Cisco Meraki MS Cloud Managed Switches

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**Overview** | **Positioning Map** | **Platform Spec** | **Licenses & Accessories** | **Why Meraki MS?**

True Zero-Touch Cloud Provisioning, Network Visibility, and Remote Troubleshooting

The **Cisco Meraki MS Cloud Managed Switches** offer true zero-touch provisioning, can be pre-staged and configured entirely from a web browser. The Meraki management experience accelerates and simplifies the work of the network engineer.

Troubleshooting network issues, especially on remote locations, can significantly add to the cost of running this mission-critical service. Cisco Meraki MS provides groundbreaking tools for remote troubleshooting so that scaling a Meraki network need not mean scaling complexity.
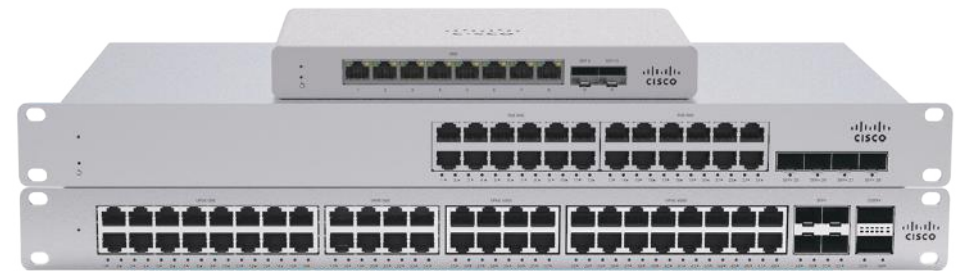
Highlights

The Cisco Meraki MS includes features for streamlining the work of the network engineer, from deployment to security to troubleshooting.

Multigigabit Ethernet

Provide the higher performance demanded by the latest access points over existing cabling.

Virtual Stacking

Simultaneously configure thousands of ports across standalone and physically stacked switches, regardless of location.

Layer 7 Visibility

Meraki MS makes it **easy to understand** how valuable network resources are being used.

Layer 3 Scalability

Build large, resilient networks using dynamic routing protocols and warm spare technology.

Voice & Video QoS

Give latency-sensitive applications the priority and bandwidth they deserve with **configurable QoS**.

Network Topology

View the network in real-time, showing devices and their connections and even monitor network-wide health.

Remote Live Tools

Powerful tools for identifying and correcting issues, even from thousands of miles away.

Enterprise Security

Protect the wired network from both external and internal threats.

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Cisco Meraki MS Cloud Managed Switches Positioning Map

Core	MS410 Series	MS425 Series	MS450 Series
Premium Access (Layer 3)		MS355 Series	MS390 Series
Access (Layer 3)	MS250 Series	MS350 Series	
Access (Layer 2+)	MS210 Series MS225 Series		
Access (Layer 2)	MS120 Series MS125 Series		
Compact	MS120-8		

| Performance | → High |

Cisco Meraki MS Cloud Managed Switches

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Cisco Meraki MS120 Compact Series

Product SKU	Switching Capacity	Forwarding Rate	Downlinks	Uplinks		PoE			Power Supply		Fanless	Stacking		Rack Mount
			1GE RJ45	1GE SFP	10GE SFP+	Ports	IEEE 802.3	Power Budget	Default	External RPS		Virtual	Physical	
MS120-8-HW	20 Gbps	14.88 Mpps	8	2					External		✔	✔		*1
MS120-8LP-HW	20 Gbps	14.88 Mpps	8	2		8	af/at	67 W	External		✔	✔		*1
MS120-8FP-HW	20 Gbps	14.88 Mpps	8	2		8	af/at	124 W	Internal		✔	✔		*1

*1 Wall or utility board mountable with included mount hardware.

