

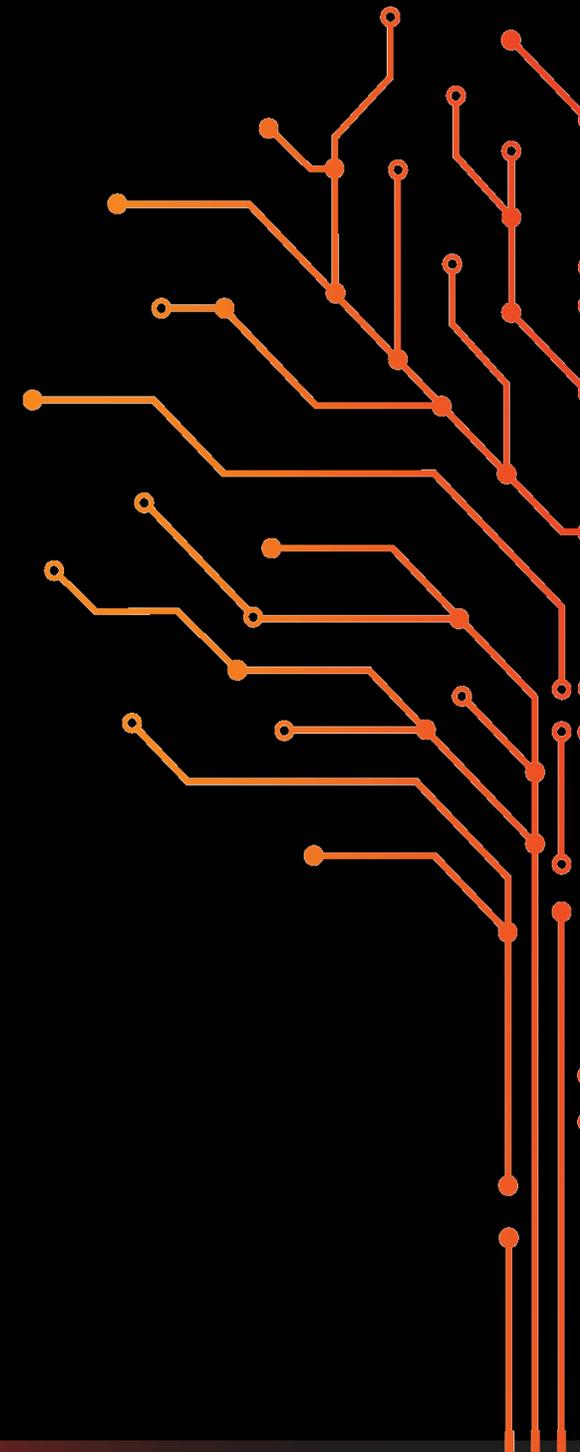


Meraki Cloud Managed WiFi & Switching

@merakisimon

Welcome to the 2nd session of the *Meraki Cloud Networking* webinar series!

- Use the Q and A panel to ask questions.
- Use the Chat panel to communicate with attendees and panelists.
- A link to a recording of the session will be sent to all registered attendees.
- Please take the feedback survey at the end of the webinar.





Career Advantage **Webinars**

Meraki Cloud Networking Series



NEXT SESSION:

Exploring Meraki Cloud Telephony and Vision



19 January, 9:00 a.m. Pacific Standard Time

Register at: bit.ly/Meraki3



Agenda

Introduction

Why Cloud Networking?

