



# Cisco Meraki - more than "just" complete cloud managed networks



4. 10. 2016



Technology can connect us, empower us, and drive us. At Meraki we believe by simplifying powerful technology we can free passionate people to focus on their mission and reach groups previously left in the darkness.

Technology that simply works

```
Cisco Internetwork Operating System Software
IOS (tm) 2500 Software (C2500-D-L), Version 12.0(9), RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2000 by cisco Systems, Inc.
Compiled Mon 24-Jan-00 22:06 by bettyl
Image text-base: 0x030387D0, data-base: 0x00001000

ROM: System Bootstrap, Version 11.0(10c), SOFTWARE
BOOTFLASH: 3000 Bootstrap Software (IGS-BOOT-R), Version 11.0(10c), RELEASE SOFTWARE (fc1)

[REDACTED] uptime is 14 years, 1 week, 3 days, 15 hours, 51 minutes
System restarted by reload at 02:20:35 GMT Sat Oct 21 2000
System image file is "flash:12.0.9-2500"
Network configuration file is "tftp://[REDACTED]"

cisco 2500 (68030) processor (revision L) with 14336K/2048K bytes of memory.
```

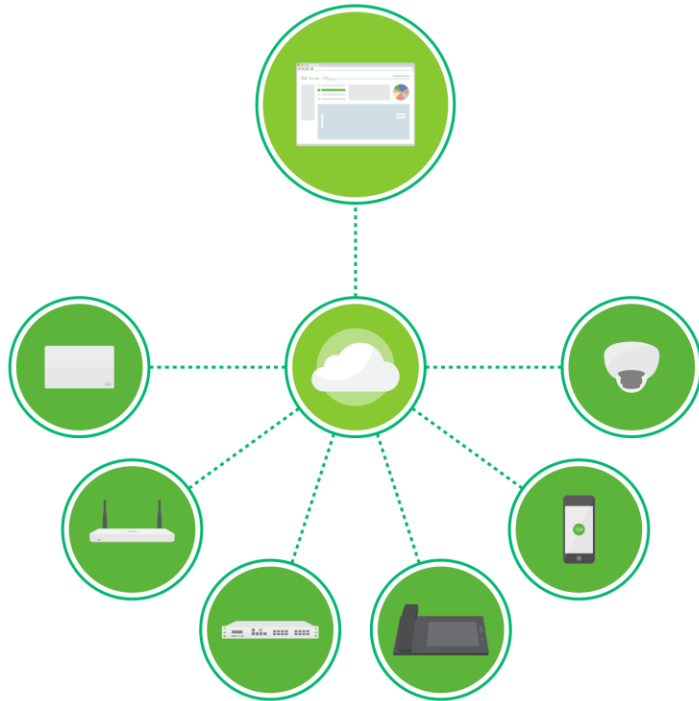
What's the first thing that comes to mind?

And the second...?

## Cisco 2016 Annual Security Report

- Aging infrastructure is growing and leaves organizations increasingly vulnerable to compromise. We analyzed 115,000 Cisco® devices on the Internet and discovered that 92 percent of the devices in our sample were running software with known vulnerabilities. In addition, 31 percent of the Cisco devices in the field that were included in our analysis are “end of sale” and 8 percent are “end of life.”

# Simplifying across IT with cloud management



Cloud where cloud makes sense.

