

Introducing Team's Cloud based Managed Networking & Security Services
Powered By

Cisco Meraki Cloud Managed Networking

 Cisco Meraki



CUSTOMER REQUIREMENTS

- Rapid network deployment
- End-to-end visibility
- Network management at scale
- High availability and redundancy
- Creating new value from the network
- Managing endpoints
- Reduced IT overhead



*IT should be simpler
to monitor and
manage*



Intuitive centralised management

- No training, no command line
- Templates to configure at-scale
- Packet capture, built-in tools and diagnostics

Designed for distributed enterprises

- Single pane of glass visibility
- Zero-touch provisioning
- Seamless updates from the cloud
- Site-to-site IPsec VPN in 3 clicks

Industry-leading visibility

- Fingerprints users, applications, and devices
- Network-wide monitoring and alerts
- Full stack: APs, switches, Security, MDM



Site-to-site VPN

Connection status for Meraki Corp - appliance

Configuration: This appliance is exporting 76 subnets over the VPN: 207.213.194.0/24, 208.195.154.0/24, 208.246.45.0/24, 208.212.158.0/24.

VPN Registry: Connected. This appliance was able to connect to multiple VPN registries using UDP port 9350.

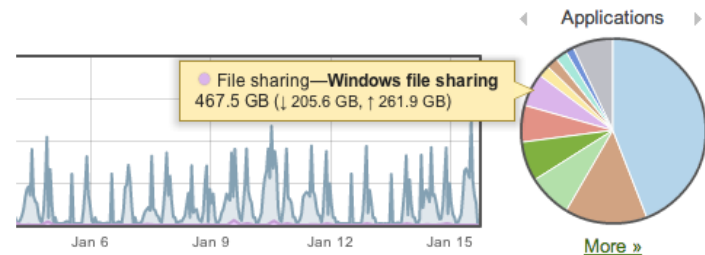
NAT type: None (Public IP). This appliance has a publicly accessible IP address and is using 184.23.135.130:40282 as a contact point.

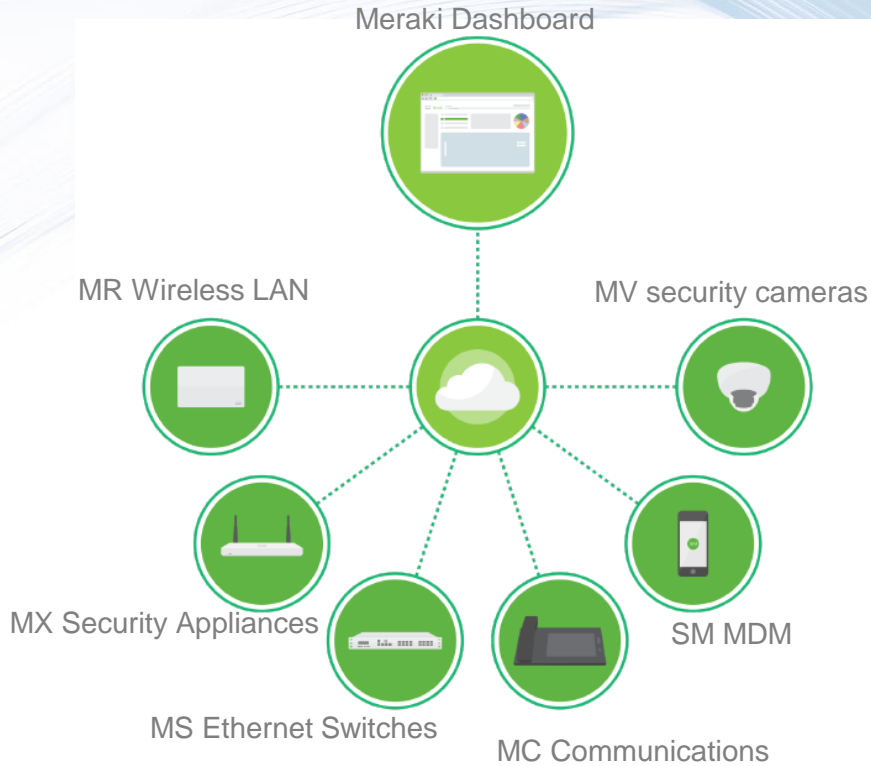
Encrypted: Using IPsec and AES encryption.




