Intent-Based Networking and Network Intelligence

Meraki Overview

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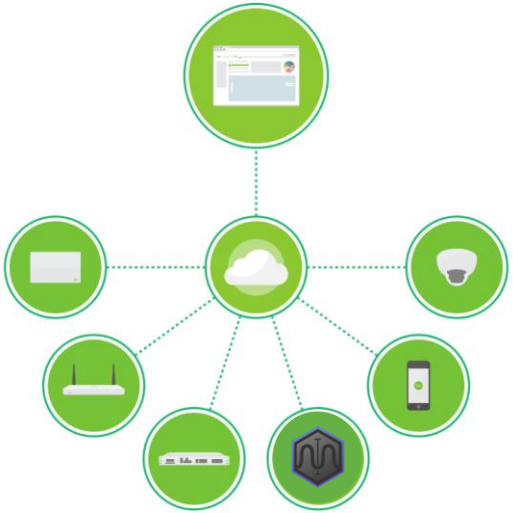
Who We Are and What We Do



NETWORKING IS COMPLICATED.

WE'RE MAKING IT EASIER, FASTER, AND SMARTER.

Our products are used in over 1.6M networks worldwide; you'll find them in classrooms, coffee shops, hospitals, and hotel rooms. Better networking means that businesses run more smoothly, and more people have reliable access to the information they need.

A complete, powerful, and intuitive cloud-managed IT solution.

Wireless | Security | Switching | Communications | Enterprise Mobility | Security Cameras

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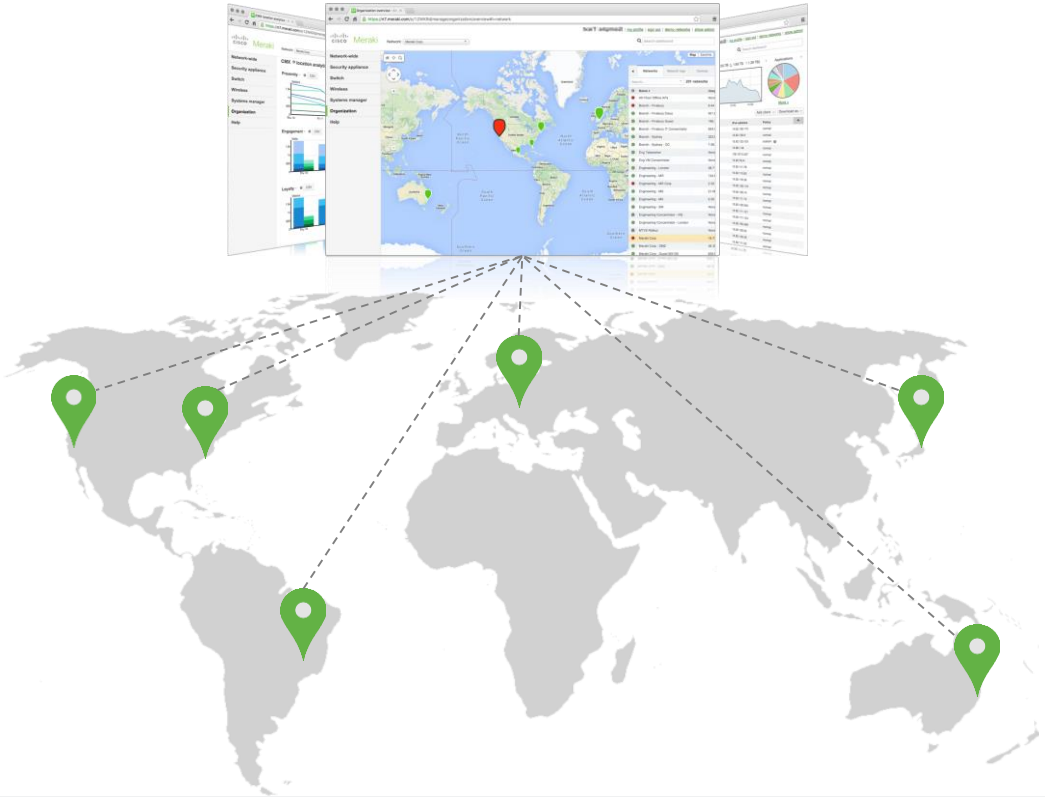
With the Meraki full stack you can…

Deploy and grow networks at branch locations or large campuses **easily and rapidly**

Manage and monitor those networks with robust analytics from a **single pane of glass**

Reduce administrative overhead with **simple all-inclusive licensing** models and tools



Vision today: Cloud-managed IT

CLOUD MANAGED IT

MR Wireless

MX Security Appliances

MS Switches

MI Insight

MV Vision

SM

SM EMM

CASE STUDY: The Field Museum

Security & SD-WAN Landscape

Cloud-managed Applications on the Rise

Office 365

salesforce

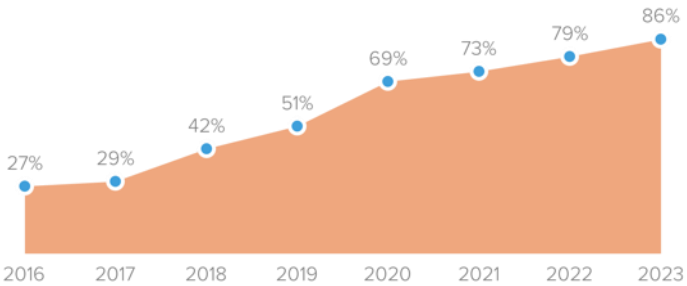
slack

Dropbox

AVG. NUMBER OF SaaS APPS PER ORGANIZATION

[Source: BetterCloud 2017 State of the SaaS-Powered Workplace]

PERCENTAGE OF ENTERPRISES ESTIMATING WHEN 80% OF THEIR BUSINESS APPS WILL BE SaaS



[Source: BetterCloud 2017 State of the SaaS-Powered Workplace]

SaaS SPENDING FORECAST, 2016 – 2020

95%
INCREASE

Global SaaS spending is forecast to increase by over 95% to **$75.7B**

[Source: Gartner, 2017]

Percentage of enterprises (1,000+ employees) estimating the majority of their apps will be SaaS by 2021