# Wireless



# Introducing the MR84: high-density wireless made easy

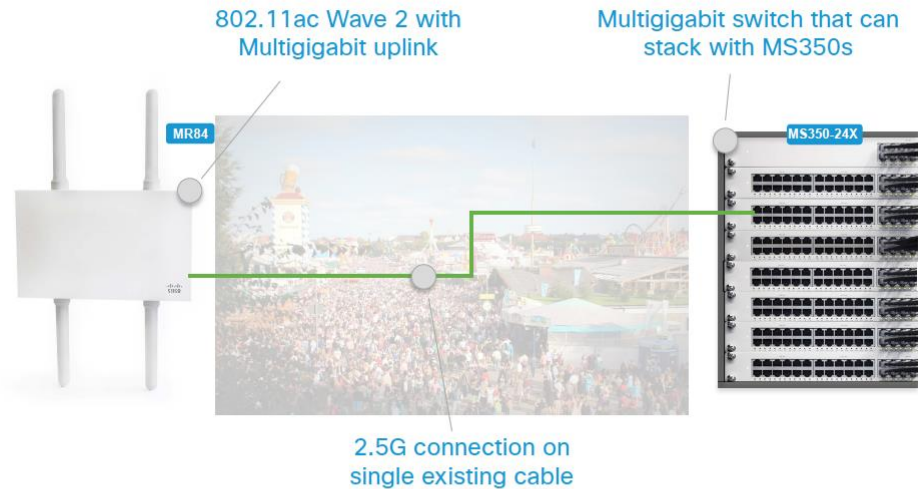
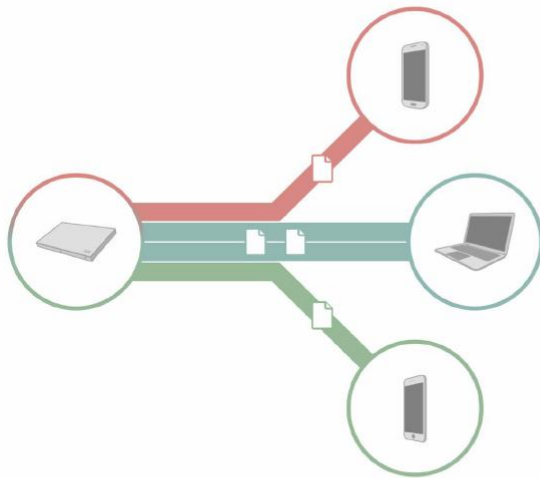
## Why customers will love it

- Serve more concurrent clients with most advanced 802.11ac Wave 2 chipset, 4x4:4-stream MU-MIMO 160MHz architecture, and **multigigabit uplink**
- Steer clients to faster, less congested 5Ghz channels and improve roaming performance by setting minimum bitrates
- Enjoy a seamless wireless experience — even with 10,000+ devices — across entire venue with Layer 3 roaming
- Rapidly expand wireless connectivity to remote “dead zone” areas with zero-touch, automatic AP meshing
- Reduce RF interference in congested areas with a dedicated scanning radio that proactively tunes to optimize performance



**IP67 rating for harsh outdoor / indoor conditions**

# Why 802.11ac and multigigabit?



**MU-MIMO vs. SU-MIMO:** serve more devices simultaneously

**Wider channels:** transmit data faster, free up air time for more clients

**Multigigabit:** more bandwidth over existing cables



## Making high-density wireless network easy



# Communications



# Cisco Meraki MC74

- Streamlined deployment
- Simplified management
- Delightful end-user experience
- Single pane-of-glass management with Meraki network
- First in a series



Managed through the cloud, integrated with the network

# Telephony feature sets

Visual Voicemail

Conferencing

Workgroups (beta)