Site connectivity

Location	Subnet(s)	Status*	Latency (RTT)	Last heartbeat
Teleworker - Hiteshbeck Z1	10.128.6.0/24	connected	17.49ms	5 seconds
Teleworker - Daqhan Z1	10.128.2.0/24	connected	17.40ms	5 seconds
Teleworker - Jacob Busath Z1	10.10.9.0/24	connected	17.62ms	0 seconds
	10.92.106.0/23			







Cloud where cloud makes sense.

- 


Security

 - No user traffic passes through cloud
 - Fully HIPAA / PCI compliant (level 1 certified)
- 

Reliability

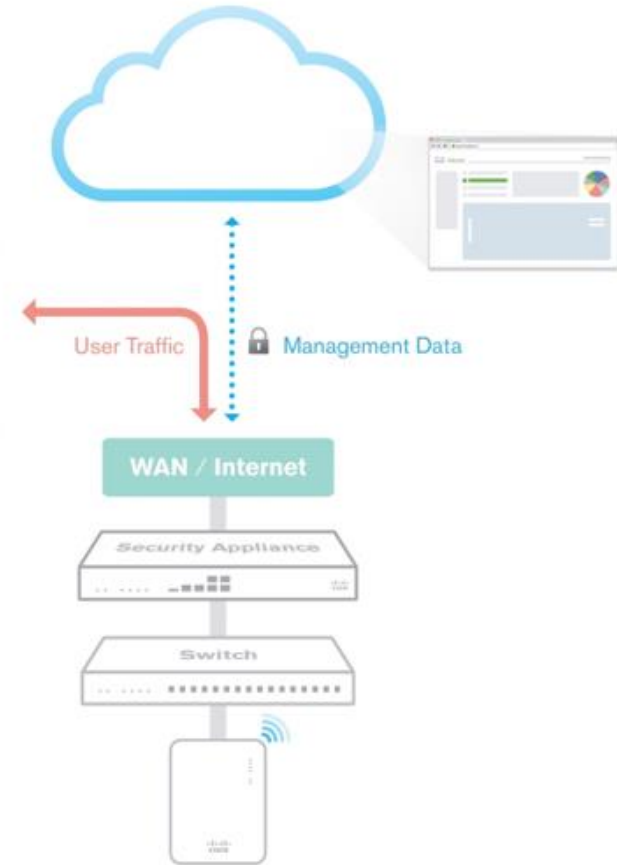
 - Highly available cloud with multiple data centers
 - Network functions even if connection to cloud is interrupted
- 

Scalability

 - Unlimited throughput, no bottlenecks, scale to any size
 - Add devices or sites in minutes
- 

Future-proofing

 - New features pushed through firmware, guided by customer feedback
 - Automatic firmware and security updates (user-scheduled)



2015

2016

MX Security



MS Switching



MR Wireless



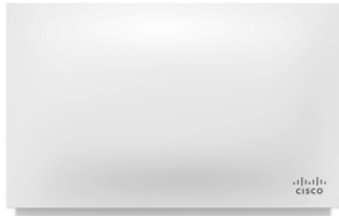
SM EMM



MC Communications



A Meraki solution includes a 1:1 ratio of hardware and licenses



hardware

+



license

1-yr, 3-yr, 5-yr, 7-yr, and 10-yr options

Licensing is required and includes:

Centralized management and network-wide visibility and control

Seamless firmware and security updates

24/7 Enterprise Support and lifetime warranty

The cloud license represents the total cost of ownership for all of your Meraki devices

MX Security Appliance

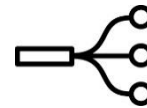


Feature highlights



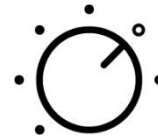
Security

NG Firewall, Client VPN,
Site to Site VPN, IDS/IPS



Networking

IWAN, 3G/4G Cellular,
Static Routing, Link Balancing



Application Control

Traffic Shaping, Content
Filtering, Geo Firewall
Rules

A complete unified threat management solution

9 models scaling from teleworker and small branch to campus / datacenter

MX Security Appliances: Models

Teleworker



Z1

1-5 users

Dual-radio wireless

FW throughput: 50 Mbps

Small Branch



MX64(W)

~50 users

802.11ac wireless

FW throughput: 250 Mbps



MX65(W)

