

## Administering and Troubleshooting Meraki MV Cameras (MER-MV)

### Administering and Troubleshooting Meraki MV Cameras (MER-MV)

This 2-day Meraki MV Camera course provides students with the skills to configure, optimize, and troubleshoot a Cisco Meraki solution. Students will learn how to install and optimize Meraki Cameras. Students will also learn how to configure the Meraki Dashboard, troubleshoot and configure the Meraki environment and learn how to diagnose and resolve user and Network issues that may arise.

#### 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:

- IT Staff and Managers
- Network and Systems Personnel and Engineers
- Small to mid-sized organizations that require fundamental knowledge on networking terms/concepts and configuration guidance for Meraki equipment
- This also includes organizations looking to implement remote sites, provide a guest wireless solution, and collect user analytics

#### Course Duration

2 days

#### Course Price

\$2,195.00 or 21 CLCs

#### Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

#### Module 0: Course Overview

- **Module Introduction**
  - Topic List
- **Lesson 1: Introductions**
  - Course Goals
  - WebEx Basics
  - General Administration
  - Introductions
- **Module Summary**

#### Module 1: Introduction to Meraki

- **Module Introduction**
  - Topic List
- **Lesson 1: Why Cisco Meraki?**
  - Simplifying IT with Cloud Management
  - Cloud-Managed Networking Architecture
  - Benefits of a Cloud-Based Solution

- **Lesson 2: Meraki Product Overview**
  - Cisco Meraki MS Switches
  - Meraki MS Switches
  - Cisco Meraki MR Wireless Access Points
  - MR Wireless Access Points
  - Cisco Meraki MX Security & SD-WAN
  - MX Security & SD-WAN Appliances
  - MG Meraki Cellular Gateways (1)
  - Cisco Meraki MV Vision Security Cameras
  - Meraki MV Security Cameras
  - MV Camera Models – Indoor
  - MV Camera Models – Outdoor
  - Cisco Meraki Systems Manager
  - Systems Manager Enterprise Mobility Management
  - Cisco Meraki Sensors – MT
  - Meraki Sensors – MT (1)
  - Meraki Sensor Connectivity
  - Cisco Meraki Insight
  - Meraki Insight
- **Lesson 3: Meraki API Overview**
  - Solutions Built on Meraki APIs
  - Meraki as a Platform
  - Meraki's APIs
  - How do I use Meraki APIs? (1)
- **Lesson 4: Meraki Licensing and Support**
  - Meraki Licenses
  - Meraki Licensing Models
  - Co-Termination Licensing
  - Frequent Questions about Co-Termination
  - Meraki Co-Term Licensing Types
  - Co-Term Licensing: Calculator (1)
  - Licensing Status and Compliance (1)
  - Per-Device Licensing (1)
  - Frequent Questions about Per-Device Licensing
  - Conversion to Per-Device Licensing
  - Licensing Documentation
  - Meraki Support Model
  - Enterprise Support
  - Enterprise Support Best Practices
  - Meraki – Product End of Life
  - Warranty & Returns
  - Return Policy and Requesting a RMA
  - Meraki Now
- **Module Summary**

## **Module 2: Cloud Management with the Meraki Dashboard**

- **Module Introduction**
  - Topic List
- **Lesson 1: Overview of the Meraki Dashboard**
  - The Cisco Meraki Dashboard

- The Meraki Phone App
- Dashboard: Organizational Structure
- Meraki Dashboard Best Practices – Campus
- Dashboard Compliance and Data Protection
- Cloud Reliability
- Loss of Connectivity to the Cisco Meraki Cloud
- Safe Configuration
- Meraki Dashboard Login (1)
- Create Dashboard Account (1)
- Create Dashboard Account and Organization
- Verify Created Account
- First Login to New Organization
- Account Login with Multiple Assigned Organizations
- Manage Multiple Organizations
- Global Overview – Organizations
- Global Overview – Networks
- Global Overview – Network Tags
- Manage Multiple Organizations
- View Health Status for Multiple Organizations (1)
- Meraki Dashboard Best Practices - Multiple Locations
- Dashboard Search
- Logged in User Profile
- Modify User Profile (1)
- **Lesson 2: Help & Support**
  - Meraki Help
  - Dashboard - Help - Get Help (1)
  - Dashboard - Help – Community
  - Dashboard - Help – Cases
  - Dashboard - Help - Firewall Rules Info
  - Dashboard - Help - API Documentation
  - Dashboard - Help - API Early Access Features
  - Dashboard - Help – App Marketplace (1)
  - Dashboard - Help – New Dashboard Features
  - Dashboard - Help – Announcements (1)
  - Give Your Feedback
  - Alerts
- **Lesson 3: Organizational Wide Configure Settings**
  - Organizational Menu Settings
  - Settings – Org Name and Security Settings
  - Settings – Authentication – Cisco SecureX Sign-On
  - Settings – Authentication
  - Configuring SAML SSO with ADFS
  - Configuring SAML SSO with OneLogin
  - Configuring SAML SSO with Azure AD
  - Settings - Administration Settings
  - Settings – Meraki Support Access
  - Settings – Privacy
  - Settings - SNMP Configuration
  - Settings - Dashboard API Access
  - Settings – MSP Identification