Cisco Meraki MS120 Series

Product SKU	Switching Capacity	Forwarding Rate	Downlinks	Uplinks		PoE			Power Supply		Fanless	Stacking		Rack Mount
			1GE RJ45	1GE SFP	10GE SFP+	Ports	IEEE 802.3	Power Budget	Default	External RPS		Virtual	Physical	
MS120-24-HW	56 Gbps	41.67 Mpps	24	4					Internal		✔	✔		✔
MS120-24P-HW	56 Gbps	41.67 Mpps	24	4		24	af/at	370 W	Internal			✔		✔
MS120-48-HW	104 Gbps	77.38 Mpps	48	4					Internal		✔	✔		✔
MS120-48LP-HW	104 Gbps	77.38 Mpps	48	4		48	af/at	370 W	Internal			✔		✔
MS120-48FP-HW	104 Gbps	77.38 Mpps	48	4		48	af/at	740 W	Internal			✔		✔

Cisco Meraki MS125 Series

Product SKU	Switching Capacity	Forwarding Rate	Downlinks	Uplinks		PoE			Power Supply		Fanless	Stacking		Rack Mount
			1GE RJ45	1GE SFP	10GE SFP+	Ports	IEEE 802.3	Power Budget	Default	External RPS		Virtual	Physical	
MS125-24-HW	128 Gbps	95.23 Mpps	24		4				Internal		✔	✔		✔
MS125-24P-HW	128 Gbps	95.23 Mpps	24		4	24	af/at	370 W	Internal			✔		✔
MS125-48-HW	176 Gbps	130.95 Mpps	48		4				Internal		✔	✔		✔
MS125-48LP-HW	176 Gbps	130.95 Mpps	48		4	48	af/at	370 W	Internal			✔		✔
MS125-48FP-HW	176 Gbps	130.95 Mpps	48		4	48	af/at	740 W	Internal			✔		✔

Cisco Meraki MS Cloud Managed Switches

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Overview | Positioning Map | **Platform Spec** | Licenses & Accessories | Why Meraki MS?

Cisco Meraki MS210 Series

| Product SKU | Switching Capacity | Forwarding Rate | Downlinks | Uplinks | | | PoE | | | Power Supply | | Fanless | Stacking | | Rack Mount |
			1GE RJ45	1GE SFP	10GE SFP+	Ports	IEEE 802.3	Power Budget	Default	External RPS		Virtual	Physical	
MS210-24-HW	56 Gbps	41.67 Mpps	24	4					Internal	✓	✓	✓	80 Gbps	✓
MS210-24P-HW	56 Gbps	41.67 Mpps	24	4		24	af/at	370 W	Internal	✓		✓	80 Gbps	✓
MS210-48-HW	104 Gbps	77.38 Mpps	48	4					Internal	✓	✓	✓	80 Gbps	✓
MS210-48LP-HW	104 Gbps	77.38 Mpps	48	4		48	af/at	370 W	Internal	✓		✓	80 Gbps	✓
MS210-48FP-HW	104 Gbps	77.38 Mpps	48	4		48	af/at	740 W	Internal	✓		✓	80 Gbps	✓

Cisco Meraki MS225 Series

| Product SKU | Switching Capacity | Forwarding Rate | Downlinks | Uplinks | | | PoE | | | Power Supply | | Fanless | Stacking | | Rack Mount |
			1GE RJ45	1GE SFP	10GE SFP+	Ports	IEEE 802.3	Power Budget	Default	External RPS		Virtual	Physical	
MS225-24-HW	128 Gbps	95.24 Mpps	24		4				Internal	✓	✓	✓	80 Gbps	✓
MS225-24P-HW	128 Gbps	95.24 Mpps	24		4	24	af/at	370 W	Internal	✓		✓	80 Gbps	✓
MS225-48-HW	176 Gbps	127.98 Mpps	48		4				Internal	✓	✓	✓	80 Gbps	✓
MS225-48LP-HW	176 Gbps	127.98 Mpps	48		4	48	af/at	370 W	Internal	✓		✓	80 Gbps	✓
MS225-48FP-HW	176 Gbps	127.98 Mpps	48		4	48	af/at	740 W	Internal	✓		✓	80 Gbps	✓

Cisco Meraki MS Cloud Managed Switches

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Overview **Positioning Map** **Platform Spec** **Licenses & Accessories** **Why Meraki MS?**