NEW

~50 users

802.11ac wireless & PoE+

FW throughput: 250 Mbps

Medium Branch



MX84

NEW

~200 users

Dedicated WAN uplinks

FW throughput: 500 Mbps

Campus



MX100

~500 users

Gigabit uplinks

FW throughput: 750 Mbps



MX400

~2,000 users

Modular interface

FW throughput: 1 Gbps



MX600

~10,000 users

Modular interface

FW throughput: 1 Gbps

All devices support 3G/4G

Licensing that fits the business' needs



Enterprise License

Stateful firewall

Site-to-site VPN

IWAN

Link bonding and failover

Application control

Web caching

Client VPN



Advanced Security License

All enterprise features, plus

Content filtering (with Google SafeSearch)

Cisco AMP for Malware protection

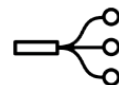
Sourcefire IDS/IPS

Threat Grid-integration*

Geo-based firewall rules

*additional Threat Grid subscription required

MS Switches



Feature highlights

Voice and video QoS

Layer 7 app visibility

Virtual and physical stacking

Dynamic routing

Enterprise security

Remote packet capture, cable testing

13 models scaling from access to campus aggregation

Introducing cloud managed physical stacking, multigigabit performance, and UPoE power to the campus network

MS Switches: Models

Layer 2 Access

MS200 series



MS220

8, 24, 48 port models
Integrated power and fans
Cisco RPS 2300 compatible

MS300 series



MS320

24, 48 Port Models
10 gigabit SFP+ uplinks
Integrated fans



MS350

NEW

24, 48 Port Models
Multigigabit and UPoE support
Physical stacking

Layer 3 Aggregation

MS400 series



MS410

NEW

16, 32 port models
10 gigabit SFP+ uplinks
Physical stacking



MS420

24, 48 port models
10 gigabit SFP+ ports
Flexible stacking



MS425

NEW

16, 32 port models
40 gigabit QSFP+ uplinks
Physical stacking

Cloud-managed physical stacking

Physical stacking

World's first cloud-managed physically stackable switches

Exceptionally fast throughput

Spatial reuse provides up to 160Gb/s aggregate stack bandwidth

Cross-stack LACP

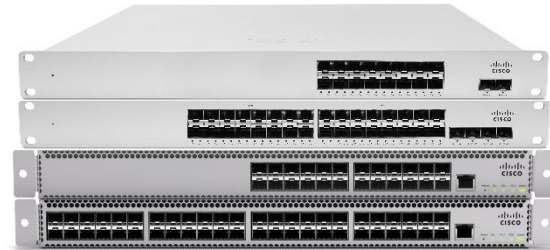
Aggregate links across multiple switches for up to 8x10Gb/s uplink to your core or aggregation switch

Stacking Configuration

Configure all stacking configurations from Dashboard in a simple and intuitive interface