- Settings – Delete This Organization
- Organization > Configure > Configuration Sync
- Configuration Sync – Network Wide
- Organization > Configure > Administrator
- Create Administrator Account – Org Access
- Create Administrator Account – Network Access
- Create Administrator Account – Camera Access
- Create Administrator Account
- Verify Administrator Account
- Deleting an Administrator Account
- Organization > Configure > Camera Roles
- Camera Role Restrictions
- Creating a Camera role in Dashboard
- Role naming and Network access permissions
- Viewing permissions and camera permissions
- Confirmation
- See the new Camera Role
- Organization > Configure > License Info
- License Information – Co-Termination
- Add Licenses to Organization – Co-Termination
- License History – Co-Termination
- Converting to PDL (Per Device Licensing)
- Licensing & Inventory Page – PDL (1)
- Organization > Configure > Create Network
- Create Network – Setup Network
- Create Network – Select Devices from Inventory
- Create Network – Add Devices
- Finding Meraki Order Number
- Delete Networks
- Organization > Configure > Inventory
- Organization > Inventory - Searching for Devices
- Organization > Inventory - Claiming Devices
- Organization > Inventory - Unclaiming Devices
- Organization > Add a Device to a Network
- Recovering a Missing or Stolen Device
- Organization > Monitor > Overview
- Organization > Monitor > Overview > Networks
- Organization > Monitor > Overview > Network Tags
- Overview > Network Tags Tab
- Overview > Devices Tab
- Overview > Map
- Organization > Monitor > Change Log
- Organization > Monitor > Login Attempts
- Organization > Monitor > Firmware Upgrades
- Scheduling Firmware Upgrades
- Firmware Upgrades > Confirm Scheduled Upgrade
- Firmware Upgrades > Scheduled Changes
- Firmware Upgrades > Overview
- Firmware Upgrades > Firmware Status
- Firmware Upgrades > Latest Firmware Versions Section

- Firmware Upgrades > Release Notes (1)
- Firmware Upgrades > Firmware Roll Back (1)
- Firmware Upgrades Through APIs
- **Lesson 4: Network-Wide Settings**
  - Network-Wide Settings – General
  - Network-Wide > Configure > General
  - Network-Wide > General > Traffic Analysis
  - Network-Wide > General > CloudShark
  - Network-Wide > General > Device Configuration (1)
  - Network-Wide > General > Reporting > Syslog
  - Network-Wide > General > SNMP
  - Network-Wide > General > Firmware Upgrades (1)
  - Network-Wide > Administration > Org Admins
  - Network-Wide > Administration > Network Admin
  - Network-Wide > Administration > Guest Ambassadors
  - Network-Wide > Admin > Camera-Only Admins
  - Network-Wide > Users > Guest Access
  - Network-Wide > Users (1)
  - Network-Wide > Alerts
  - Network-Wide > Alerts – Network-Wide
  - Network-Wide > Alerts – Camera
  - Network-Wide > Alerts – SNMP traps
  - Network Wide > Add Devices
  - Event log (1)
- **Lesson 5: Location/Mapping Devices**
  - Maps & Floor Plans (1)
  - Maps & Floor Plans - Drag & Drop Devices
  - Maps & Floor Plans – Assign Devices to...
  - Maps & Floor Plans - Geolocate Devices (1)
  - Maps & Floor Plans (1)
- **Module Summary**