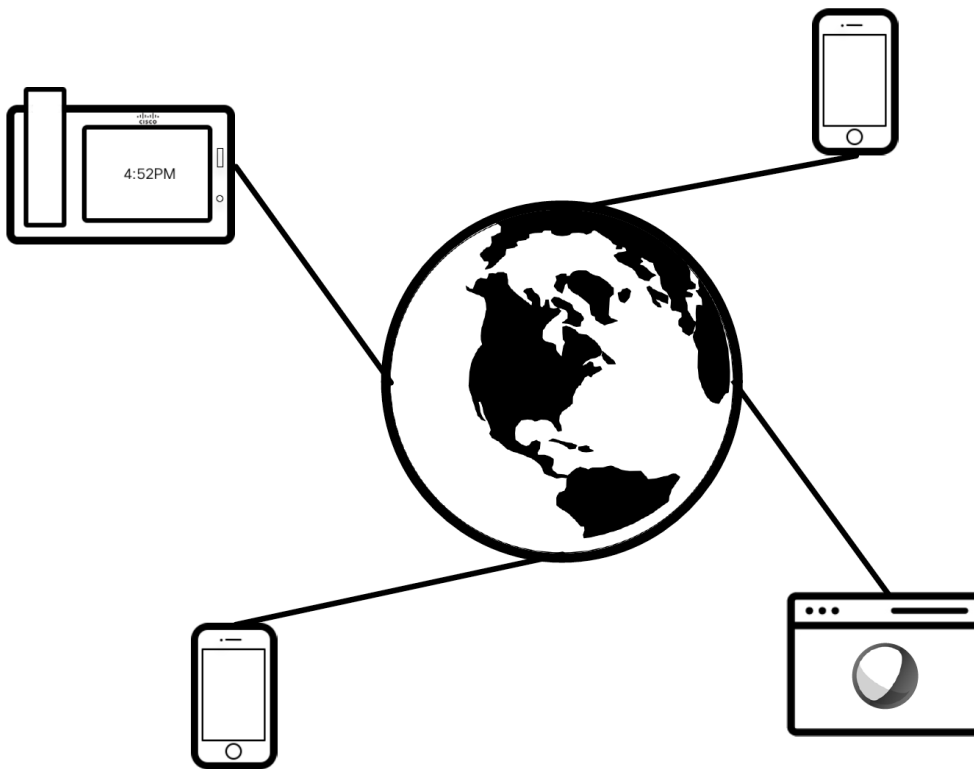
Music On Hold

Automated attendant/IVR Menu

Basic call features (hold, transfer, multiple simultaneous incoming calls, caller ID)

Secure end to end calls via Secure SIP (TLS) for signaling and SRTP for media streams

Phones assigned extensions (4-6 digits) and DIDs (10 digits)



**Check the MC Datasheet for the latest features**

25

# Security appliances



# MX: One, easy to use, appliance to secure your networks and connect them with the world.



## Security - UTM

NG Firewall, Client VPN, Site to Site VPN, IDS/IPS, Anti-Malware, Geo-Firewall



## Networking

NAT/DHCP, 3G/4G Cellular, Intelligent WAN (IWAN)



## Application Control

Web Caching, Traffic Shaping, Content Filtering

# Ironclad security

**Stateful Firewall**

L3, L7 (NGFW)

**IPS/IDS**

Snort

**Content Filtering**

4+ billions URLs  
(Webroot BrightCloud)

**Geo-based security**

Geo-filtering (Max Mind)