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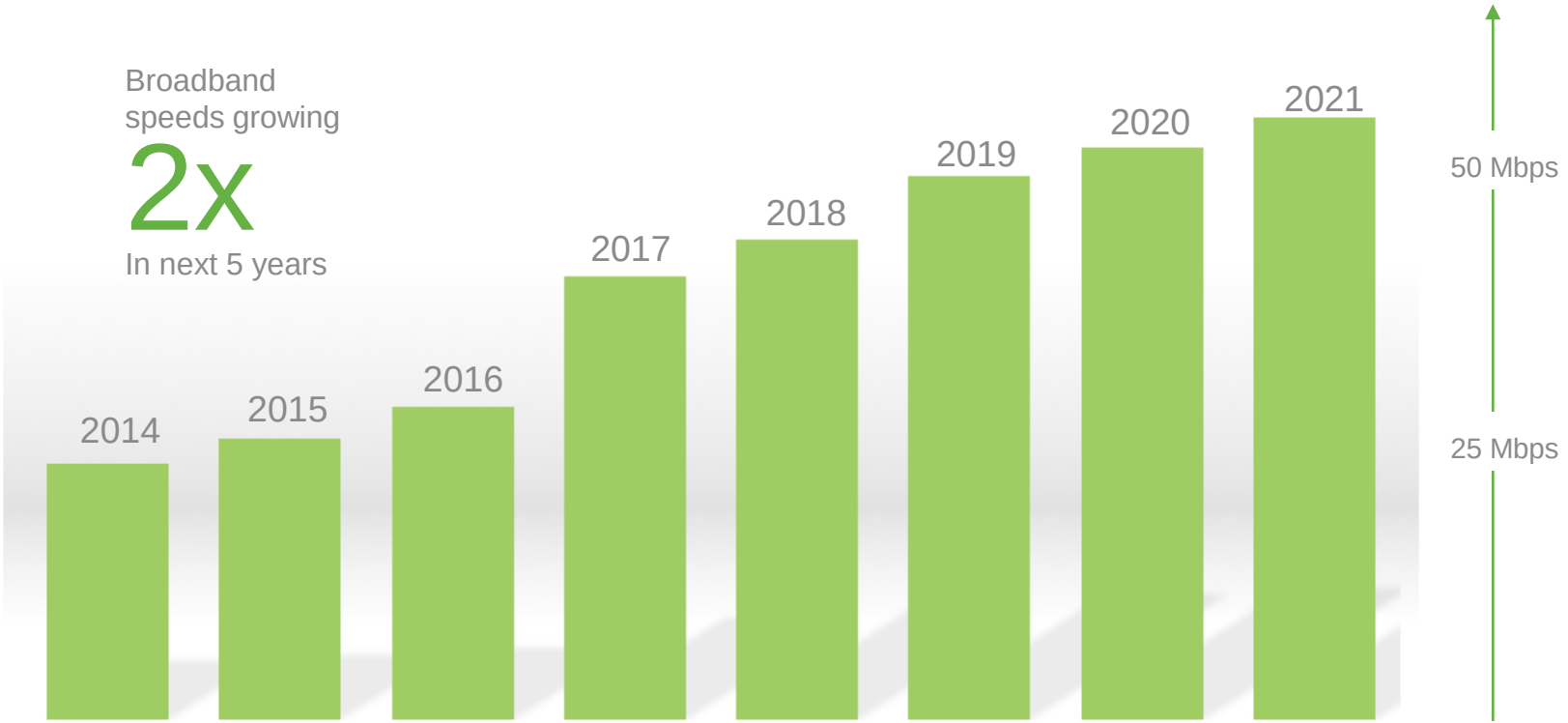
The Branch is Becoming Faster

Broadband speeds growing

2x

In next 5 years



[Source: Cisco. The Zettabyte Era: Trends and Analysis, July 2017]

LTE is Widespread and Reliable

57%

CAGR for LTE through 2019

UP TO

20x

lower cost of LTE vs MPLS, with comparable reliability

82%

of businesses with multiple remote sites use LTE

$300,000/hr

of downtime cost mitigated with LTE as failover for medium-sized businesses

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[Sources: Gartner, 2014. Next-Generation Wide-Area Networking, EMA 2016. Cisco 2017 VNI report]

Increased Branch WAN Uplink Options

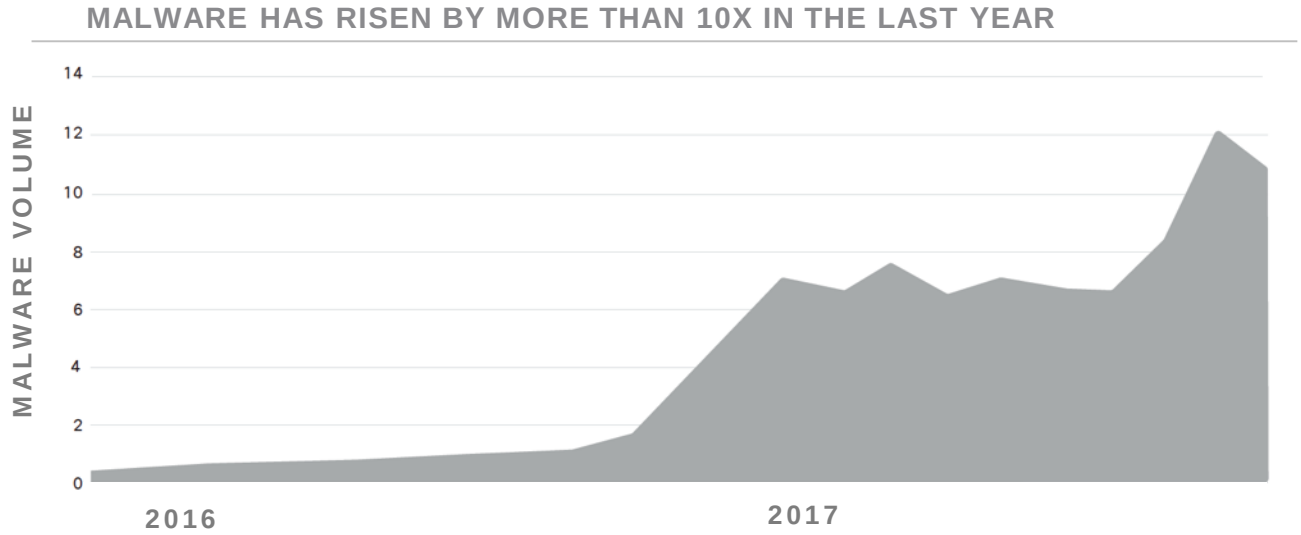
LTE as the single-uplink

Broadband + Broadband

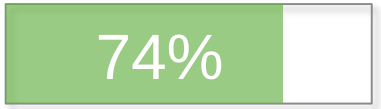
Broadband + MPLS

An increasing amount of bandwidth is becoming accessible to all branch types through broadband and LTE