### Module 3: Introduction to Meraki MV Cameras

- **Module Introduction**
  - Topic List
- **Lesson 1: MV Security Cameras Introduction & Features**
  - Use Cases
  - Current Video Surveillance Solutions
  - MV Camera Features
  - Meraki Mobile App
  - Dedicated Video Wall Monitoring for Apple TV
  - MV Licensing
  - MV Warranty Extended to 5 Years
  - MV Cutting Edge Architecture
  - Meraki Configuration Summary (1)
  - MV Edge Architecture and Optimized Retention
  - MV Camera Video Display – Direct Stream
  - MV Camera Video Display - Cloud Proxy Streaming
  - MV Object Detection (Person Detection)
  - Meraki Sense

- Meraki MV Camera Intelligence Training
- Meraki Cloud Archive
- Physical Security Meets Business Intelligence
- MV Feature: Secure Encrypted Video
- **Lesson 2: MV Camera Models**
  - MV Camera Models – Indoor
  - MV Cameras – MV12 Indoor Models
  - Meraki MV2 Flexible Camera
  - MV2 Flexible Camera Mounting and Swivel
  - MV2 LED Indicators
  - MV Cameras – Indoor Models
  - MV Camera Models: MV32
  - MV Camera Models – Outdoor
  - MV Cameras – Outdoor Models
  - MV52 Bullet Camera
  - MV52 Long Distance
  - MV Cameras – Outdoor Models
- **Lesson 3: MV Camera Accessories**
  - MV Power Accessory (1)
  - Cisco Meraki PoE Injector
  - Meraki MV Telescoping Pendant Mount
  - Wall Mount Arm Bracket
  - Wall Mount Arm for MV22 and MV22x
  - Conduit Back Box / Wall Mount Arm For MV72
  - Pole Mount – Gen 2
  - Gen 3 MV Mounting Accessories
  - Pole Mount – Gen 3
  - L-Bracket Mount – Gen 3
  - Wall Arm Mount – Gen 3
  - Conduit Back Box (J-Box) – Gen 3
  - T-Rail Mount – Gen 3
  - Corner Mount – Gen 3
- **Lesson 4: Network-Wide Settings for MV Cameras**
  - Camera Lights and Frequency
  - MV Firmware Upgrades
  - Camera Alerts
  - Event log for Cameras
  - Camera Map and Floor Plans
- **Lesson 5: Security Role Configuration for MV Cameras**
  - MV Feature: Role-based Access
  - Organizational Camera Administrators (1)
  - Network Camera Administrators
  - Verify Access to Camera Network – Via Email
  - Verify Access to Camera Network – From the Dashboard
- **Lesson 6: Switch Configuration for MV Cameras**
  - Set Port Information for Camera
  - Camera Port Status
- **Lesson 7: Monitor > Cameras**
  - View Camera Status
  - Display Columns

- Select Camera Profile / Schedule
- Edit Dropdown
- **Lesson 8: Basic Camera Configuration**
  - Cisco Meraki Camera Configuration (1)
  - Change Camera Name
  - Meraki Device Configuration
  - View Camera Network Settings
  - View Camera Network Connectivity
  - Camera Connectivity Tools – Ping
  - Camera Connectivity Tools
  - Camera Connectivity Tools – Traceroute
  - Camera Connectivity Tools – Data Regions
  - Camera Location – Map
  - Camera Location > Map – Satellite
  - Camera Location – Photo
  - Camera Location – Topology
  - Camera > Event Log Tab
- **Lesson 9: MV Camera Profiles**
  - MV Camera Profiles
  - Camera Profiles > Quality and Retention Profiles (1)
  - Assign Quality & Retention Profiles (1)
  - Integrated Wireless
  - Wireless Details
  - Camera Profiles > Wireless Profiles
  - Create Wireless Profile (1)
  - Assign Wireless Profiles (1)
  - Camera Profiles > Schedules
  - Create a New Recording Schedule
  - Assign Schedules (1)
- **Lesson 10: MV Camera Intelligence Training**
  - Camera > Intelligence Training
  - Intelligence Training > Opt-in Cameras (1)
- **Lesson 11: MV Camera – Video Settings**
  - Cisco Meraki Camera Configuration
  - MV – Video Settings
  - Video Settings > Optical Zoom
  - Video Settings > Focus (1)
  - Video Settings > Aperture
  - Video Settings > Rotation & High Dynamic Range
  - Video Settings > Sensor Crop
  - Video Settings > Privacy Windows
  - Video Settings > External RTSP
  - Settings – Quality and Retention
  - Settings – Quality and Retention > Cloud Archive
  - Settings – Quality and Retention > Profiles (1)
  - Settings – Quality and Retention > Recording Schedule (1)
  - Settings – Quality and Retention > Motion-Based Retention
  - Settings – Quality and Retention > Bandwidth (1)
  - Settings – Quality and Retention > Resolution and Storage
  - Settings – Quality and Retention > Audio Recording