**Malware Protection**

Cisco AMP

AMP Threat Grid

**Client authentication**

AD, Radius, 802.1x

**SOC**

Single pane of glass security center

**Firmware freshness**

Continuous security updates

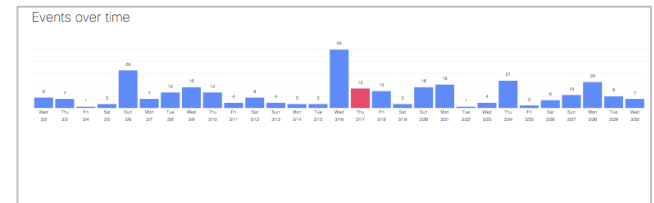
**PCI compliance**

PCI 3.1 certified cloud-based management

Intrusion prevention powered by **SOURCEfire**

Security blocking  Enabled

Block security risks labeled  High

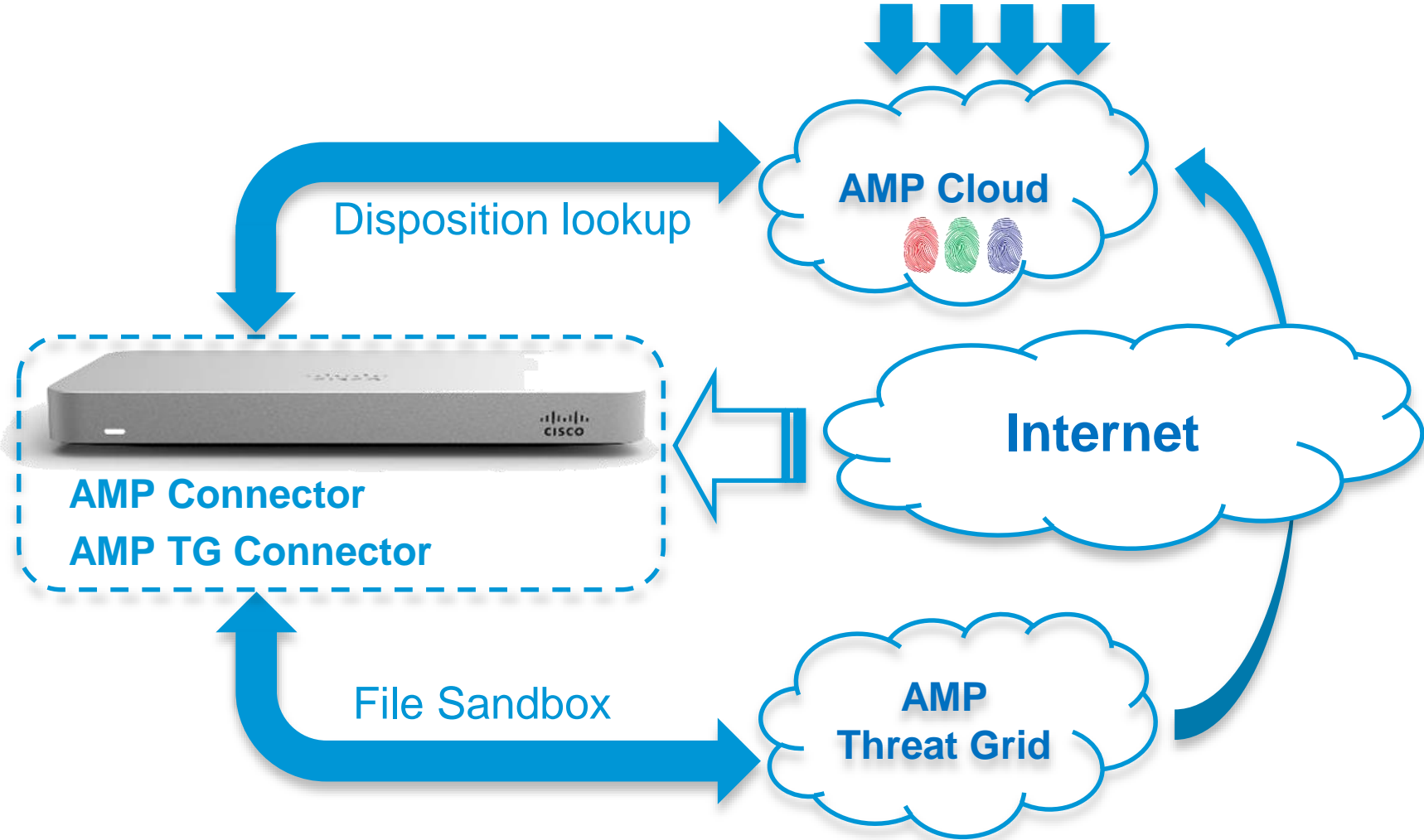


Most affected clients

Client	Last Affected	Events
10.6.0.22	Mar 17 22:37:18	30
10.6.0.86	Mar 25 10:57:55	26
10.6.0.29	Mar 29 20:46:05	24
SMORENOVM Meralco Network OS	Mar 22 19:29:20	22
10.6.0.192	Mar 25 10:49:23	14
10.6.0.188	Mar 18 9:18:44	14
10.6.0.191	Mar 29 7:10:18	14
10.6.0.98	Mar 19 12:39:08	13
10.6.0.147	Mar 29 18:12:10	13
10.6.0.202	Mar 30 8:40:11	12