Cisco Meraki MS Enterprise Licenses for Meraki MS120 Compact Series

Product SKU					Compatible Model
1-Year	3-Years	5-Years	7-Years	10-Years	
LIC-MS120-8-1YR	LIC-MS120-8-3YR	LIC-MS120-8-5YR	LIC-MS120-8-7YR	LIC-MS120-8-10YR	MS120-8
LIC-MS120-8LP-1YR	LIC-MS120-8LP-3YR	LIC-MS120-8LP-5YR	LIC-MS120-8LP-7YR	LIC-MS120-8LP-10YR	MS120-8LP
LIC-MS120-8FP-1YR	LIC-MS120-8FP-3YR	LIC-MS120-8FP-5YR	LIC-MS120-8FP-7YR	LIC-MS120-8FP-10YR	MS120-8FP

Cisco Meraki MS Enterprise Licenses for Meraki MS120 Series

Product SKU					Compatible Model
1-Year	3-Years	5-Years	7-Years	10-Years	
LIC-MS120-24-1YR	LIC-MS120-24-3YR	LIC-MS120-24-5YR	LIC-MS120-24-7YR	LIC-MS120-24-10YR	MS120-24
LIC-MS120-24P-1YR	LIC-MS120-24P-3YR	LIC-MS120-24P-5YR	LIC-MS120-24P-7YR	LIC-MS120-24P-10YR	MS120-24P
LIC-MS120-48-1YR	LIC-MS120-48-3YR	LIC-MS120-48-5YR	LIC-MS120-48-7YR	LIC-MS120-48-10YR	MS120-48
LIC-MS120-48LP-1YR	LIC-MS120-48LP-3YR	LIC-MS120-48LP-5YR	LIC-MS120-48LP-7YR	LIC-MS120-48LP-10Y	MS120-48LP
LIC-MS120-48FP-1YR	LIC-MS120-48FP-3YR	LIC-MS120-48FP-5YR	LIC-MS120-48FP-7YR	LIC-MS120-48FP-10Y	MS120-48FP

Cisco Meraki MS Enterprise Licenses for Meraki MS125 Series

Product SKU					Compatible Model
1-Year	3-Years	5-Years	7-Years	10-Years	
LIC-MS125-24-1YR	LIC-MS125-24-3YR	LIC-MS125-24-5YR	LIC-MS125-24-7YR	LIC-MS125-24-10YR	MS125-24
LIC-MS125-24P-1YR	LIC-MS125-24P-3YR	LIC-MS125-24P-5YR	LIC-MS125-24P-7YR	LIC-MS125-24P-10YR	MS125-24P
LIC-MS125-48-1YR	LIC-MS125-48-3YR	LIC-MS125-48-5YR	LIC-MS125-48-7YR	LIC-MS125-48-10YR	MS125-48
LIC-MS125-48LP-1YR	LIC-MS125-48LP-3YR	LIC-MS125-48LP-5YR	LIC-MS125-48LP-7YR	LIC-MS125-48LP-10Y	MS125-48LP
LIC-MS125-48FP-1YR	LIC-MS125-48FP-3YR	LIC-MS125-48FP-5YR	LIC-MS125-48FP-7YR	LIC-MS125-48FP-10Y	MS125-48FP

Cisco Meraki MS Cloud Managed Switches

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Cisco Meraki MS Enterprise Licenses for Meraki MS210 Series

Product SKU					Compatible Model
1-Year	3-Years	5-Years	7-Years	10-Years	
LIC-MS210-24-1YR	LIC-MS210-24-3YR	LIC-MS210-24-5YR	LIC-MS210-24-7YR	LIC-MS210-24-10YR	MS210-24
LIC-MS210-24P-1YR	LIC-MS210-24P-3YR	LIC-MS210-24P-5YR	LIC-MS210-24P-7YR	LIC-MS210-24P-10YR	MS210-24P
LIC-MS210-48-1YR	LIC-MS210-48-3YR	LIC-MS210-48-5YR	LIC-MS210-48-7YR	LIC-MS210-48-10YR	MS210-48
LIC-MS210-48LP-1YR	LIC-MS210-48LP-3YR	LIC-MS210-48LP-5YR	LIC-MS210-48LP-7YR	LIC-MS210-48LP-10Y	MS210-48LP
LIC-MS210-48FP-1YR	LIC-MS210-48FP-3YR	LIC-MS210-48FP-5YR	LIC-MS210-48FP-7YR	LIC-MS210-48FP-10Y	MS210-48FP