The Growing Importance of Security



Percentage of organizations using more than 5 security vendors. Up from 55% in 2016

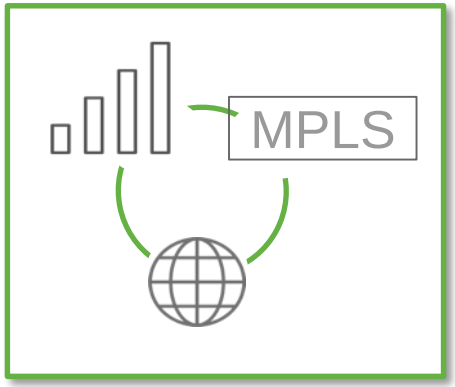


74% of security issues require people and/or policies to address, with only 26% being addressed by products

How Do You Prepare for the Future?

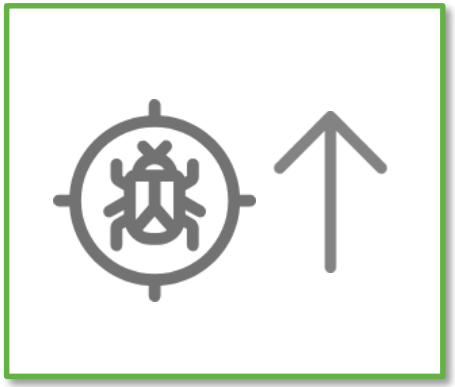
Cloud Applications

- Higher branch bandwidth requirements
- Challenge to monitor



Connectivity Options

- Diverse uplink availability
- Cost savings available
- Increase network uptime
- Bring new sites online



Security

- Increased threat volume
- Complex solution landscape

What's New?

Introducing the MX67/68 Security & SD-WAN Appliances

Designed to re-architect the branch with performance and simplicity

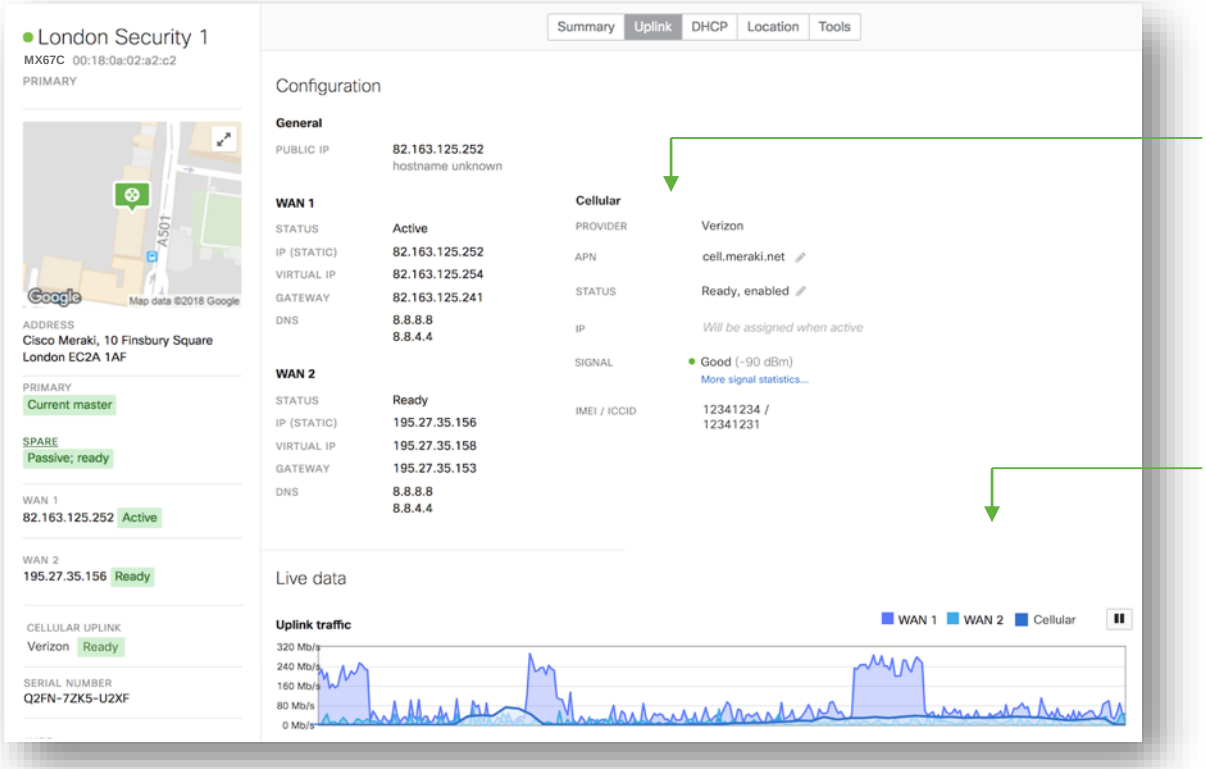
Benefits of Cellular, Now Integrated

Connect Remote Sites

Limit downtime

SIM & LTE MODEM INTEGRATED

LTE Visibility with Dashboard



LTE Configuration Information

Historical LTE Traffic

LTE Performance

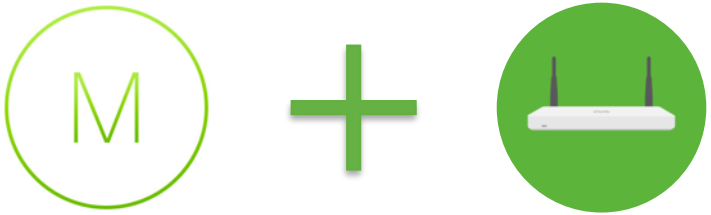
MX Security & SD-WAN Small Branch Portfolio