Top sources of threats

# Cisco AMP



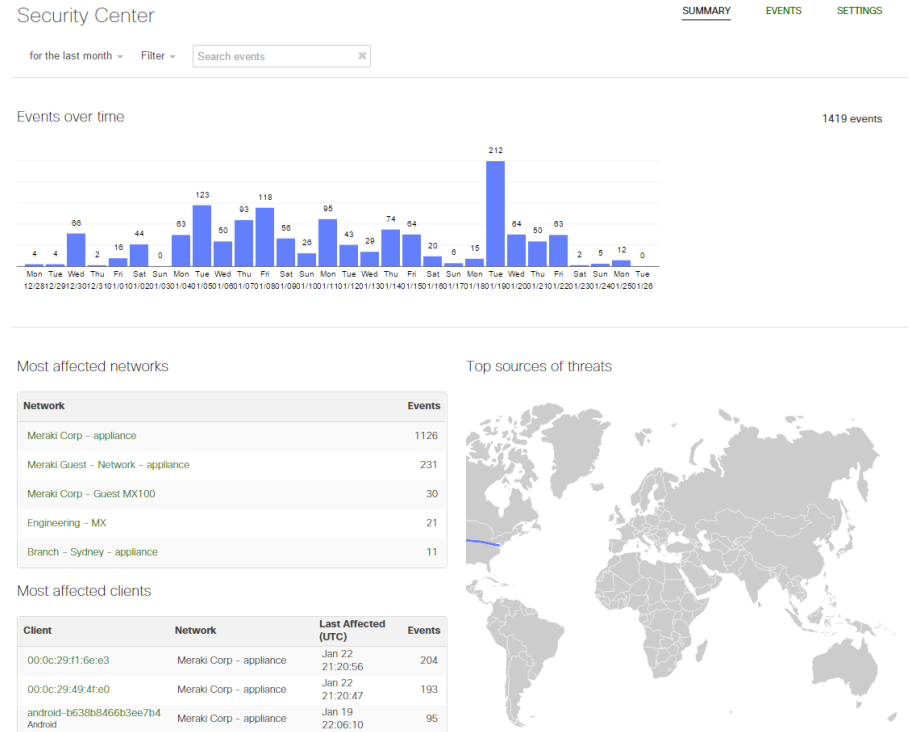


# AMP is coming to MX

- Cisco's Advanced Malware Protection
- Continuous analysis of files that enter the network
- Keeps a growing database of malicious file signatures
  - 220M** known malicious files **407M** known clean files
  - 1.5M** incoming new malware samples per day
  - 3.1B** lookups requests per day
- Alerts even if a malicious file is discovered in retrospect
- FREE with MX Advanced Security license
- Dynamic file submission available through **AMP Threat Grid UPGRADE**

# New Security Center (replaces Security Reports)

- All security-related events in one place
- Pivot on the client, network, threat or remote source
- Quickly identify clients and networks that are potentially infected
- Identify threats that appear across multiple networks



# New SD-WAN features for the MX

## Dual-active path:

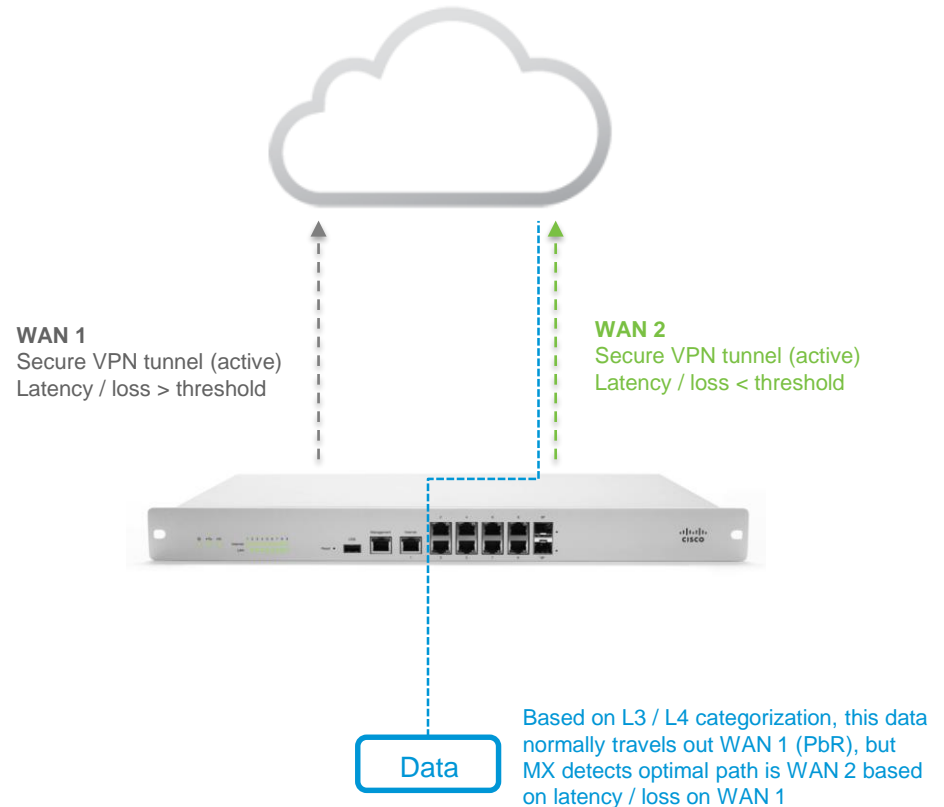
- Dual-active VPN
- Dual-active VPN & MPLS

## Dynamic Path Selection:

Ensures that the best VPN tunnel is used based on latency and loss performance metrics

## Policy-based routing (PbR) :

Allows uplinks to be intelligently assigned based on traffic protocol, subnet, source, destination, etc.



