

Current Technologies

Computer Learning Centers



Administering Meraki MS Switches for Government (MER-SWITCH-GOV)

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HAPPENS EVERYDAY!**



Administering Meraki MS Switches for Government (MER-SWITCH-GOV)

About this Class

In this Administering Meraki MS / Catalyst Switches 4-day Cisco Official course provides a comprehensive, hands-on overview of Cisco Meraki for Government switching solutions, guiding participants through the design, deployment, configuration, monitoring, and troubleshooting of secure government-compliant networks. Learners begin with an introduction to the Meraki for Government platform, including product capabilities, support models, and licensing structures tailored for government environments, ensuring a clear understanding of compliance, lifecycle management, and operational considerations. The curriculum then explores the Meraki for Government switching portfolio, including Meraki switches, Catalyst 9000 switch integrations, mGig capabilities, and access point interoperability, establishing a strong foundation for designing modern government wired networks. As the course progresses, students gain in-depth, practical experience configuring the Meraki Dashboard for government networks, covering organizational design, administrator roles, inventory management, firmware control, templates, and network-wide policies. Detailed configuration modules focus on Meraki switch deployment, including Layer 2 and Layer 3 features, routing, multicast, VRRP warm spare configurations, OSPF, access control lists, 802.1X authentication, RADIUS integration, port profiles, VLAN profiles, and staged upgrades. Spanning Tree design and configuration are addressed in detail, along with cloud monitoring and management of Catalyst switches using the Meraki Dashboard in both monitoring and managed modes. The course emphasizes security, visibility, and operational excellence for government environments through advanced topics such as ISE integration, TrustSec and Adaptive Policy for software-defined segmentation, infrastructure security features, NetFlow, IPv6 design and security, and comprehensive monitoring and alerting. Learners develop structured troubleshooting skills using dashboard analytics, logs, packet analysis, and switch-level tools, and conclude with automation and integration using Meraki APIs, Python, Ansible, Postman, and action batches. By the end of the course, participants are equipped to design, secure, operate, and automate Cisco Meraki for Government switching environments that meet stringent reliability, security, and compliance requirements

Course Duration

4 Days

Course Price

\$3,895.00

38 CLCs

Methods of Delivery

In-Person ILT

Virtual ILT

Onsite ILT

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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 in Government Agencies
- Technical Support Staff
- Cisco Certified Professionals

Prerequisites

Before taking this course, you should be familiar with:

- Basic network fundamentals and building simple LANs
- Basic IP addressing and subnets
- Routing and switching fundamentals
- Basic wireless networking concepts and terminology

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Objectives

After taking this course, you should be able to:

- Understanding of Meraki Switch Fundamental Concepts
- Dashboard Navigation and Configuration for Government
- Effective Meraki Switch Troubleshooting on Government Networks
- Provisioning Meraki Switches for Government Networks
- Configuration of Organizational and Network Settings
- Utilization of Meraki Configuration Templates and Group Policies
- Meraki Network and Device Management
- Switches Stacks and Port Configuration
- Meraki IPv6 Configuration
- Meraki Port Management with ISE and Radius
- Meraki Switch Monitoring and Connectivity Troubleshooting
- Device and Connectivity Troubleshooting on Meraki Networks
- Meraki APIs for MS and Catalyst Switches

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Course Outline

Module 0: Introductions

Module 1: Introduction to Meraki for Government

- Cisco Meraki for Government
- Meraki for Government Product Overview
- Meraki for Government Support Overview

Module 2: Meraki for Government Licensing

- Meraki Licensing for Government Overview
- Co-Termination Licensing Overview
- Co-Termination Licensing in the Dashboard
- Subscription Licensing Overview
- Subscription Licensing in the Dashboard

Module 3: Meraki for Government Switch Overview

- Meraki for Government Switch Overview
- Meraki for Government Switch Models
- Meraki for Government Catalyst Switch 9300 Switches
- Meraki mGig Switch / AP Integrations

Module 4: Configuring the Meraki Dashboard for Government Networks

- Meraki Dashboard, Organizations, and Networks
- Organizational-Wide Configure Settings
- Configuring Administrators
- Creating Networks & Managing Inventory
- Configuring Network-Wide Settings
- Managing Switch Firmware

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Course Outline

Cont. Module 4

- Network-Wide Administrators & Users
- Network-Wide > Add Devices
- Configuring Location / Mapping Devices
- Configuring Templates

Module 5: Configuring Meraki Switches for Government Networks

- Meraki for Government Switch Overview
- Meraki for Government 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
- 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

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Course Outline

Module 6: Meraki Spanning Tree Configuration for Government Networks

- Meraki Spanning Tree Protocol Overview
- Cisco MST Configuration
- Meraki Switch STP Configuration

Module 7: Meraki Monitoring and Managing Catalyst Switches for Government Networks

- Meraki Catalyst Switches for Government Networks Overview
- Design Considerations for Government Networks
- Meraki Cloud Monitoring
- Catalyst Onboarding Demo
- Monitoring Cisco Catalyst Switches
- Meraki Catalyst Management Mode

Module 8: Meraki Switch Radius, ISE, Adaptive Policy for Government Networks

- Lesson 1: Cisco Identity Services Engine (ISE)
- Lesson 2: ISE with Meraki
- Lesson 3: ISE Integration with Meraki Switches
- Lesson 4: Network Access Security
- Lesson 5: Cisco TrustSec (Software-Defined Segmentation)
- Lesson 6: Meraki Adaptive Policy
- Lesson 7: ISE Meraki Connector

Module 9: Meraki Switch Security for Government Networks

- Meraki Switch Security Overview
- Infrastructure Security
- Dynamic ARP Inspection
- SecurePorts
- NetFlow

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Course Outline

Module 10: Meraki IPv6 for Government Networks

- Meraki IPv6 for Government Networks Overview
- IPv6 Design & Deployment
- Meraki Switch IPv6 Configuration
- Meraki IPv6 Security
- Monitoring Meraki IPv6 Switched Networks
- Troubleshooting Meraki IPv6 Switched Networks

Module 11: Monitoring Meraki for Government Environments

- Monitoring Meraki for Government Environment
- Summary Report
- Organization Summary
- Topology
- Login Attempts
- Configure Meraki Alerts
- Configure Meraki Syslog
- Configure Meraki Traffic Analytics
- Monitoring Meraki Client

Module 12: Troubleshooting Meraki for Government Environments

- Troubleshooting Meraki for Government Switches Overview
- Troubleshooting Meraki Management Tunnels
- Help & Support
- Switch Troubleshooting
- Switch Tools
- Troubleshooting POE
- Tools for Switch Troubleshooting
- Change Log and Event Log

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Course Outline

Cont. Module 12

- Client Troubleshooting
- Link Aggregation Control Protocol Troubleshooting (LACP) Troubleshooting
- Port Troubleshooting
- Troubleshooting CRC Errors

Module 13: Meraki Switch APIs and Integrations

- Meraki API and Integration Overview
- Meraki API Technologies and Tools
- Meraki Dashboard API
- Meraki and Python
- Meraki and Ansible
- Using Postman with Meraki
- Meraki Tools
- Meraki Action Batches