Future-proof with improved performance and embedded LTE

	MX64(W)	MX65(W)	MX67(W)	MX68(W)	MX67C	MX68CW
Firewall Throughput	250 Mbps	250 Mbps	450 Mbps	450 Mbps	450 Mbps	450 Mbps
VPN Throughput	100 Mbps	100 Mbps	200 Mbps	200 Mbps	200 Mbps	200 Mbps
Wi-Fi	(802.11ac)	(802.11ac)	(802.11ac Wave 2)	(802.11ac Wave 2)	-	802.11ac Wave 2
Ports	5	12 (2 PoE+)	5	12 (2 PoE+)	5	12 (2 PoE+)
Embedded Cellular	-	-	-	-	CAT 6 LTE	CAT 6 LTE
Price	$595/$945	$945/$1,245	$695/$995	$995/$1,295	$1,295	$1,795

North America variant:
Bands 2, 4, 5, 12, 13, 17, and 29
Worldwide variant:
Bands 1, 3, 5, 7, 8, 20, 26, 28A, 28B, 34, 38, 39, 40, 41

Simple, All-Inclusive Licensing



License

Hardware

1:1 ratio of licensing and hardware

1, 3, 5, 7, and 10 year durations available

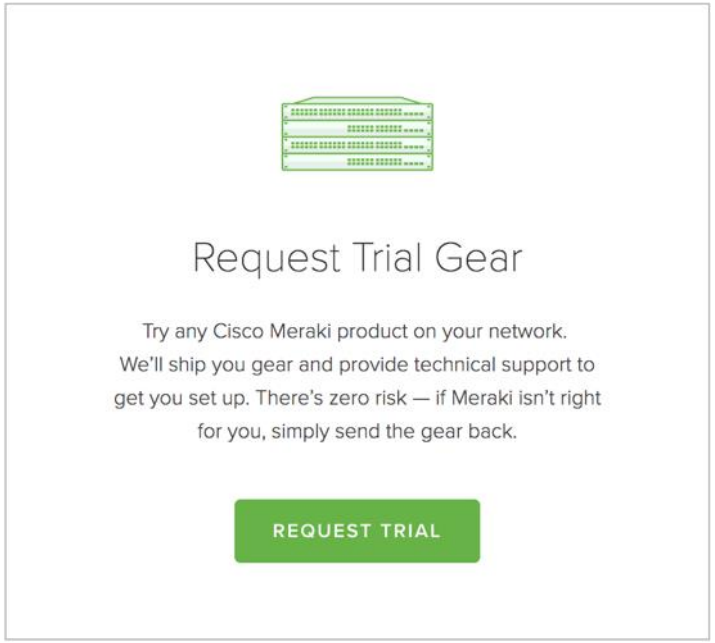
Centralized management with network-wide visibility and remote troubleshooting tools