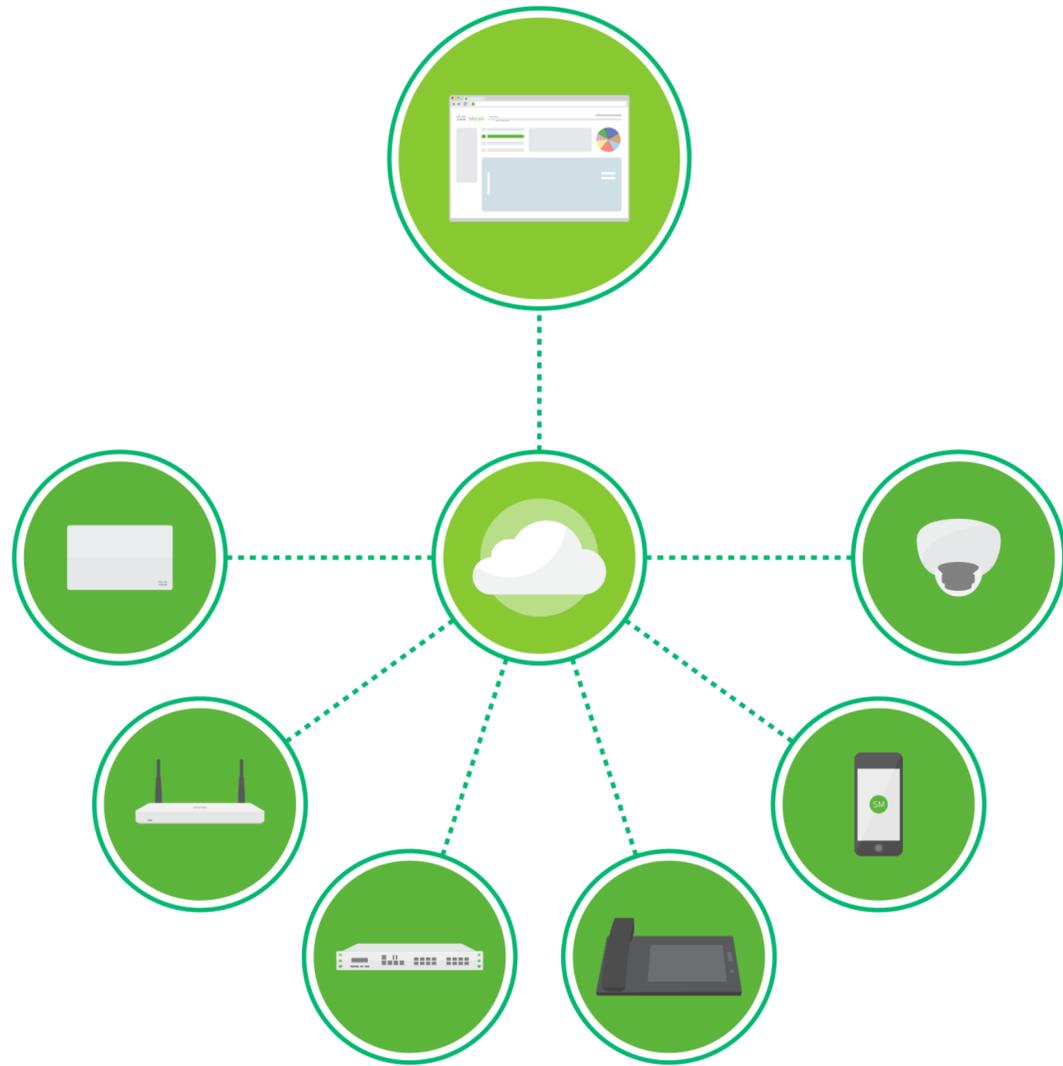
Product demo

Product families

Q&A

About Cisco Meraki

Simplifying IT with Cloud Management



A complete cloud managed IT solution

Wireless, switching, security, SD-WAN,
communications, EMM, and security cameras

Integrated hardware, software, and cloud services

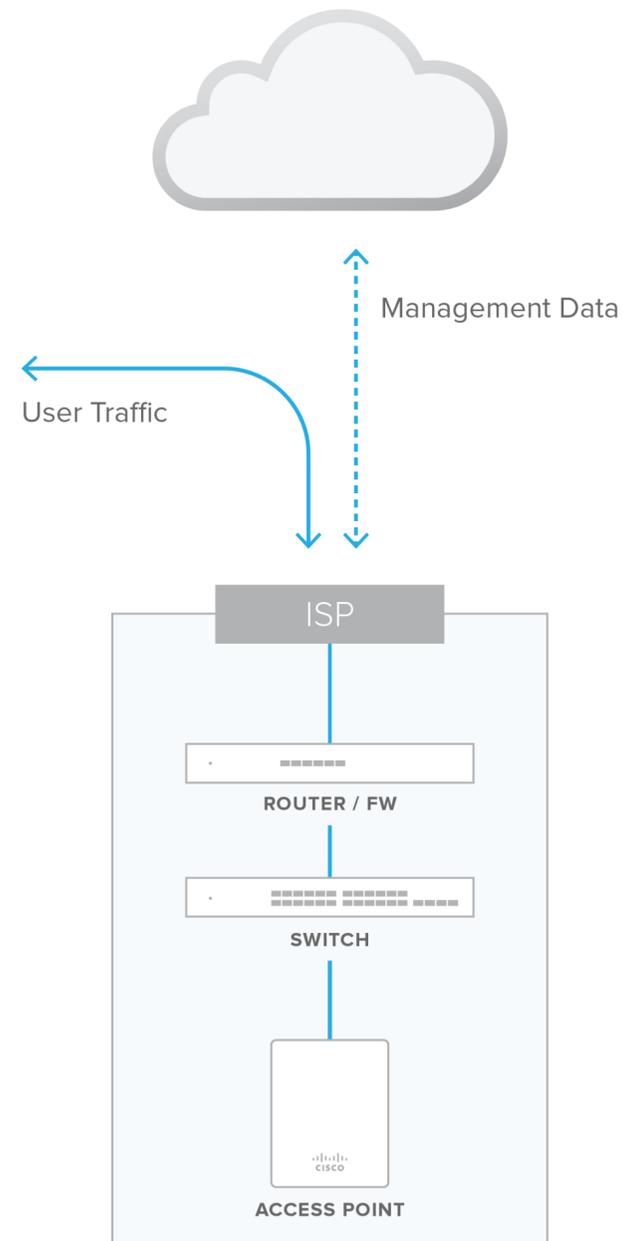
Leader in cloud-managed networking

Among Cisco's fastest growing portfolios

Over 140,000 unique customers

Over 2 million Meraki network devices online

Out of band cloud management



Intuitive

- Simple browser-based dashboard
- Cloud hosted centralized management platform

Scalable

- Unlimited throughput, no bottlenecks
- Add devices or sites in minutes

Reliable

- Highly available cloud with multiple datacenters
- Network functions even if connection to cloud is interrupted
- 99.99% uptime SLA

Secure

- No user traffic passes through cloud
- Fully HIPAA / PCI compliant (level 1 certified)
- 3rd party security audits, daily penetration testing
- Automatic firmware and security updates (user-scheduled)

