



Administering Meraki MX (SDWAN/Security) Appliances v2.0 (MER-MXSDWAN)

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HAPPENS EVERYDAY!***



Administering Meraki MX (SDWAN/Security) Appliances v2.0 (MER-MXSDWAN)

About this Class

Course Duration

5 Days

Course Price

\$4395.00

45 CLCs

Methods of Delivery

In-Person ILT

Virtual ILT

Onsite ILT

This is a five-day, instructor-led, hands-on training course designed to provide IT professionals with the expertise needed to deploy, manage, secure, and troubleshoot Cisco Meraki MX Security Appliances in modern SD-WAN environments.

This comprehensive course equips participants with the practical skills required to design and support secure, scalable network architectures using the cloud-managed Meraki platform. Students will explore critical features of the Meraki MX including interface configuration, VLANs, SD-WAN routing, VPN design, firewall and threat protection, and directory integration. Through interactive labs and guided instruction, participants gain real-world experience configuring robust, policy-based network security and optimizing WAN performance.

Participants will also develop proficiency in monitoring and troubleshooting Meraki networks using the Meraki Dashboard, allowing for efficient problem resolution and proactive system management. Emphasis is placed on aligning Meraki deployments with organizational security policies and compliance standards for data protection and user access control.

By the end of the course, attendees will be fully prepared to implement and maintain a secure, cloud-managed Meraki MX infrastructure—supporting business continuity, secure remote access, and centralized management at scale.

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How you will benefit

This class will help you:

- Navigate the Meraki Dashboard to configure and manage MX appliances.
- Understand the Meraki MX licensing model and its application in real-world deployments.
- Configure organization-wide and individual network settings to align with enterprise policies

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

Who Should Attend

The job roles best suited to the material in this course are:

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

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Objectives

After taking this course, you should be able to:

- Navigate the Meraki Dashboard to configure and manage MX appliances.
- Understand the Meraki MX licensing model and its application in real-world deployments.
- Configure organization-wide and individual network settings to align with enterprise policies.
- Leverage configuration templates and group policies for scalable network management.
- Deploy and manage MX networks and devices across multiple locations.
- Configure interfaces, IP addressing, and VLANs on Meraki MX devices.
- Design and implement VPNs, including site-to-site and remote access, across MX networks.
- Apply SD-WAN routing policies and traffic shaping to optimize network performance.
- Enforce network security using firewall rules, access controls, and content filtering.
- Enable threat protection features to defend against malware and malicious traffic.
- Integrate with Active Directory, Cisco ISE, and RADIUS for centralized user management.
- Monitor the health and performance of MX appliances and connected clients.
- Troubleshoot client connectivity, device status, and network behavior using Meraki tools.

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Course Outline

Module 0: Introductions

Module 1: Introduction to Meraki

- Lesson 1: Why Cisco Meraki?
- Lesson 2: Meraki Product Overview

Module 2: Meraki MX Licensing

- Lesson 1: Meraki Licensing Overview
- Lesson 2: Co-Termination Licensing Overview
- Lesson 3: Co-Termination Licensing in the Dashboard
- Lesson 4: Per Device Licensing (PDL) Overview
- Lesson 5: PDL in the Dashboard
- Lesson 6: Subscription Licensing Overview
- Lesson 7: Subscription Licensing in the Dashboard

Module 3: Meraki MX Security Appliances

- Lesson 1: MX Models & Features
- Lesson 2: MX Capabilities & Sizing Guidelines
- Lesson 3: MG - Meraki Cellular Gateway
- Lesson 4: Local Status Page

Module 4: Configuring the Meraki Dashboard

- Lesson 1: Meraki Dashboard, Organizations, and Networks
- Lesson 2: Organizational - Wide Configure Settings
- Lesson 3: Configuring Administrators
- Lesson 4: Creating Networks and Managing Inventory
- Lesson 5: Organization > Overview Page
- Lesson 6: Manage MX Firmware
- Lesson 7: Configuring Network-Wide Settings
- Lesson 8: Network-Wide Administrators & Users
- Lesson 9: Network-Wide > Add Devices
- Lesson 10: Group Policy
- Lesson 11: Configuring Location / Mapping Devices
- Lesson 12: Configuring Templates

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Module 5: Meraki MX Configuration

- Lesson 1: Initial Setup using the Appliance Status Page
- Lesson 2: Addressing & VLANS
- Lesson 3: DHCP
- Lesson 4: Teleworker VPN With MX & MR

Module 6: Meraki MX Security Configuration

- Lesson 1: Security Introduction
- Lesson 2: Firewall Configuration
- Lesson 3: Threat Protection
- Lesson 4: Content Filtering

Module 7: MX RADIUS, ISE, AD & Adaptive Policy

- Lesson 1: Cisco Identity Services Engine (ISE)
- Lesson 2: ISE with Meraki
- Lesson 3: ISE Integration with Meraki Switches
- Lesson 4: Cisco TrustSec (Software-Defined Segmentation)
- Lesson 5: Meraki Adaptive Policy
- Lesson 6: ISE Meraki Connector
- Lesson 7: Active Directory Users with Meraki Group Policies