Over-the-web firmware and security updates

24/7 enterprise support and warranty

All features included as standard, no per-feature licensing

Next Steps – Cisco Meraki Free Trial



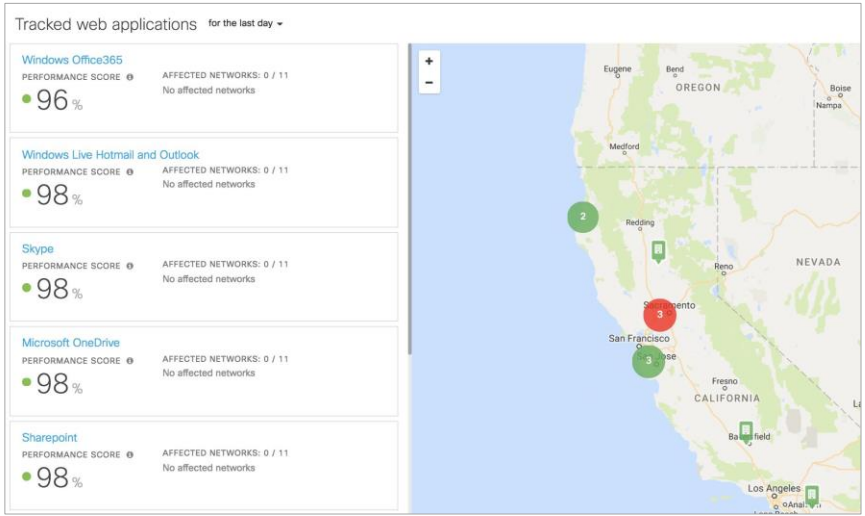
meraki.cisco.com/eval

Meraki Insight

Meraki Insight

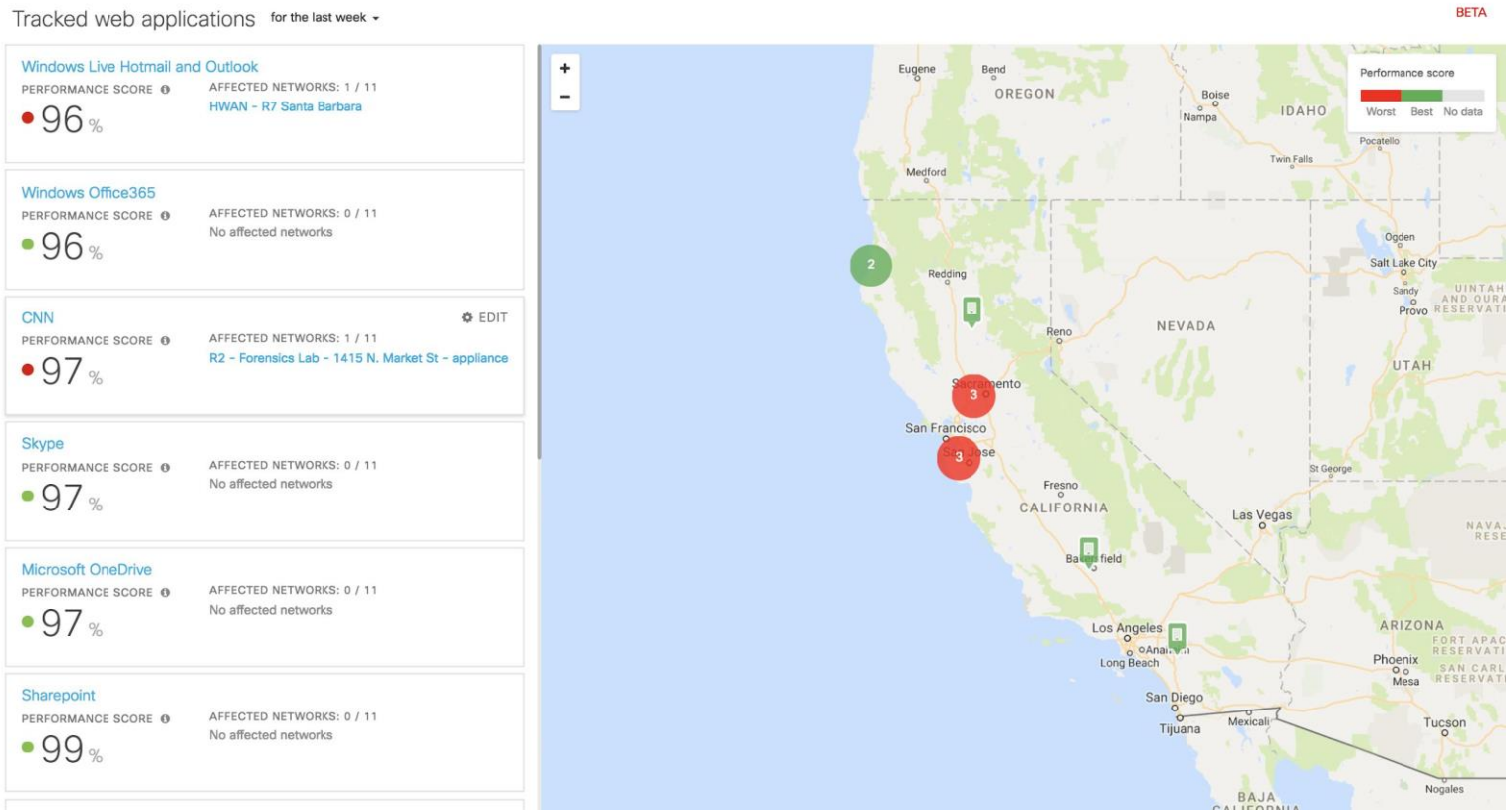
Network and SAAS Performance Management

- End-to-end visibility for SaaS application experience
- Network performance management and troubleshooting, including the LAN / WAN / ISPs
- Nothing to install or deploy