Reliability and security information at meraki.cisco.com/trust

Why cloud managed IT?

```
IOS_Router_1
File Edit View Options Transfer Script Tools Help
Enter host <Alt+R>
IOS_Router_1
network 10.0.0.1 0.0.0.0 area 0
bfd all-interfaces
IOS_Router_1#
IOS_Router_1#
IOS_Router_1#
IOS_Router_1#sh run | section rout
router bgp 100
  bgp router-id 1.1.1.1
  bgp log-neighbor-changes
  no bgp default ipv4-unicast
  neighbor 10.0.0.2 remote-as 100
  neighbor 10.0.0.2 fall-over bfd
  !
  address-family ipv4
    neighbor 10.0.0.2 activate
  exit-address-family
IOS_Router_1#
IOS_Router_1#
IOS_Router_1#
IOS_Router_1#sh bfd neighbor

IPv4 Sessions
NeighAddr
nt
10.0.0.2
t0/1
IOS_Router_1#
IOS_Router_1#
IOS_Router_1#sh bfd neighbor detail

IPv4 Sessions
NeighAddr
nt
10.0.0.2
t0/1
Session state is UP and using echo
Session Host: Software
OurAddr: 10.0.0.1
Handle: 1
Local Diag: 0, Demand mode: 0, Pol
MinTxInt: 1000000, MinRxInt: 1000000, Multiplier: 3
Received MinRxInt: 1000000, Received Multiplier: 3
Holddown (hits): 0(0), Hello (hits): 1000(2400)
Rx Count: 2407, Rx Interval (ms) min/max/avg: 1/1006/879 last: 327 ms ago
Tx Count: 2402, Tx Interval (ms) min/max/avg: 1/1030/878 last: 546 ms ago
Elapsed time watermarks: 0 0 (last: 0)
Registered protocols: BGP CEF OSPF
Uptime: 00:35:12

Ready ssh2: AES-256-CTR 48. 14 48 Rows, 74 Cols VT100 CAP NUM
```

```
IOS_Router_2
File Edit View Options Transfer Script Tools Help
Enter host <Alt+R>
IOS_Router_2
network 10.0.0.2 0.0.0.0 area 0
bfd all-interfaces
IOS_Router_2#

RH/RS State In
Up Up Et

RH/RS State In
Up Up Et

th 50 ms interval.

MinTxInt: 1000000, MinRxInt: 1000000, Multiplier: 3
Received MinRxInt: 1000000, Received Multiplier: 3
Holddown (hits): 0(0), Hello (hits): 1000(2451)
Rx Count: 2447, Rx Interval (ms) min/max/avg: 1/1031/879 last: 610 ms ago
Tx Count: 2452, Tx Interval (ms) min/max/avg: 1/1006/879 last: 238 ms ago
Elapsed time watermarks: 0 0 (last: 0)
Registered protocols: BGP CEF OSPF
Uptime: 00:35:52

Ready ssh2: AES-256-CTR 48. 14 48 Rows, 75 Cols VT100 CAP NUM
```

```
Terminal
Router>enable
Password:
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip route-cache flow
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#ip route-cache flow
Router(config-if)#exit
Router(config)#ip flow-export destination 192.168.17.3 2055
Router(config)#ip flow-export source FastEthernet0/0
Router(config)#ip flow-export version 5
Router(config)#ip flow-cache timeout active 1
Router(config)#ip flow-cache timeout inactive 15
Router(config)#^Z
Router#write
Building configuration...
[OK]
Router#exit
Connection closed by foreign host.
#
```

An integrated solution for new IT challenges



Billions of mobile devices



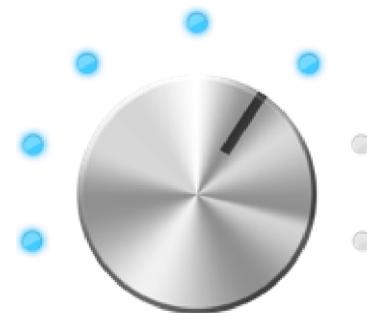
HD video and rich media



New business opportunities



Integrated mobility management



Layer 7 application shaping



Analytics and user engagement

*A complete solution out-of-the-box:
No extra hardware, software, or complexity*

SaaS feature delivery, quarterly updates



Layer 3 roaming

Splash page

- None (direct access)
Users can access the network as soon as they associate
- Click-through
Users must view and acknowledge your splash page before being allowed on the network
- Sign-on with **Facebook Wi-Fi**
Require users to check in to your Facebook Page before gaining access to you. Save this page first, in order to associate your ssid with your Facebook Page.
- Sign-on with SMS Authentication
Users enter a mobile phone number and receive an authorization code via SMS. After a trial period of 25 texts, you will need to connect with your Twilio account
- Billing (paid access)

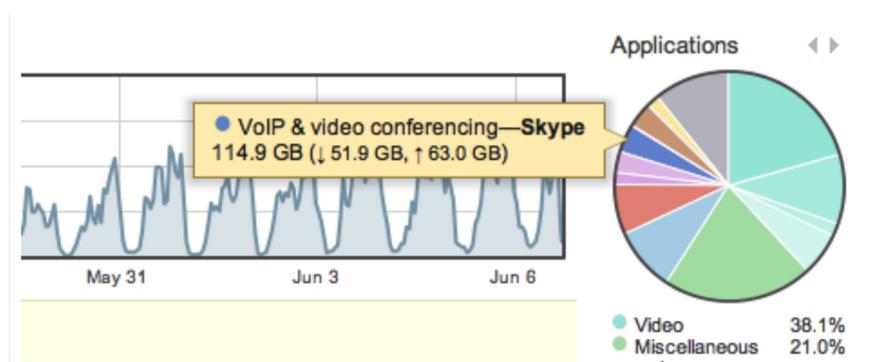
Easy guest onboarding

RF spectrum

Search access points...

