MS and Cisco Catalyst switches, and Meraki Wireless Networks. This includes a comprehensive understanding of how to design, implement, manage, and troubleshoot these networks effectively, making them invaluable assets to their respective agencies or departments.

Why Attend with Current Technologies CLC

- Our Instructors are in 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

Who Should Attend

The primary audience for this course is as follows:

- Network Engineers
- System Administrators:
- IT Professionals
- Technical Support Staff:
- Cisco Certified Professionals

Module 1: Introduction to Meraki

- Why Cisco Meraki?
- Meraki Product Overview
- Meraki Support

Module 2: Meraki Licensing

- Meraki Licensing Overview
- Co-Termination Licensing Overview

Course Duration

5 days

Course Price

\$4,295.00 or 43 CLCs

Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

- Co-Term Licensing in the Dashboard
- Per Device Licensing (PDL) Overview
- PDL in the Dashboard
- Subscription Licensing Overview
- Subscription Licensing in the Dashboard

Module 3: Configuring the Meraki Dashboard

- Security Center
- Configuring Network-Wide Settings
- Network-Wide Administrators & Users
- Network-Wide > Add Devices
- Monitoring Clients
- Group Policy
- Configuring Location / Mapping Devices
- Configuring Templates
- Meraki RADIUS, ISE & Adaptive Policy Overview
- Umbrella Overview
- Meraki App
- Meraki Dashboard, Organizations, and Networks
- Help & Support
- Organizational-Wide Configure Settings
- Configuring Administrators
- Creating Networks & Managing Inventory
- Organization > Overview Page
- Login Attempts
- VPN Status
- Manage Firmware
- Summary Reports
- Organization Summary

Module 4: Meraki MX Security Appliances

- MX Models & Features
- Cellular Capabilities
- Local Status Page
- Initial Setup using the Appliance Status Page
- Addressing & VLANS
- DHCP
- Access Control
- Splash Pages
- Teleworker VPN With MX & MR
- Security Introduction
- Firewall Configuration
- Threat Protection
- Content Filtering
- Meraki SD-WAN with Site-to-Site VPNs
- Configuring Meraki SD-WAN
- Monitor Site-to-Site VPNs
- Meraki SD-WAN & Traffic Shaping
- Routing

- Client VPN
- Active Directory

Module 5: Meraki Switch Overview

- Meraki MS Warm Spare Virtual Router Redundancy Protocol (VRRP)
- Meraki Switch Open Shortest Path First (OSPF)
- Meraki Switch Access Control Lists
- Meraki Switch Access Policies (802.1X)
- Organization-Wide Radius
- Access Policy
- Meraki Switch Port Profiles
- Meraki Switch Port Schedules
- Meraki Switch Staged Upgrades
- VLAN Profiles
- Meraki Switch Overview
- Meraki Switching Portfolio
- Catalyst Meraki 9200/9300 Switches
- Basic Switch Configuration
- Provisioning Switch Stacks
- Meraki Switch Settings
- Configuring Switch Ports
- Link Aggregation
- Mirroring Switch Ports
- DHCP Server Status
- Routing & DHCP
- Meraki Switch Multicast Configuration

Module 6: Meraki Wireless APs

- Configuring SSID Availability
- Configuring Bluetooth Settings
- Configuring Port Profiles
- Wireless RF Radio Settings
- RF Spectrum
- Wireless Threats & Air Marshal
- Location Heatmap
- PCI Report
- Location Analytics
- Access Point Wireless Health Overview
- Wi-Fi Standards & Meraki AP Features
- Meraki WIFI 6 AP Models
- Meraki WIFI 6E Indoor Portfolio
- Meraki Antennas, Power, Mounts, & Accessories
- Wireless Design
- Wireless Configuration
- SSID Configuration with Access Control
- Per SSID - Firewall & Traffic Shaping
- Splash Page Configuration