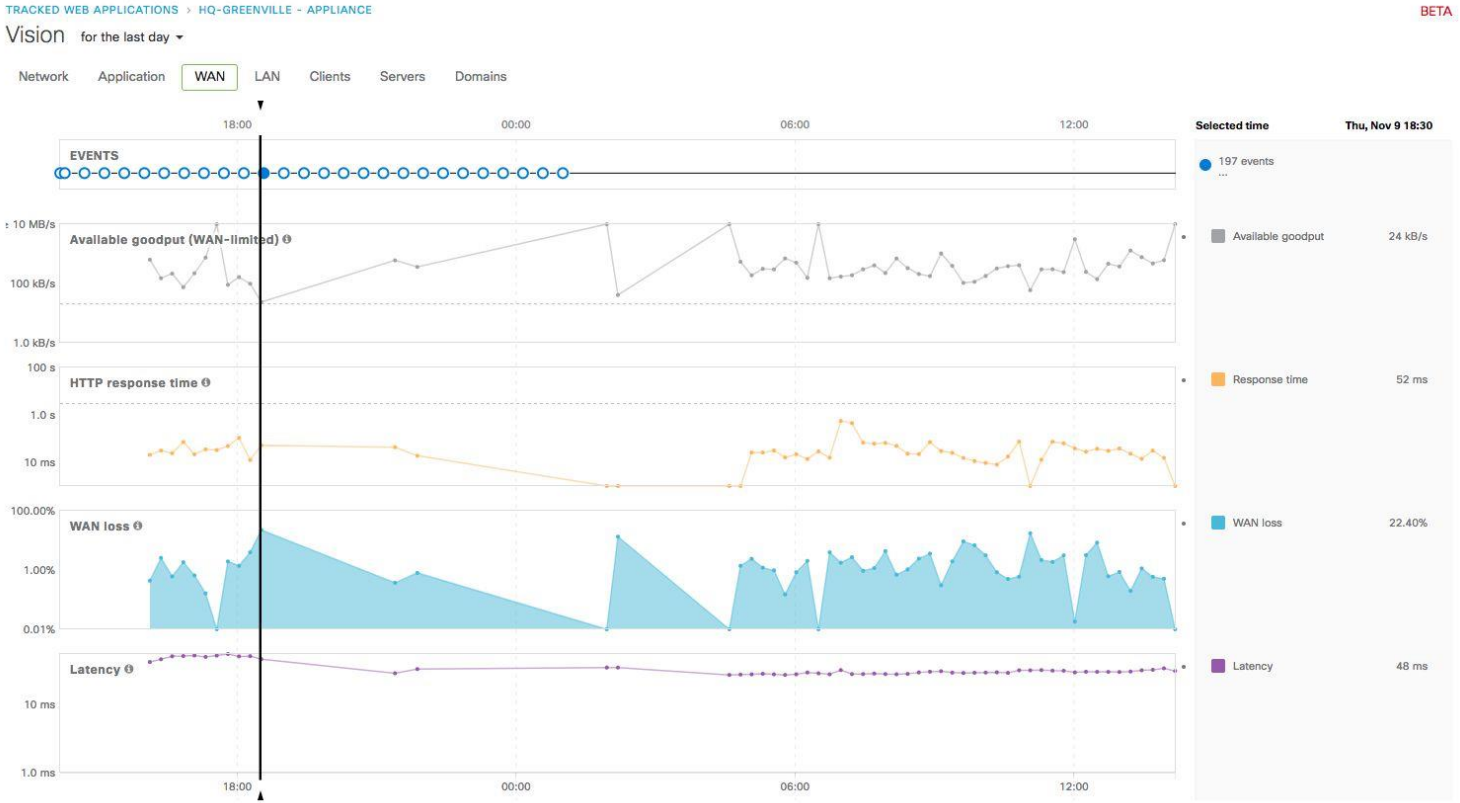


Simplify network troubleshooting
Ease migration to SaaS & SD-WAN

Focus on Mission Critical Apps



Faster time to resolution



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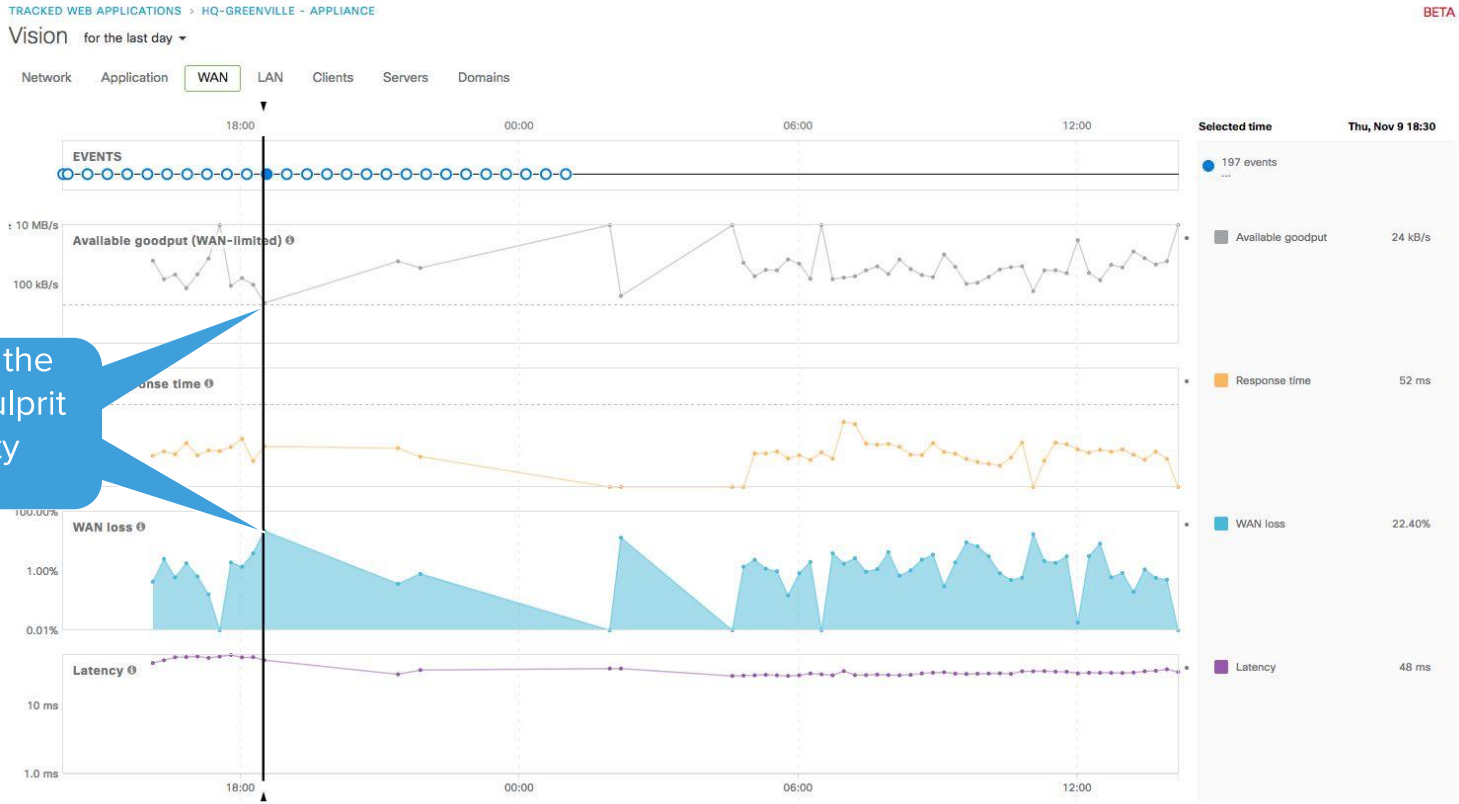


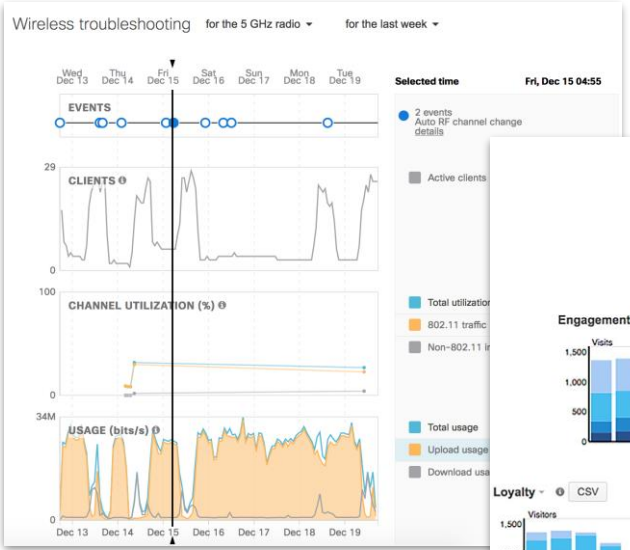
Diagnostics show that the WAN loss (ISP) is the culprit for application quality degradation