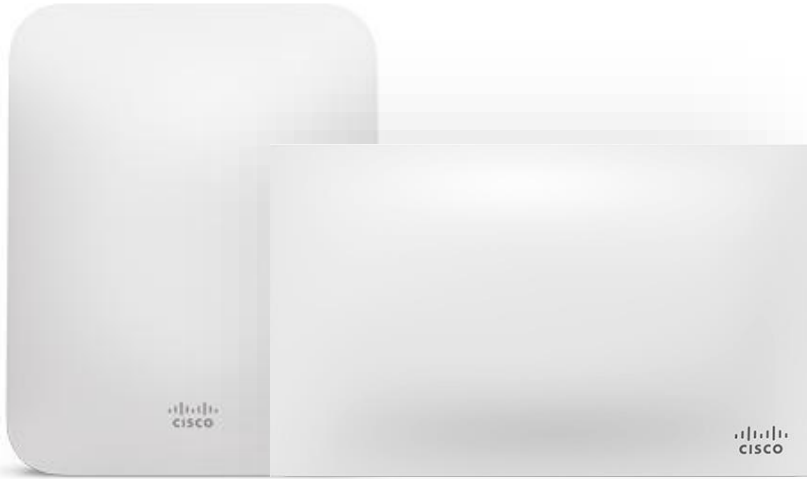


MS350
family



MS400
Series

MR Wireless Access Points



Feature highlights

BYOD policies

Application traffic shaping

Guest access

Enterprise security

WIDS / WIPS





















Location analytics

9 models including indoor / outdoor, high performance and value-priced

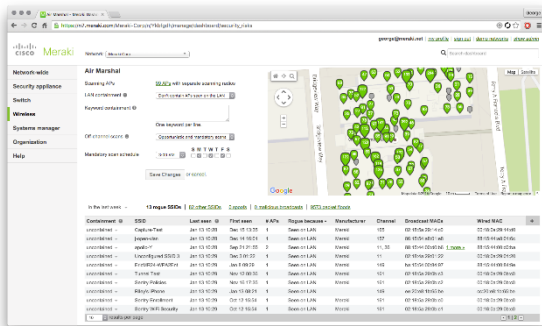
802.11ac Wave 2, multigigabit performance, and dedicated scanning and BLE radios

Lifetime warranty on indoor APs

MR Wireless Access Points: Models

	Entry	General Purpose	High Performance	Future Proof
Indoor	 MR18  2 Stream 3-Radio 802.11a/b/g/n	 MR32   MR34  2 & 3 Stream 3-Radio 802.11ac	 MR42   3 Stream 3-Radio 802.11ac Wave 2 80 MHz	 MR52   MR53   4 Stream 4-Radio 802.11ac Wave 2 160 MHz Multigigabit (MR53)
Outdoor	 MR62 Single-Radio 802.11b/g/n	 MR66  Dual-Radio 802.11a/b/g/n	 MR72   2 Stream 3-Radio 802.11ac	

MR 3rd radio tames hostile RF environments



Meraki Dashboard

Classify and filter attacks
Shoot down rogue APs
View forensic data



Air Marshal

Full-time WIPS scanning

User-defined attack policies

Tweaked alarming system

Updated signatures pushed from cloud

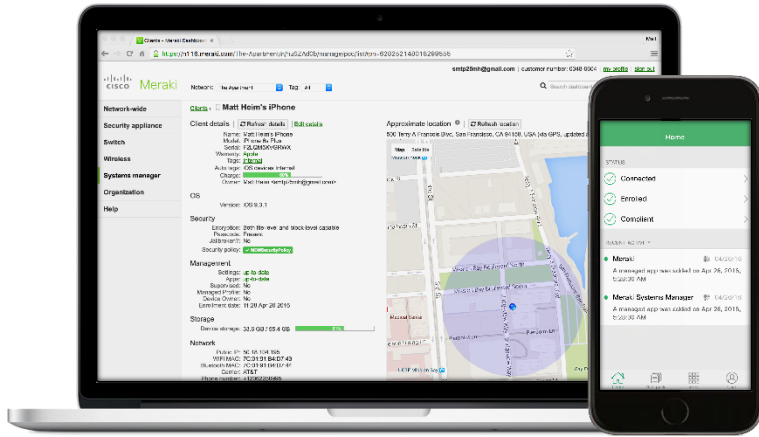
Auto RF

Intelligently spread channel use across all APs in the network

Reduce client stickiness and mobbed APs

Frequent Tx power adjustment enabled by 3rd radio

Systems Manager enterprise mobility management



Feature highlights

Device security

Mobile and desktop management

Easy and Rapid provisioning

Backpack™ file sharing

Software inventory

Multi platform MDM support - OS X, iOS, Windows, Windows Mobile, Android, & Chrome OS

Cloud-based - no on-site appliances or software, works with any vendor's network

More information available at meraki.cisco.com/sm

Systems Manager Licensing

A complete Enterprise feature set in a single product: SM

	Network size	
	≤100 devices	>100 devices
Annual cost	Free	\$40 / device
Complete feature set with ongoing updates	✓	✓
24/7 phone and email support		✓

No change is required for existing free SM users with networks with ≥ 100 devices. They can continue to add unlimited devices, and will continue not having access to new features or phone support.