Cisco Meraki MS Enterprise Licenses for Meraki MS225 Series

Product SKU					Compatible Model
1-Year	3-Years	5-Years	7-Years	10-Years	
LIC-MS225-24-1YR	LIC-MS225-24-3YR	LIC-MS225-24-5YR	LIC-MS225-24-7YR	LIC-MS225-24-10YR	MS225-24
LIC-MS225-24P-1YR	LIC-MS225-24P-3YR	LIC-MS225-24P-5YR	LIC-MS225-24P-7YR	LIC-MS225-24P-10YR	MS225-24P
LIC-MS225-48-1YR	LIC-MS225-48-3YR	LIC-MS225-48-5YR	LIC-MS225-48-7YR	LIC-MS225-48-10YR	MS225-48
LIC-MS225-48LP-1YR	LIC-MS225-48LP-3YR	LIC-MS225-48LP-5YR	LIC-MS225-48LP-7YR	LIC-MS225-48LP-10Y	MS225-48LP
LIC-MS225-48FP-1YR	LIC-MS225-48FP-3YR	LIC-MS225-48FP-5YR	LIC-MS225-48FP-7YR	LIC-MS225-48FP-10Y	MS225-48FP

Cisco Meraki MS Cloud Managed Switches

Overview   **Positioning Map**   **Platform Spec**   **Licenses & Accessories**   **Why Meraki MS?**

Cisco Meraki 1000BASE Small Form-Factor Pluggable (SFP) Modules

Product SKU	Description	Max Distance	Compatible Model
MA-SFP-1GB-TX	1000BASE-T SFP Module	100 m	MS120, MS125, MS210, MS220, MS225
MA-SFP-1GB-SX	1000BASE-SX SFP Module	550 m	MS120, MS125, MS210, MS220, MS225
MA-SFP-1GB-LX10	1000BASE-LX10 Module	10 km	MS120, MS125, MS210, MS220, MS225

Cisco Meraki 10GBASE Small Form-Factor Pluggable Plus (SFP+) Modules

Product SKU	Description	Max Distance	Compatible Model
MA-CBL-TA-1M	10GBASE-CU SFP+ Direct Attach	1 m	MS125, MS225
MA-CBL-TA-3M	10GBASE-CU SFP+ Direct Attach	3 m	MS125, MS225
MA-SFP-10GB-SR	10GBASE-SR SFP+	400 m	MS125, MS225
MA-SFP-10GB-LRM	10GBASE-LRM SFP+	220 m	MS225
MA-SFP-10GB-LR	10GBASE-LR SFP+	10 km	MS125, MS225
MA-SFP-10GB-ER	10GBASE-ER SFP+	40 km	MS125, MS225
MA-SFP-10GB-ZR	10GBASE-ZR SFP+	80 km	MS225

Cisco Redundant Power System (RPS) 2300 for Meraki MS210/225

Product SKU	Description
PWR-RPS2300	Cisco RPS 2300 Chassis (No Power Supply)
C3K-PWR-750WAC	Cisco RPS 2300 750 W AC Power Supply
CAB-RPS2300-E=	Cisco RPS 2300 cable

Cisco Meraki Stacking Cables for Meraki MS210/225

Product SKU	Description
MA-CBL-40G-50CM	Stacking Cable (50 cm)
MA-CBL-40G-1M	Stacking Cable (1 m)
MA-CBL-40G-3M	Stacking Cable (3 m)

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▌Cloud Management Architecture

Cisco Meraki's architecture provides feature-rich network management without on-site management appliances or Wi-Fi controllers.

Every Meraki device —including access points, switches, security & SD-WAN appliances, and cameras— connects over the Internet to Meraki's datacenters, which run Meraki's cloud management platform.

These connections, secured via SSL, utilize a patented protocol that provides real-time visibility and control, yet uses minimal bandwidth overhead (typically 1 Kbps or less.)