Name	Channels used	Avg. channel utilization (2.4 GHz)	Avg. channel utilization (5 GHz)
WIFI-3-488A	6,149	14% - low	3% - very low
WIFI-2-482A	11,157	14% - low	2% - very low
WIFI-1-487D	6,48	15% - low	2% - very low
WIFI-6-482B	11,161	11% - low	3% - very low
WIFI-8-48D2	6,36	20% - low	3% - very low
WIFI-9-4843	11,44	17% - low	2% - very low
WIFI-4-4854	1,153	23% - low	4% - very low
WIFI-5-4830	6,48	19% - low	1% - very low

Auto RF



Traffic analytics and shaping

Air Marshal

Scanning APs 10 APs with separate scanning radios

LAN containment Don't contain APs seen on the LAN

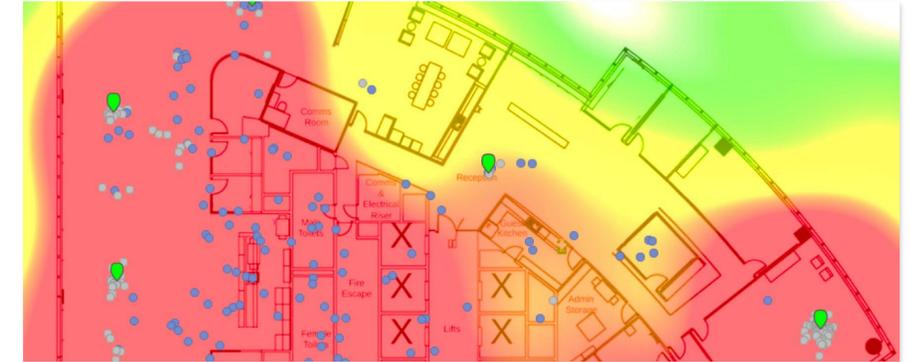
Keyword containment One keyword per line.

Off-channel scans Opportunistic scans only

Save Changes or cancel.

In the last week 3 rogue SSIDs | 1781 other SSIDs | 0 spoofs | 0 malicious broadcasts | 0 packet floods