# Introducing MV security cameras

# Meraki MV security cameras

*Introducing a brand new Meraki product family*



The only video surveillance solution from a cloud leader

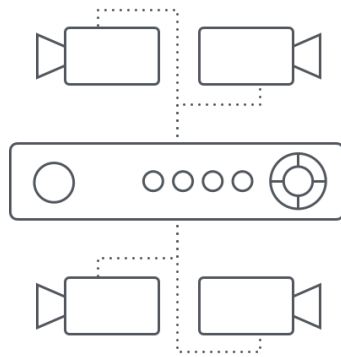
Simplified design for streamlined deployment

Fully managed through the Meraki dashboard

128GB of flash storage on each camera (about 20 days of footage)

# Current video surveillance solutions

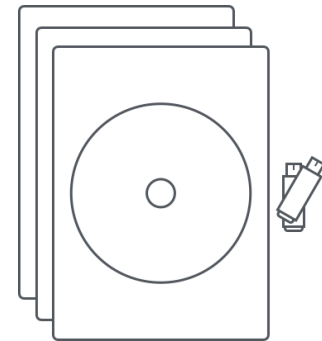
WITH MV, SAY GOODBYE TO



Additional on-premise hardware



Standalone software packages



External recording devices

# Dashboard, better by default

Two-factor authentication  Force users to set up and use two-factor authentication

Local time zone Europe - London (UTC +1.0, DST)

Cameras upgrade The cameras in this network are configured to run the latest available firmware.  
 Upgrade as scheduled

Enabled alerts Send an email alert if:  
 A camera goes offline for more than 60 minutes

● Second Floor - Work Area e0:55:3d:83:03:bb MV21

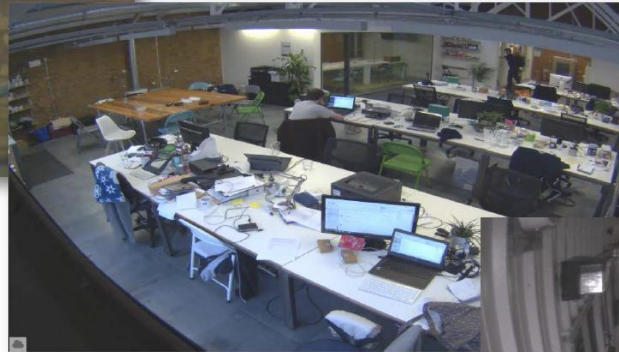
Work Area Video Image settings

Reboot (Firmware upgrade) (Jul 29 21:30-21:33)

Jul 25 Jul 28 Jul 31

Don't overlook the dashboard advantage.

# High Resolution Day or Night



High resolution 5 megapixel camera with video recorded at 720p HD.

3 - 10mm vari-focal lens offers a flexible Field of View (FOV) for easy camera placement.

- Wide angle for rooms and corridors
- Zoomed in for cash registers and door entrances.

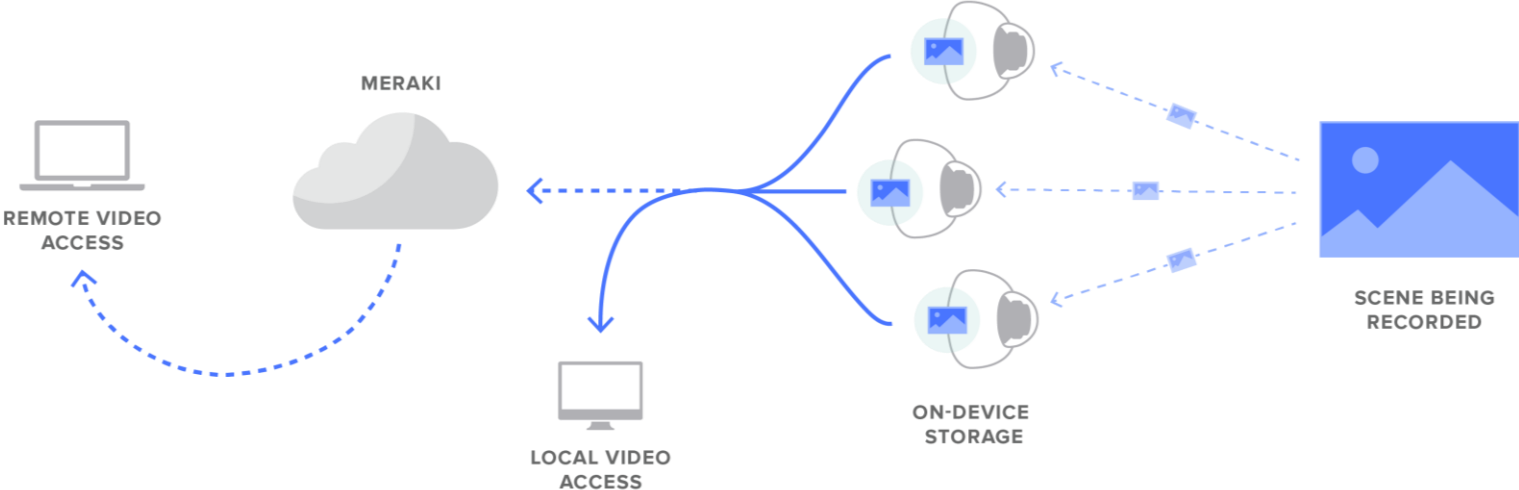
Night mode with infrared (IR) illumination up to 100 feet.