In place of traditional command-line based network configuration, Meraki provides a rich web-based dashboard, providing visibility and control over up to tens of thousands of Meraki devices, anywhere in the world. Tools, designed to scale to large and distributed networks, make policy changes, firmware updates, deploying new branches, etc. simple and expedient, regardless of size or location. Meraki's real-time protocols combine the immediacy of on-premise management applications with the simplicity and centralized control of a cloud application.
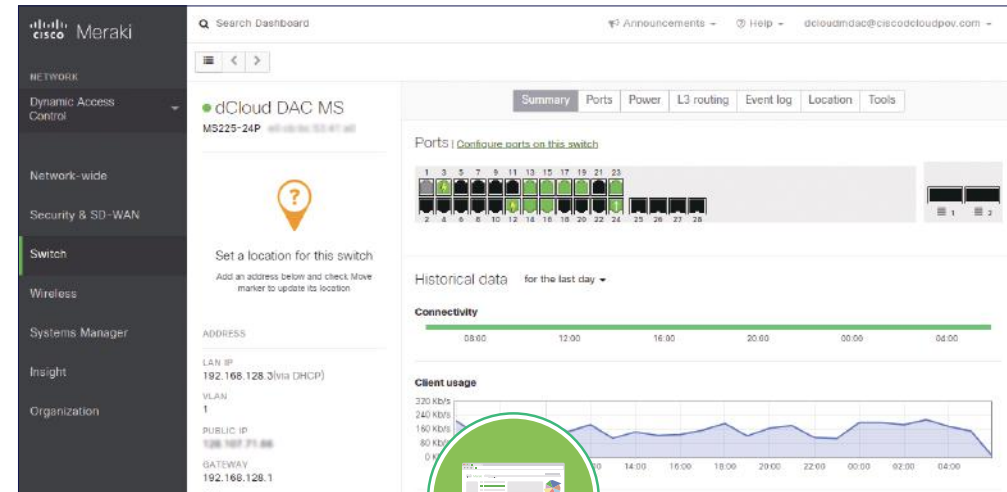
Cisco Meraki MS Cloud Managed Switches

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Network Topology

Network topology helps IT admins quickly see and troubleshoot connections at a glance, and it's built right into the Cisco Meraki dashboard.

- **Intelligent Mapping of Physical Links**

  Network topology automatically maps network architectures, showing how Meraki security, switching, and wireless devices are connected — including redundant links disabled by the STP to prevent data loops. In the topology view, squares represent Cisco Meraki MX, rect-angles represent Cisco Meraki MS, and circles represent Cisco Meraki MR. Non-Meraki equipment is also detected and displayed (as diamonds). Because Cisco Meraki MS auto-matically listens for LLDP and CDP broadcasts from connected devices, it may be possible to detect the manufacturer, model type, IP address, and more of third-party equipment. This is done automatically, with no overlay software needed.

- **Dynamic Device Searching**

  Quickly zero in on the devices that matter by using the dynamic search tools available in the topology dashboard view. Search for network devices by name, tag, or device type to see how equipment is deployed. Devices not meeting search criteria will be automatically dimmed, so that sought-for equipment is highlighted. Conversely, if you are viewing details for a specific client, like a laptop or mobile phone, from within the Cisco Meraki dashboard, clicking the "topology" link will highlight which network device that client is directly con-nected to — enabling a quick assessment of upstream connectivity.