DEMO: Insight

Intelligent Wireless

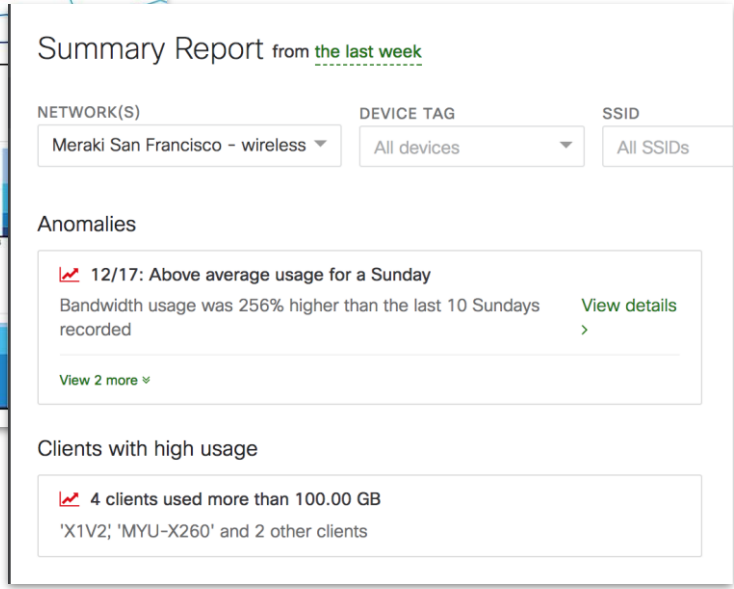
Wireless Intelligence

RF Analytics



Location Analytics

Anomaly Detection



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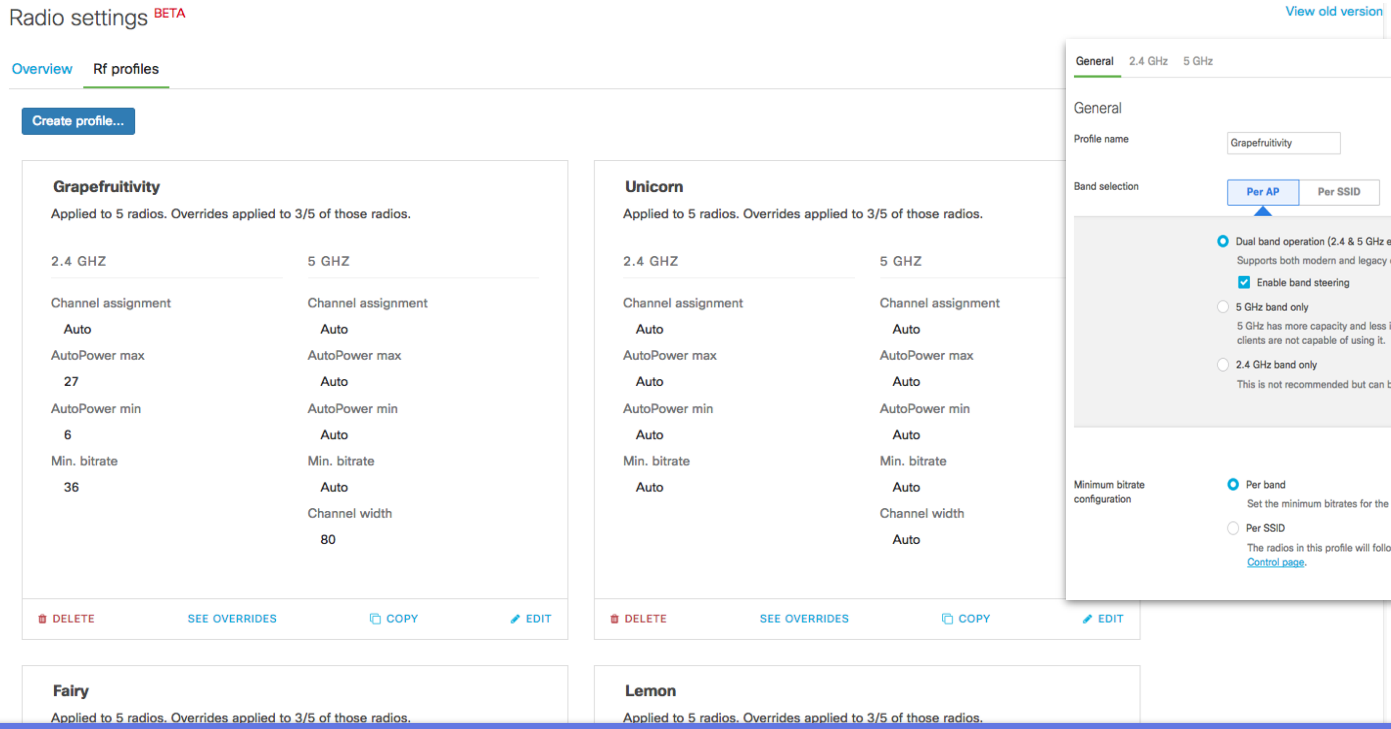
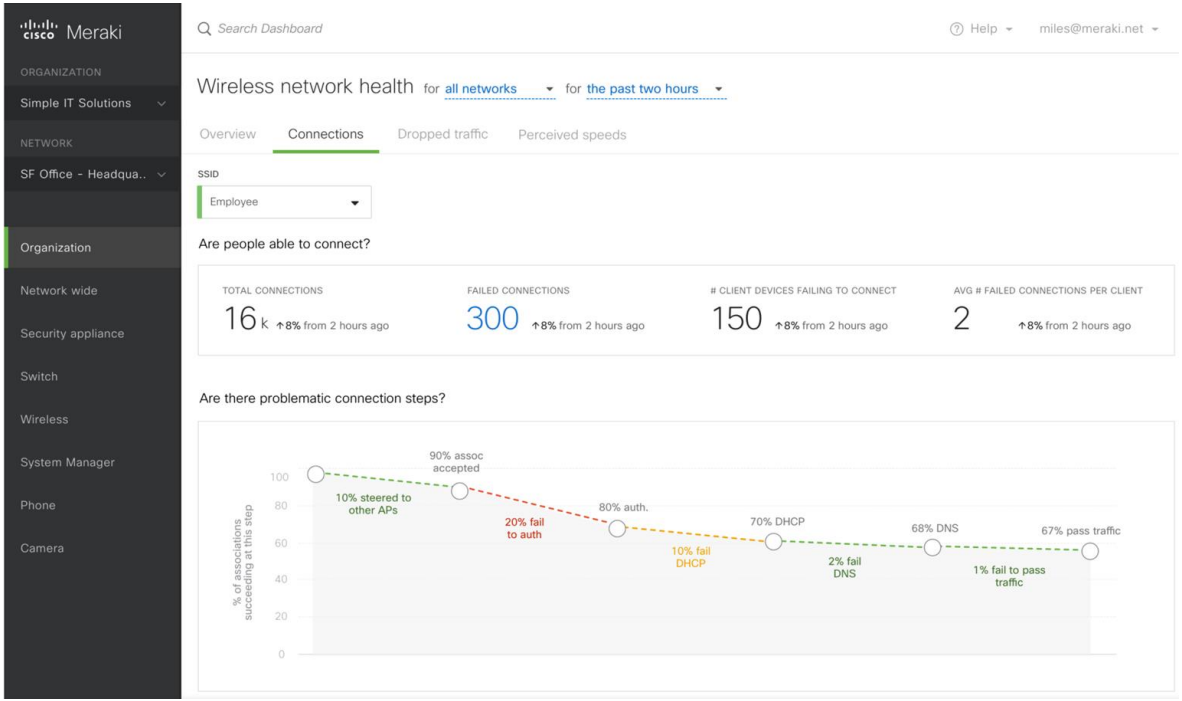
RF Profiles