About Meraki

Leader in cloud-managed networking

Among Cisco's fastest-growing portfolios
Over 75,000 unique customers
Over 1 million Meraki network devices online



Interactive Meraki Dashboard Demo

<https://dashboard.meraki.com>



Network: Live Demo - University Wireless

amnonli@gmail.com | my profile | sign out

Search dashboard

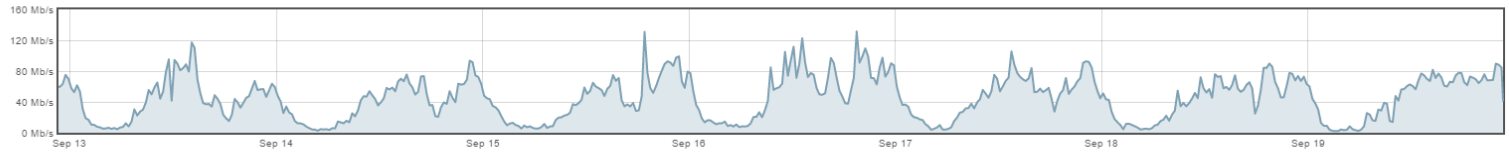
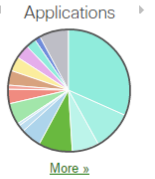
- Network-wide
- Wireless
- Organization
- Help

Please verify your email address to access all of our features. A confirmation email was sent to amnonli@gmail.com.

Resend confirmation email or update email address

Clients all for the last week

3.26 TB (↓ 2.99 TB ↑ 278.14 GB) | Matches: 45.79 GB (↓ 42.55 GB ↑ 3.24 GB)



Policy pc 16 matches in 3532

Add client Download as

	Status	Description	Last seen	Usage	OS	IPv4 address	Policy
1	📶	Lance-Beaches-MacBook-Pro	Sep 19 22:39	20.45 GB	Mac OS X	10.253.167.84	normal
2	📶	Leonard-Millers-MacBook-Pro	Sep 19 22:32	9.36 GB	Mac OS X 10.10	10.145.73.32	normal
3	📶	Isaac Valencia	Sep 18 21:16	4.46 GB	Windows 7	10.15.73.218	normal
4	📶	Stephen Tyson	Sep 19 22:39	3.82 GB	Apple iPhone	10.242.220.64	normal
5	📶	b4.8b.19.a5.ed.68	Sep 19 22:40	3.13 GB	Apple iPhone	10.78.241.164	normal
6	📶	Jose Tucker	Sep 19 17:33	2.32 GB	Windows 7	10.139.169.193	normal
7	📶	Russell Hyde	Sep 19 09:15	1.10 GB	Windows 7	10.220.39.54	normal
8	📶	Charlie Malone	Sep 19 13:29	434.2 MB	Windows 7	10.30.207.237	normal
9	📶	a4.8d.3b.d8.d1.79	Sep 19 15:34	275.6 MB	Axis communications ab IPCamera	10.162.109.251	normal
10	📶	Leo Oneil	Sep 15 09:59	253.5 MB	Windows 7	10.130.213.195	normal
11	📶	Brian Moses	Sep 19 15:26	199.8 MB	Windows 7	10.55.195.246	normal
12	📶	Wallace Harmon	Sep 19 18:02	17.2 MB	Windows 7	10.221.126.208	normal
13	📶	Lawrence Contreras	Sep 19 17:19	12.1 MB	Windows 7	10.56.118.37	normal
14	📶	1c.5a.3e.cb.70.9c	Sep 14 17:40	2.6 MB	Axis communications ab IPCamera	10.167.230.140	normal
15	📶	Lawrence Contreras	Sep 16 11:33	2.0 MB	Windows 7	10.3.150.193	normal
16	📶	Brett Bush	Sep 19 22:36	213 KB	Windows 7	10.92.209.180	normal

LIVE DEMO

Explore dashboard: [Wireless LAN Tour](#) | [Security Appliances Tour](#) | [Access Switches Tour](#)

Trial



Network: Live Demo - University Wireless

amnonli@gmail.com | [my profile](#) | [sign out](#)

Search dashboard

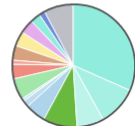
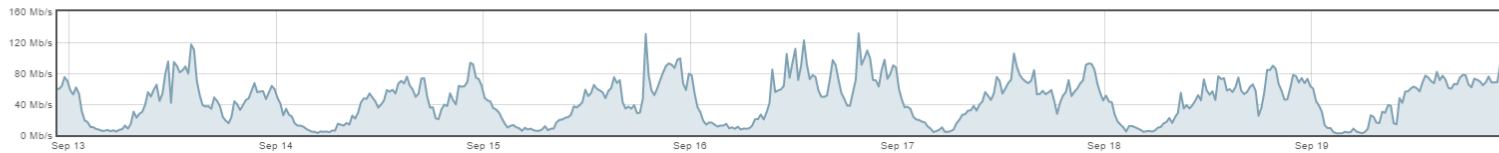
Please verify your email address to access all of our features. A confirmation email was sent to amnonli@gmail.com.