Air Marshal



Location Analytics

Live demo

Products

Cisco Meraki AP lineup

Indoor APs

MR30H



2 stream triple-radio
802.11ac Wave 2
Bluetooth LE

MR33



2 stream triple-radio
802.11ac Wave 2
Bluetooth LE

MR42



3 stream quad-radio
802.11ac Wave 2
Bluetooth LE

MR52



4 stream quad-radio
802.11ac Wave 2
Bluetooth LE

MR53



4 stream quad-radio
802.11ac Wave 2
Multigigabit
Bluetooth LE

Outdoor APs

MR62



Single-radio
802.11b/g/n

MR66



Dual-radio
802.11a/b/g/n

MR72



2 stream triple-radio
802.11ac
Bluetooth LE

MR84



4 stream quad-radio
802.11ac Wave 2
Multigigabit
Bluetooth LE

The New Meraki Access Switching Portfolio

L2 ACCESS

Compact

MS220-8



 PoE+ Options

 1G SFP Uplinks

Branch & Campus

MS225



 PoE+ Options

 10G SFP+ Uplinks

 80G Stacking

Branch & Campus

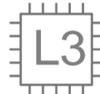
MS250



 PoE+ Options

 10G SFP+ Uplinks

 80G Stacking

 Basic Routing

 Modular Power

Campus

MS350



 PoE+ UPoE*

 10G SFP+ Uplinks, mGig

 160G Stacking

 High Performance Routing

 Modular Power

 Modular fans

The Meraki Full Stack



MR
Access Points



MX
Security Appliances



MS
Ethernet
Switches



Systems Manager
EMM



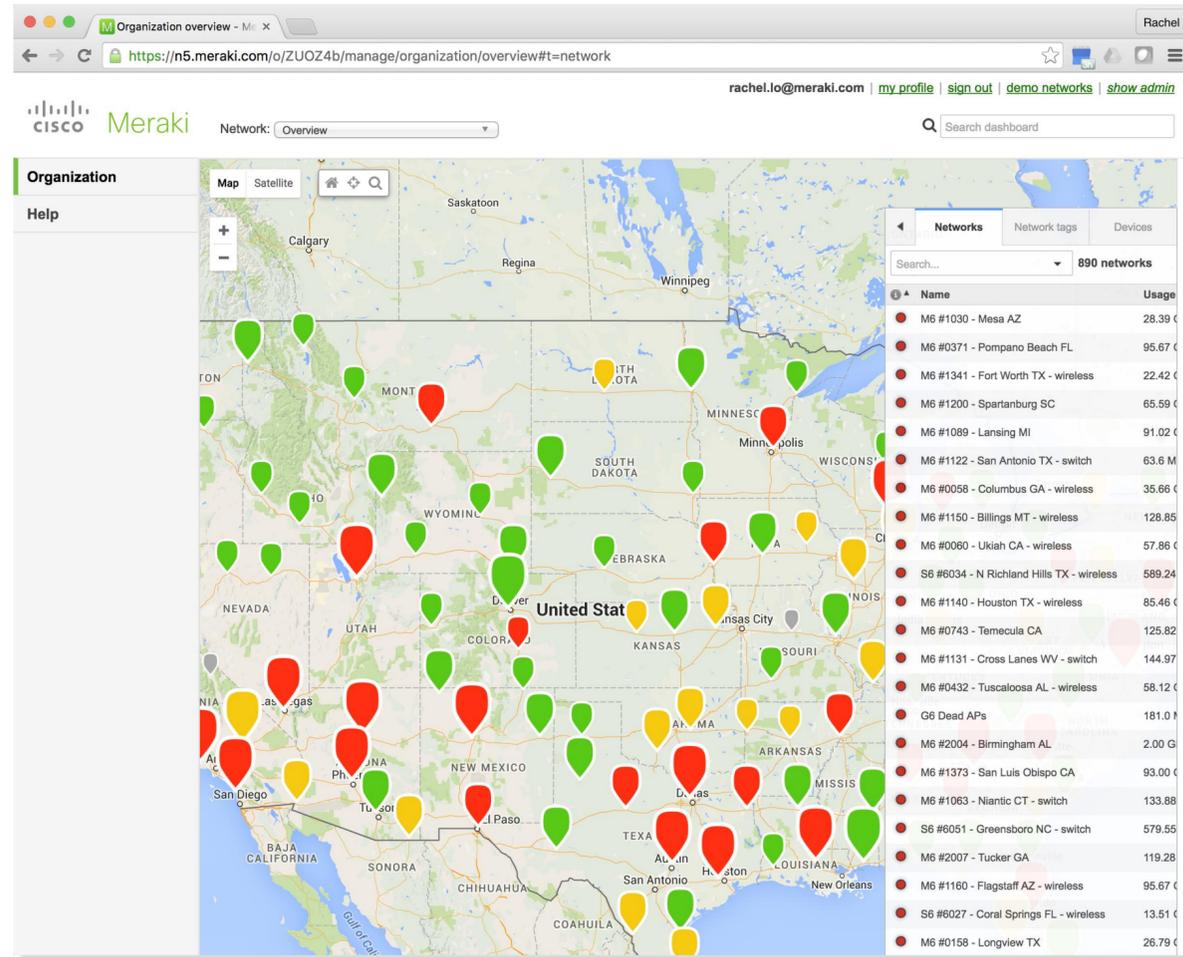
MC
Communications



MV
Security Cameras

A complete cloud managed IT portfolio
Single pane of glass management

Benefits of all Cisco Meraki products



Multi-site management

Zero-touch device provisioning

Seamless firmware upgrades (user-scheduled)

Summary reports

PCI compliant

99.99% SLA

Keeping in touch...



Official Blog

<http://meraki.cisco.com/blog>



Twitter

[@meraki](https://twitter.com/meraki)



Meraki public community

<http://cs.co/talkmeraki>





Q&A



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karsulli@cisco.com

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