- **Usage Statistics and Status**

  See at a glance where trouble lies on your network: devices displayed in the topology view are color-coded based on connectivity health. Cisco Meraki devices alerting red or yellow can be immediately clicked into for remote diagnosis and troubleshooting. Hovering over individual network links displays the active ports at each termination point, the number of clients using that link for the last day, link speed, and link usage. These statistics make it easy to pinpoint which links are the most heavily-trafficked and service the most clients.
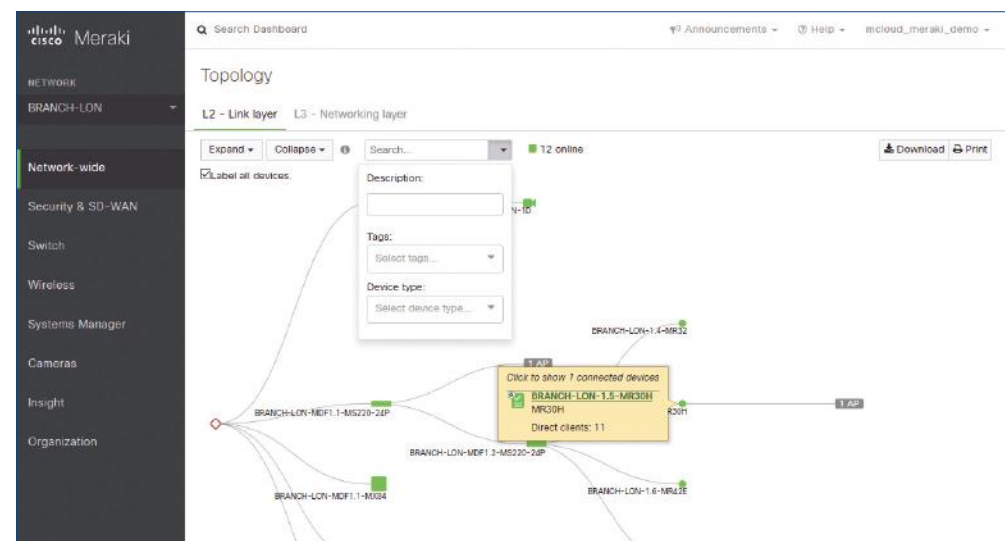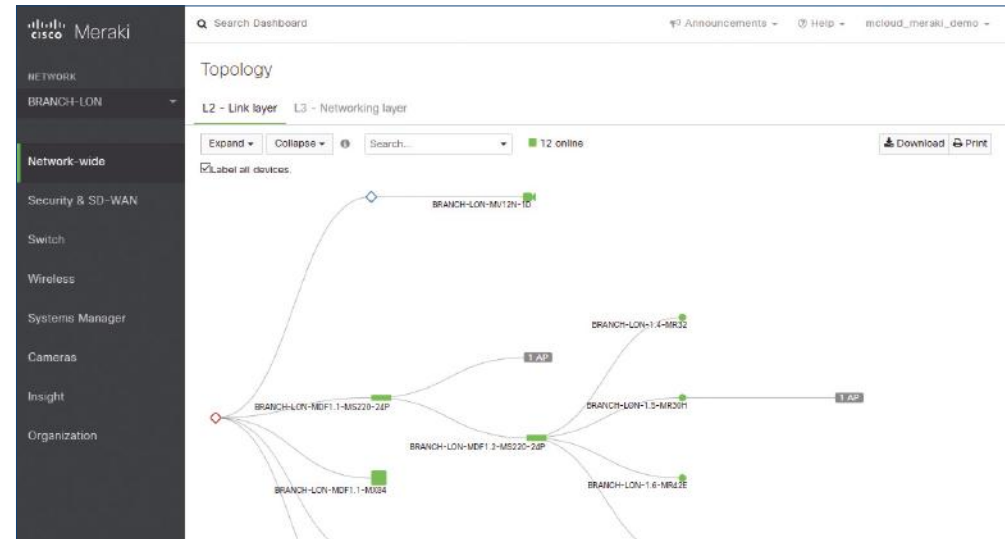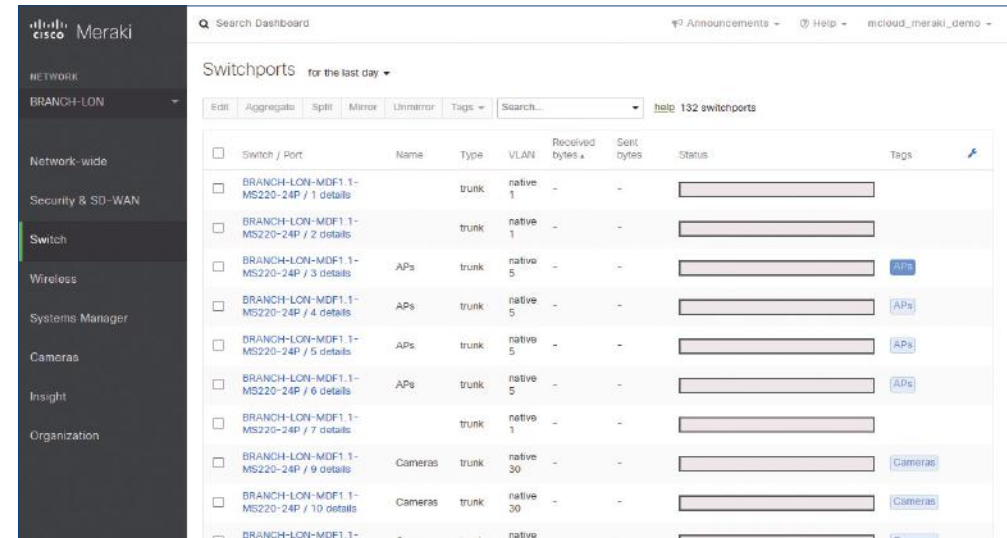
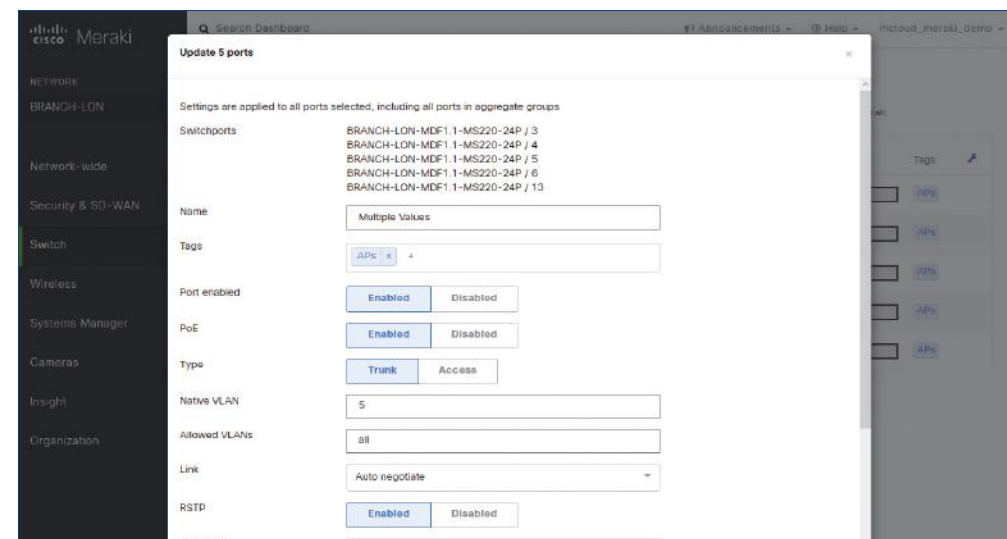## Virtual Stacking

Cisco Meraki MS switches can be treated as a virtual stack without requiring a physical connection, and regardless of their location. This means that switches can be in different physical locations (e.g., New York and California) and administrators still have unprecedented visibility and manageability into all the ports in the virtual stack, greatly simplifying management of large distributed networks. Switches that are in the same physical location can be physically stacked and managed using Virtual Stacking in the same way.

Virtual Stacking is not limited to four or eight switches per stack; in fact, thousands of ports can be members of a single virtual stack. This leads to a different challenge in network management, namely how to manage thousands of ports in a single pane-of-glass without overwhelming the administrator? Meraki solves this challenge by integrating switch names, tags, and a live, Google-like search. Administrators can name switches and even ports as required, for example, city location and floor assignment, or any other logical classification used by the organization. Tagging enables a second level of classification for even further logical grouping. For example, all VoIP ports can be tagged with "VoIP" and wireless access point ports with "WLAN," enabling easy searching and sorting through ports via the integrated live search. Finally, critical ports can be assigned tags such as "uplink," so administrators can receive per-port email or text message alerts of potential network issues. Admins can also see in real-time the status of each switch and every single port in the virtual stack.