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Clients all for the last week

3.26 TB (↓ 2.99 TB ↑ 278.14 GB) | [Matches: 45.79 GB](#) (↓ 42.55 GB ↑ 3.24 GB)

Applications



Hide

Applications details

#	Description	Group	Usage	% Usage	Group usage	Group % usage
1	Netflix	Video	865.82 GB	31.6%	1.31 TB	49.0%
2	Google%20Video	Video	281.96 GB	10.3%	1.31 TB	49.0%
3	Miscellaneous%20video	Video	149.64 GB	5.5%	1.31 TB	49.0%
4	Xfinity%20TV	Video	32.78 GB	1.2%	1.31 TB	49.0%
5	hulu.com	Video	7.15 GB	0.3%	1.31 TB	49.0%
6	Vimeo	Video	1.72 GB	0.1%	1.31 TB	49.0%
7	Dailymotion	Video	1.37 GB	<0.1%	1.31 TB	49.0%
8	YouTube	Video	573.5 MB	<0.1%	1.31 TB	49.0%
9	ustream.tv	Video	16.9 MB	<0.1%	1.31 TB	49.0%
10	Amazon%20Instant%20Video	Video	2.1 MB	<0.1%	1.31 TB	49.0%
11	Miscellaneous%20secure%20web	—	243.34 GB	8.9%	243.34 GB	8.9%
12	iTunes	Music	147.94 GB	5.4%	214.52 GB	7.8%
13	Spotify	Music	47.07 GB	1.7%	214.52 GB	7.8%
14	Miscellaneous%20audio	Music	12.20 GB	0.4%	214.52 GB	7.8%
15	Pandora	Music	7.15 GB	0.3%	214.52 GB	7.8%
16	soundcloud.com	Music	157.5 MB	<0.1%	214.52 GB	7.8%
17	Rhapsody	Music	15.2 MB	<0.1%	214.52 GB	7.8%
18	Miscellaneous%20web	—	154.48 GB	5.6%	154.48 GB	5.6%
19	Facebook	Social web	104.58 GB	3.8%	134.92 GB	4.9%
20	Twitter	Social web	29.97 GB	1.1%	134.92 GB	4.9%

20 results per page

1 | 2 | 3 | 4 | 5 | 6 | 7

Policy pc 16 matches in 3532

Add client Download as

LIVE DEMO

Trial



Network: Live Demo - Switches

Search dashboard

- Network-wide
- Switch
- Organization
- Help

- Monitor
 - Switches
 - Switch ports
 - DHCP servers
- Configure
 - Routing and DHCP
 - IPv4 ACL
 - Access policies
 - Port schedules
 - Switch settings

s. A confirmation email was sent to amnonli@gmail.com.

[View new version](#)

3 switches

Download as

Status	Name	Alerts	Tags	Contacted at	Usage	# Clients with usage	# active ports	Connectivity	
<input type="checkbox"/>	Office POE switch #1			now	4.42 GB	74	- / 24		
<input type="checkbox"/>	Office POE switch #2			now	9.47 GB	95	- / 24		
<input type="checkbox"/>	Office POE switch #3			now	1.63 GB	106	- / 24		

I wish this page would...

make a wish

LIVE DEMO

Trial



Network: Live Demo - Switches

amnonli@gmail.com | my profile | sign out

Search dashboard

- Network-wide
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Please verify your email address to access all of our features. A confirmation email was sent to amnonli@gmail.com.