PoE with built in chassis heating for MV71 outdoor model:

- MV21 PoE 802.3af (10.94W max)
- MV71 PoE+ 802.3at (21.95W max)



# Cutting edge architecture



# Powerful, intuitive features

## Video wall

Resize, reorder, and monitor video streams on the fly

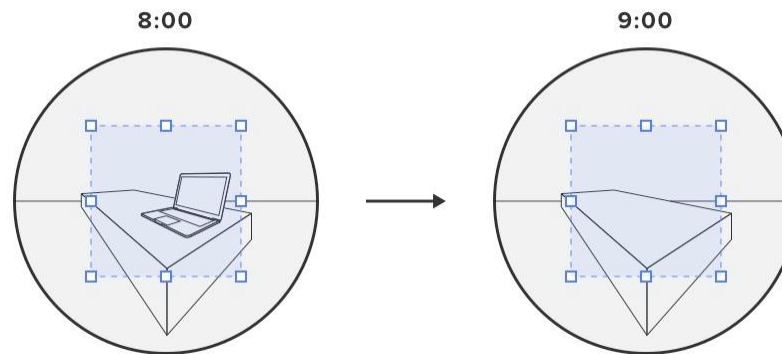
Drag-and-drop functionality

## Motion search


Automatically isolate key motion events and find out who stole that laptop

## Granular access controls

Choose who can view, export, and change the layout of videos



Video Image settings Network Event log Location Tools



Go to... Live || Q Motion search



Go to... Live



### Search results

75 motion events between Aug 31st, 1:25 pm and Aug 31st, 2:35 pm

Motion sensitivity  Minimum event length

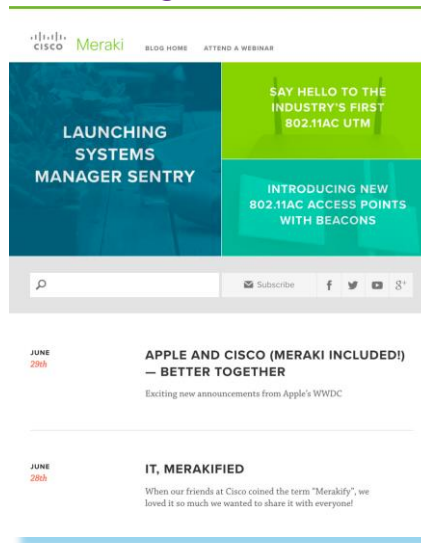
Timestamp	Duration	Frame	ROI
August 31st 2016, 1:25:12 pm BST	29.0s	20.29%	15.00%
August 31st 2016, 1:27:11 pm BST	20.8s	9.90%	5.00%
August 31st 2016, 1:27:34 pm BST	30.5s	49.85%	85.00%
August 31st 2016, 1:28:07 pm BST	31.2s	12.21%	75.00%
August 31st 2016, 1:28:41 pm BST	31.9s	5.78%	75.00%
August 31st 2016, 1:29:14 pm BST	20.7s	5.64%	70.00%
August 31st 2016, 1:29:36 pm BST	31.9s	9.07%	65.00%
August 31st 2016, 1:30:10 pm BST	31.9s	7.79%	10.00%
August 31st 2016, 1:30:45 pm BST	19.3s	16.96%	10.00%
August 31st 2016, 1:31:05 pm BST	31.6s	5.64%	10.00%

# Next steps

Risk-free evaluation  
[meraki.cisco.com/eval](https://meraki.cisco.com/eval)



Check out our website & blog  
[meraki.cisco.com/blog](https://meraki.cisco.com/blog)  
[blog.meraki.si](https://blog.meraki.si)



Contact your Meraki rep  
RRC & Cisco local office  
[meraki.cisco.com/contact](https://meraki.cisco.com/contact)

