

Administering Meraki MS / Catalyst Switches v2.0 (MER-SWITCH)

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This four-day, instructor-led, hands-on course is designed for IT professionals focusing on Meraki-switched networks. It aims to provide participants with a comprehensive understanding and hands-on experience in deploying, managing, and troubleshooting networks that utilize Cisco Meraki MS and Cisco Catalyst switches. The course offers a balanced mixture of theoretical knowledge and practical skills, ensuring it is well-suited for those involved in the intricate aspects of network management and configuration.

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 MS and Cisco Catalyst switches. This includes a comprehensive understanding of how to design, implement, manage, and troubleshoot these networks effectively, making them invaluable assets to their respective departments.

How you'll benefit

This class will help you:

- Utilize Meraki Configuration Templates and Group Policies
- Understand Meraki Switch Fundamental Concepts
- Understand Meraki Network and Device Management
- Learn Understanding of Meraki Switch Fundamental Concepts

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

Course Duration

4 days

Course Price

\$3,895.00 or 38 CLCs

Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

Module 1: Introduction to Meraki

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

Module 2: Meraki MS / Catalyst Licensing

- Meraki Licensing Overview
- Co-Termination Licensing Overview
- Co-Termination Licensing in the Dashboard
- Per Device Licensing (PDL) Overview
- PDL in the Dashboard
- Subscription Licensing Overview
- Subscription Licensing in the Dashboard
- Catalyst Licensing for the Meraki
- Migrating DNA Licensing to Meraki Dashboard

Module 3: Meraki Switches

- Meraki Layer 2 Access Switches
- Meraki Layer 3 Access Switches
- Meraki Aggregation Switches
- Catalyst Switches
- Power and Accessories

Module 4: Configuring the Meraki Dashboard

- Meraki Dashboard, Organizations, and Networks
- Organizational - Wide Configure Settings
- Configuring Administrators
- Creating Networks and Managing Inventory
- Organization > Overview Page
- Configuring Network - Wide Settings
- Network - Wide Administrators & Users
- Network - Wide > Add Devices
- Configuring Location / Mapping Devices
- Configuration Templates
- Configuring Group Policies

Module 5: Configuring Meraki MS Switches

- Basic Switch Configuration
- Provisioning Switch Stacks
- Meraki MS Switch Settings
- DHCP Server Status
- Meraki MS - Port Schedules
- Local Status Page
- Manage MS Firmware
- Manage MS Staged Upgrades
- Configuring Switch Ports
- Link Aggregation
- Mirroring Switch Ports

Module 6: Meraki MS Routing and Multicast

- Meraki Layer 2 vs Layer 3
- Static Routes
- Meraki Switch Warm Spare - Virtual Router Redundancy Protocol (VRRP)
- Meraki Switch Routing

- Meraki MS - Open Shortest Path First (OSPF)

Module 7: Monitoring Catalyst Switches in the Meraki Dashboard

- Monitoring Catalyst Switches
- Supported Catalyst Switches
- Cloud Monitoring for Catalyst Onboarding
- Cloud Monitoring for Catalyst Licensing
- Cloud - Based Monitoring
 - View Network Topology
 - Track Clients and Traffic
 - Monitor Switch Status
 - Troubleshoot Connections
 - Inspect Port Details
 - Application Statistics

Module 8: Managing Catalyst Switches in the Meraki Dashboard

- Managing Catalyst Switches
- Supported Catalyst Switches
- Migrating to Meraki - Managed Mode
- Register the Switch with the Meraki Dashboard
- Managed Catalyst Switch Meraki Feature Support
- Managing Catalyst Switches in the Dashboard

Module 9: Meraki Switch Security

- Access Control Lists
- Securing Switch Ports
- SecurePort Switch Ports for MR Access Points
- Port Isolation
- Enforce Segmentation with Group Policy ACL

Module 10: Meraki Authentication ISE and Radius

- Managing Users
- Access Control
- Meraki Integration with Cisco Identity Services Engine (ISE)
- Meraki 802.1x Radius Integration

Module 11: Meraki Adaptive Policy

- Meraki Switches Supported Models
- Adaptive Policy Architecture
 - Identity Classification and Propagation
 - Security Policy Definition
 - Policy Deployment and Orchestration
- Configuration
 - Adaptive Policy SGT Propagation Configuration
 - Static Assignment of Adaptive Policy Group by Switchport
 - RADIUS - Based Assignment of an Adaptive Policy Group
 - Configure Access Policy on Switchports
 - Testing and Validation

Module 12: Meraki IPv6 Configuration

- Meraki IPv6 Overview
- Meraki IPv6 Features on Meraki
- Meraki IPv6 Dual Stack
- IPv6 DHCP and Addressing

- IPv6 Security and ACLs
- IPv6 Management Protocols

Module 13: Monitoring Switches and Clients

- Monitoring Switch Ports
- Meraki Health
- Switch Traffic Analytics
- Switch Topology
- Monitoring Wired Clients

Module 14: Troubleshooting Switches and Clients

- Troubleshooting Clients Connections
- Troubleshooting Switch Connectivity
- Switch Event Logs
- Capturing Packets in a Switch
- Configuring Switch Alerts
- Switch Tools
- VLAN Mismatch Troubleshooting
- Use Wireshark to Decode Port Captures

Module 15: Meraki Switch APIs

- Meraki API and Integration Overview
- Meraki API Technologies and Tools
- Meraki Dashboard API
- Using Postman with Meraki
- Meraki Dashboard API Python Library
- Use Case - Pulling Statistics from Meraki Devices
- Meraki Tools
- Meraki Action Batches