[Resend confirmation email](#) or [update email address](#)

Switches > Office POE switch #1 [Next switch >](#)

Configuration [Edit configuration](#)

MAC address: 02:02:00:2e:63:ac
 Serial number: VRT-2207616230316 (MS22P)

Status

Public IP: 72.13.86.194
 Topology: [Show](#)
 RSTP root: CORE1 (priority 16384) via port 52
 PoE: loading...
 History: [Event log](#)
 Configured firmware: Up to date
 DHCP relay: Not configured ([add relay](#))

Connectivity for 12 hours <<< from Sep 19 13:28 PDT to Sep 20 01:28 PDT >>>



Network usage



Ports [Configure ports on this switch](#)



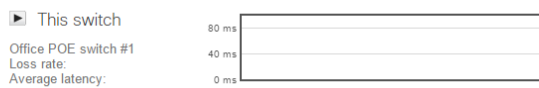
[Show port list >](#)

Live tools

- Ping
- Cable test
- Forwarding table
- Cycle port
- Wake client
- Traceroute
- Throughput

Ping

Enter a hostname, IP, or client MAC address.





- Network-wide
- Switch**
- Organization
- Help

Network: Live Demo - Switches

amnonli@gmail.com | [my profile](#) | [sign out](#)

Search dashboard

Please verify your email address to access all of our features. A confirmation email was sent to amnonli@gmail.com.
[Resend confirmation email](#) or [update email address](#)

Switch ports for the last day

Edit | Aggregate | Split | Mirror | Unmirror | Tag | Search... [help](#) 72 switch ports

Switch / Port	Name	Type	VLAN	Received bytes	Sent bytes	Status
<input type="checkbox"/> Office POE switch #1 / 1		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 2		trunk	native 1	468.4 KB	22.6 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 3		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 4		trunk	native 1	223.6 KB	22.3 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 5		trunk	native 1	473.7 KB	22.6 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 6		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 7		trunk	native 1	1.2 MB	10.0 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 8		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 9		trunk	native 1	1.2 MB	10.0 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 10		trunk	native 1	1.2 MB	10.0 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 11		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 12		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 13		trunk	native 1	13.8 MB	183.6 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 14		trunk	native 1	14.2 MB	182.3 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 15		trunk	native 1	12.9 MB	178.7 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 16		trunk	native 1	25.4 MB	316.0 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 17		trunk	native 1	18.7 MB	299.2 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 18		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 19		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 20		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 21		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 22		trunk	native 1	-	-	<div style="width: 0%;"></div>
<input type="checkbox"/> Office POE switch #1 / 23		trunk	native 1	10.8 MB	218.8 MB	<div style="width: 100%;"></div>
<input type="checkbox"/> Office POE switch #1 / 24		trunk	native 1	8.4 MB	211.0 MB	<div style="width: 100%;"></div>

LIVE DEMO

CISCO Meraki

Network: Live Demo - Switches

Network-wide

Switch

Organization

Help

Please verify your email address to access all of our features. A confirmation email was sent to **amnonli@gmail.com**.
[Resend confirmation email](#) or [update email address](#)

Switch ports for the last day

Edit Aggregate Split Mirror Unmirror Tag Search...

- Switch / Port
- Office POE switch #1 / 1
- Office POE switch #1 / 2
- Office POE switch #1 / 3
- Office POE switch #1 / 4
- Office POE switch #1 / 5
- Office POE switch #1 / 6
- Office POE switch #1 / 7
- Office POE switch #1 / 8
- Office POE switch #1 / 9
- Office POE switch #1 / 10
- Office POE switch #1 / 11
- Office POE switch #1 / 12
- Office POE switch #1 / 13
- Office POE switch #1 / 14
- Office POE switch #1 / 15
- Office POE switch #1 / 16

Update 1 port

Switch ports:

Name:

Tags:

Enabled:

RSTP:

STP guard:

PoE:

Link:

Port schedule:

Isolation:

Type:

Native VLAN:

Allowed VLANs:

				Sent bytes	Status
				-	<input type="checkbox"/>
				22.6 MB	<input type="checkbox"/>
				-	<input type="checkbox"/>
				22.3 MB	<input type="checkbox"/>
				22.6 MB	<input type="checkbox"/>
				-	<input type="checkbox"/>
				10.0 MB	<input type="checkbox"/>
				-	<input type="checkbox"/>
	trunk	native 1	1.2 MB	10.0 MB	<input type="checkbox"/>
	trunk	native 1	1.2 MB	10.0 MB	<input type="checkbox"/>
	trunk	native 1	-	-	<input type="checkbox"/>
	trunk	native 1	-	-	<input type="checkbox"/>
	trunk	native 1	13.8 MB	183.6 MB	<input type="checkbox"/>
	trunk	native 1	14.2 MB	182.3 MB	<input type="checkbox"/>
	trunk	native 1	12.9 MB	178.7 MB	<input type="checkbox"/>
	trunk	native 1	25.4 MB	316.0 MB	<input type="checkbox"/>

We have added download usage to the usage graph so you can compare your total usage to your downloaded usage. Check it out!