- Settings – Quality and Retention > Retention Length
- Settings > Low Light Mode (1)
- Settings – Low Light Mode > Infrared Illuminators
- Settings – Low Light Mode > Transition Thresholds
- Settings > Motion Alerts
- Settings – Motion Alerts > Schedule
- Camera Motion Email Alert
- Settings – Motion Alerts > Motion Sensitivity
- Settings – Motion Alerts > Motion Recap Images
- Settings – Motion Alerts > Alerts for People Detection
- Settings – Motion Alerts > Area of Interest (1)
- Settings – Motion Alerts > Summary
- Settings – Wireless Profiles
- Settings > Zones (1)
- Settings – Sense
- Settings – Sense > Object Detection
- Settings > Sense > Sense API Licenses
- Settings – Sense > Audio Detection
- MV Sense – What is CCV?
- MV Sense – How does CCV Work?
- Settings – Sense > Custom CV (1)
- What is MQTT?
- Settings – Sense > MQTT Broker
- Edit MQTT Broker
- **Lesson 12: Viewing Analytics**
  - Camera – Analytics Tab (1)
- **Lesson 13: MV Video Access**
  - Cameras > Video Access
  - Camera > Video Access > Video Access Log
  - Camera > Video Access > External Stream Users
- **Lesson 14: MV Export**
  - Camera > Exports (1)
- **Lesson 15: MV Cameras APIs**
  - Focus on Solving Customer Problems, not Building Features
  - Why this Matters
  - Meraki API
  - Meraki API Use Cases
  - Introducing Meraki MV Sense
  - Introducing Meraki MV Sense Data Types
  - REST vs MQTT (MQ Telemetry Transport) APIs
  - MQTT (MQ Telemetry Transport)
  - Zones
  - Optimized Video Retention
  - Full Frame Snapshots via API
- **Lesson 16: Meraki Magic (AKA Smart Codec)**
  - Introducing Smart Codec
  - Quality Comparisons
  - Network Bandwidth Savings (1)
- **Module Summary**

## Module 4: Introduction to Meraki MV Cameras

- **Module Introduction**
  - Topic List
- **Lesson 1: Meraki MV Viewing Applications**
  - Meraki Mobile App
  - Dedicated Video Wall Monitoring for Apple TV
- **Lesson 2: Viewing Meraki MV Video**
  - Camera > Video
  - Timeline Bar
  - Video Playback Tools
  - Video Playback Tools > Day Selector
  - Other Video Playback Tools
  - Video Playback Tools > Keyboard Shortcuts
  - Video Search & Exports
  - Motion Search (1)
  - Motion Search People Only
  - Meraki Camera Motion Search Motion Blocks
  - Video – Object Detection
  - Video – Show Objects
  - Video – Share
  - Video – Share > Internal Dashboard Link
  - Video – Share > External Dashboard Link
  - Video – Share > Export Video Clips
  - Video – Screenshot (1)
- **Lesson 3: Meraki MV Video Wall**
  - MV Feature: Video Wall
  - Guidelines for MV Streaming Workstations
  - Create Video Wall (1)
  - Video Wall Layout
  - MV32 Video Wall De-warp Tiles
  - General Video Wall Improvements
  - Video Wall Automatic Rotation between Layouts
- **Lesson 4: Meraki Vision Portal**
  - Meraki Vision
  - Vision Key Improvements over Dashboard
  - Meraki Vision Login
  - Meraki Vision – Search for Cameras / Networks
  - Meraki Vision – Select Cameras by using the Map
  - Meraki Vision – Site View
  - Meraki Vision – Camera View
  - Meraki Vision – Camera Feed Settings
  - Meraki Vision – Theater vs Fullscreen
  - Meraki Vision – Video Wall
  - Meraki Vision – Exports
- **Module Summary**