Module 7: Meraki Troubleshooting Overview

- Troubleshooting Methodology
- Meraki Help and Support
- Configure and Monitor Alerts
- Change Log and Event Log
- Meraki Packet Captures
- Client Troubleshooting
- Meraki MX Troubleshooting
- Meraki MX Tools Tab
- Meraki MS Troubleshooting
- Meraki MS Tools Tab
- Meraki MR Troubleshooting
- Meraki MR Tools Tab

Module 8: Meraki Insight

- Meraki Insight Introduction
- Meraki Insight Licensing
- Meraki Insight Web App Health
- Meraki Insight WAN Health
- Meraki Insight VoIP Health
- MX Thousand Eyes Integration

Module 9: Meraki Gateways MG

- Wireless WAN Capabilities
- Cellular Solutions & MG Portfolio
- MG Design
- MG Appliance Page
- MG Settings

Module 10: Introduction to Meraki MV Cameras

- MV Security Cameras Introduction & Features
- MV Camera Models
- Monitor > Cameras
- Basic Camera Configuration
- MV Camera Profiles
- MV Camera Intelligence Training
- MV Camera - Video Settings
- Viewing Analytics
- MV Video Access
- MV Export
- MV Cameras APIs
- Meraki MV Viewing Applications
- Viewing Meraki MV Video
- Meraki MV Video Wall
- Meraki Vision Portal

Module 11: Meraki Systems Manager

- Systems Manager Tags
- Scopes Using Target Groups

- Configuration Profiles
- Sentry Using Profile Settings
- App Management
- Systems Manager Alerts
- Why use Systems Manager?
- Sentry Overview
- SM Supported Devices & Licenses
- Systems Manager Features
- Creating an EMM Network
- Organizational MDM Settings
- Systems Manager (SM) Configuration
- Enrolling Devices

Module 12: Meraki Sensors

- What is – Meraki Sensors?
- MQTT (Message Queuing Transmit Telemetry) – The IOT Protocol

LAB OUTLINE

- Lab 1-1: Configuring the Meraki Organization
- Lab 1-2: Configuring the Meraki Networks
- Lab 1-3: Creating Meraki Configuration Templates & Configuring Network-Wide Settings
- Lab 1-4: Creating Meraki Group Policies
- Lab 1-5: Basic Configuration of HQ Devices
- Lab 1-6: Basic Configuration of DC Devices
- Lab 1-7: Basic Configuration of Branch 1 Devices
- Lab 1-8: Basic Configuration of Branch 2 Devices
- Lab 1-9: Network Topology
- Lab 2-1: Configuration of HQ MX Appliance
- Lab 2-2: DHCP Configuration
- Lab 2-3: Firewall Configuration
- Lab 2-4: Site-to-Site VPN Configuration
- Lab 2-5: Active Directory Authentication
- Lab 2-6: SD-WAN & Traffic Shaping
- Lab 2-7: Threat Protection

- Lab 2-8: Content Filtering
- Lab 2-9: MX/Z Monitoring and Troubleshooting
- Lab 3-1: Configuring the Meraki Switching
- Lab 3-2: Configuring Switch Ports
- Lab 3-3: Configuring Switch port Captures
- Lab 4-1: Monitoring and Trouble Shooting
- Lab 5-1: Meraki Wireless Basics
- Lab 5-2: Meraki Wireless Radio Settings
- Lab 5-3: Configure the Map & Floor Plans
- Lab 5-4: Configure and Manage Air Marshall
- Lab 5-5: Configure and Manage RF Spectrum
- Lab 5-6: Monitoring and Troubleshooting Meraki Device and Clients
- Lab 5-7: Meraki Wi-Fi 6E Wireless Basics
- Lab 5-8: Meraki Wi-Fi 6E Wireless Radio Settings
- Lab 5-9: Configure and Manage Wi-Fi 6E RF Spectrum
- Lab 6-1: Configuring the Meraki MV Network-Wide Setting
- Lab 6-2: Explore the cameras tab
- Lab 6-3 Meraki Vision Portal
- Lab 7-1: Systems Manager
- Lab 8-1: Bonus Lab: Using Meraki APIs for Configuration and Monitoring switches and Aps