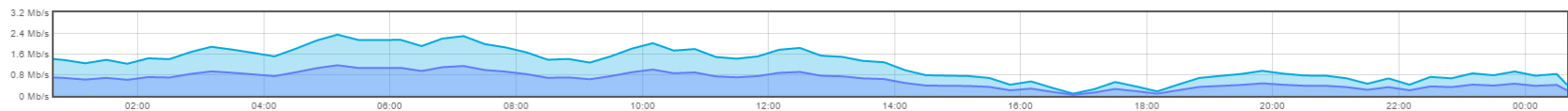
Please verify your email address to access all of our features. A confirmation email was sent to amnonli@gmail.com.

[Resend confirmation email](#) or [update email address](#)

Summary report In 'Live Demo - Firewall' over the last day ▾

[Email this report](#) [Schedule report emails](#)

Usage (Total 89.62 GB: ↓ 44.81 GB ↑ 44.81 GB)



Top appliances by usage

#	Name	Model	Usage ▾	# Clients with usage ⓘ
1	Main Office	MX90	11.51 GB	22

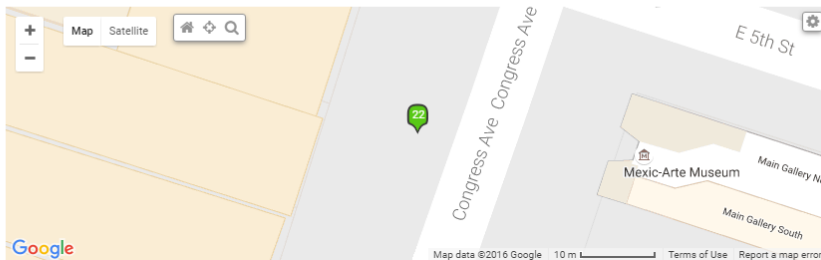
Clients (Total: 22 distinct clients)

Top clients by usage

#	Description	Usage ▾	% Usage
1	28.C2.DD.75.24.9d	5.52 GB	6.2%
2	Jorge-Averies-MacBook-Pro	2.61 GB	2.9%
3	Ross-Lanes-iPhone	943.8 MB	1.0%
4	Kent-Mavers-iPhone	815.3 MB	0.9%
5	Corey-Coleman-MacBook-Pro	654.7 MB	0.7%
6	Leonard Woods	468.4 MB	0.5%
7	Glenn-Spears-iPhone	210.8 MB	0.2%
8	Chester-Ayalas-iPhone	172.6 MB	0.2%
9	Chris-Cookes-iPhone	86.5 MB	0.1%
10	Brad-Munozs-MacBook-Air	43.0 MB	<0.1%

Top client device manufacturers by usage

#	Manufacturer	# Clients	% Clients	Usage ▾	% Usage
1	Apple	11	50.0%	5.94 GB	6.6%
2	AzureWave Technology	1	4.5%	5.52 GB	6.2%
3	Meraki	4	18.2%	47.6 MB	0.1%
4	Cisco Systems	2	9.1%	6.0 MB	<0.1%
5	Raspberry Pi Foundation	1	4.5%	637 KB	<0.1%
6	Microsoft	1	4.5%	276 KB	<0.1%
7	Hon Hai/Foxconn	1	4.5%	192 KB	<0.1%



Top appliance models by per-device usage

#	Model	# Appliances	Usage	Avg usage per appliance ▾
1	MX90	1	11.51 GB	11.51 GB

Usage details

Top applications by usage

#	Application	Usage ▾	% Usage
1	Netflix	7.17 GB	63.8%
2	iTunes	1.09 GB	9.7%
3	Google Video	1018.4 MB	8.9%
4	Miscellaneous secure web	435.7 MB	3.8%
5	Miscellaneous video	272.9 MB	2.4%
6	Facebook	267.3 MB	2.3%

Thanks !