Module 8: Meraki SDWAN Configuration

- Lesson 1: What is Meraki SD-WAN?
- Lesson 2: SD-WAN Concepts
- Lesson 3: Designing SD-WAN Networks
- Lesson 4: Direct Internet Access
- Lesson 5: Configuring Meraki SD-WAN
- Lesson 6: Monitor Site-to-Site VPNs
- Lesson 7: Meraki SD-WAN & Traffic Shaping
- Lesson 8: Data Center Redundancy
- Lesson 9: Routing
- Lesson 10: Meraki & Catalyst SD-WAN

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Module 9: Meraki Integration with Umbrella

- Lesson 1: Meraki Integration with Umbrella
- Lesson 2: Enabling Umbrella (From the Umbrella Dashboard)
- Lesson 3: Enabling Umbrella (From the Meraki Dashboard)
- Lesson 4: Creating an Umbrella Policy (From the Umbrella Dashboard)
- Lesson 5: Applying Umbrella Policies

Module 10: MX Client VPNs

- Lesson 1: L2TP Client VPN Configuration
- Lesson 2: Cisco AnyConnect VPN

Module 11: Meraki IPv6 Configuration

- Lesson 1: Meraki IPv6 Overview
- Lesson 2: IPv6 Design & Deployment
- Lesson 3: Meraki MX IPv6 Configuration
- Lesson 4: MX IPv6 Addressing
- Lesson 5: IPv6 Concentrator Mode
- Lesson 6: IPv6 Security
- Lesson 7: Monitoring and Troubleshooting Meraki IPv6 Networks

Module 12: MX Monitoring

- Lesson 1: Meraki Monitoring Environments
- Lesson 2: Summary Reports
- Lesson 3: Organization Summary
- Lesson 4: Topology
- Lesson 5: Security Center
- Lesson 6: Login Attempts
- Lesson 7: VPN Status
- Lesson 8: Alerts
- Lesson 9: Simple Network Management Protocol (SNMP)
- Lesson 10: Syslog
- Lesson 11: Traffic Analytics
- Lesson 12: Monitoring Client
- Lesson 13: Meraki App

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Module 13: MX Troubleshooting

- Lesson 1: Meraki Troubleshooting Methodology
- Lesson 2: Meraki Help and Support
- Lesson 3: Troubleshooting MX Management Tunnels
- Lesson 4: Troubleshooting a Faulty MX
- Lesson 5: Meraki MX Troubleshooting Tools
- Lesson 6: Change Log and Event Log
- Lesson 7: Meraki Packet Captures
- Lesson 8: Troubleshooting Uplinks to the Dashboard
- Lesson 9: Dashboard Alerts for Device Connectivity
- Lesson 10: Troubleshooting Client Connections

Module 14: MX Insight

- Lesson 1: Meraki Insight Introduction
- Lesson 2: Meraki Insight Licensing
- Lesson 3: Meraki Insight Web App Health
- Lesson 4: Root Cause Analysis for Web App Health
- Lesson 5: Smart Thresholds for Web App Health
- Lesson 6: Meraki Insight WAN Health
- Lesson 7: Meraki Insight VoIP Health
- Lesson 8: Meraki Insight Alerting

Module 15: ThousandEyes and MX

- Lesson 1: Thousand Eyes Introduction
- Lesson 2: MX Thousand Eyes Integration
- Lesson 3: Design & Technical Overview
- Lesson 4: Network Topologies and Deployment Considerations
- Lesson 5: ThousandEyes via Meraki App Platform
- Lesson 6: Enabling & Deploying ThousandEyes on the MX Platform
- Lesson 7: Thousand Eyes Active Application Monitoring
- Lesson 8: Thousand Eyes Internet Outages

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Module 16: Meraki MX APIs and Integrations

- Lesson 1: Meraki API and Integration Overview
- Lesson 2: Meraki API Technologies and Tools
- Lesson 3: Meraki Dashboard API
- Lesson 4: Using Postman with Meraki
- Lesson 5: Meraki Dashboard API Python Library
- Lesson 6: AsyncIO
- Lesson 7: Dashboard APIs for MX
- Lesson 8: API VPN Map
- Lesson 9: Use Case - Pulling Statistics from Meraki Devices
- Lesson 10: Meraki Tools
- Lesson 11: Meraki Action Batches

Module 17: Meraki MX Cloud Integration with VMX

- Lesson 1: Meraki vMX Overview
- Lesson 2: Meraki vMX Sizing
- Lesson 3: NAT Mode on the vMX
- Lesson 4: Deploying VMX to AWS
- Lesson 5: Deploying VMX to GCP
- Lesson 6: Deploying VMX to AZURE
- Lesson 7: Deploying VMX to NFV/ESXi
- Lesson 8: Cloud On-Ramp & Cloud Integrations

Optional Modules

Module A: Secure Connect

- Lesson 1: Meraki Secure Connect Overview
- Lesson 2: Meraki Secure Connect Setup Process

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Course Outline

Cont. Module A

- Lesson 3: Meraki Secure Connect Configuration
- Lesson 4: Meraki Secure Connect Guidelines
- Lesson 5: Sites Integration
- Lesson 6: Policy Best Practice

Module B: Monitoring Cisco XDR

- Lesson 1: Cisco Secure XDR Overview
- Lesson 2: Cisco XDR Telemetry
- Lesson 3: XDR Platform
- Lesson 4: Meraki SD-WAN and XDR
- Lesson 5: Meraki XDR Integration Details
- Lesson 6: XDR Verification & Troubleshooting
- Lesson 7: Viewing and Managing Incidents
- Lesson 8: XDR AI Analytics