Customize RF characteristics by deployment



Available for Meraki MR access points as a **free** feature update

One step further: Wireless Health



Metrics and anomaly detection for:

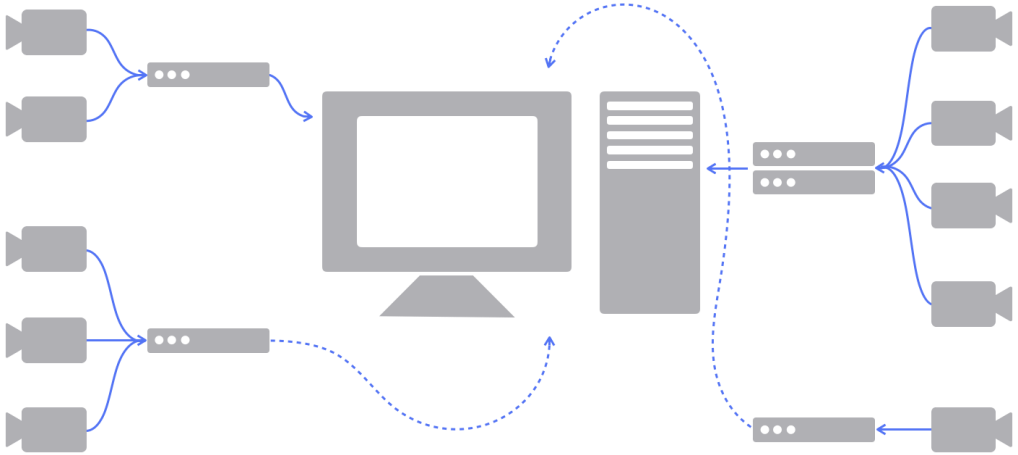
- client network associations
- wireless connection quality (latency)
- capacity (data rate)

Available for Meraki MR access points as a **free** feature update

DEMO: Wireless Health

MV Security Cameras

A Traditional Security Camera Deployment



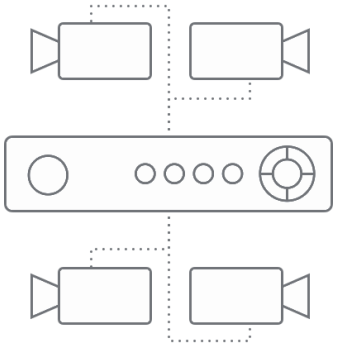
Network video recorders (NVRs), servers, on-premises hardware

Multiple software packages, manual configuration, and **complexity**

Huge network vulnerability

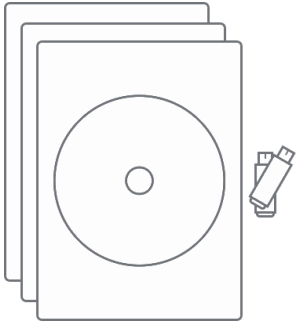
Current Video Surveillance Solutions

WITH MV, SAY GOODBYE TO



Additional on-premise hardware
Ex. Network Video Recorder (NVR)

Standalone software packages, drivers, plug-ins, and IP configuration



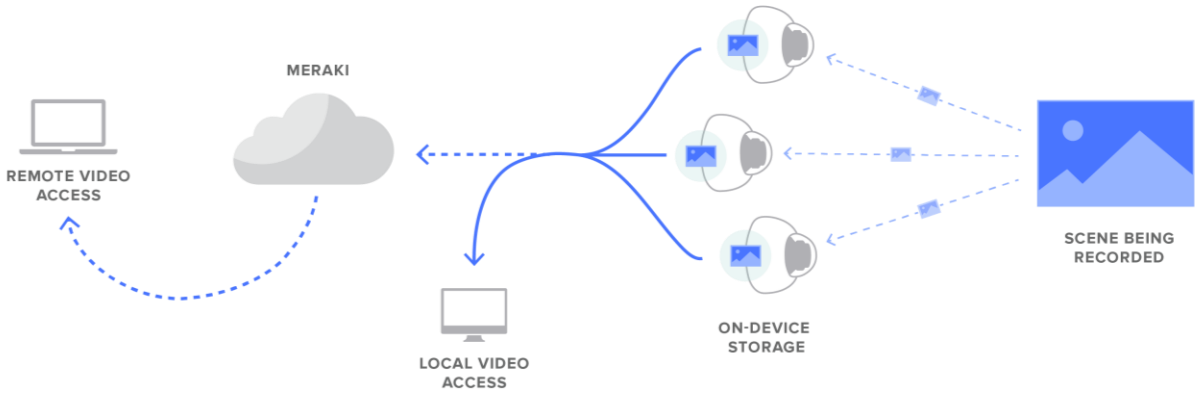
DVDs, thumb drives, VHS, and other outdated sharing options

Cutting Edge Architecture

Less than 50kbps upstream bandwidth per camera

Configuration, thumbnails, and metadata stored in the cloud

Hybrid video processing: video is analysed on camera, motion indexed in the cloud



Introducing MV12

3 SKUs – up to 256GB integrated storage

High definition – 1080p

Microphone

Wireless capable

Compact form factor

Qualcomm Snapdragon processor

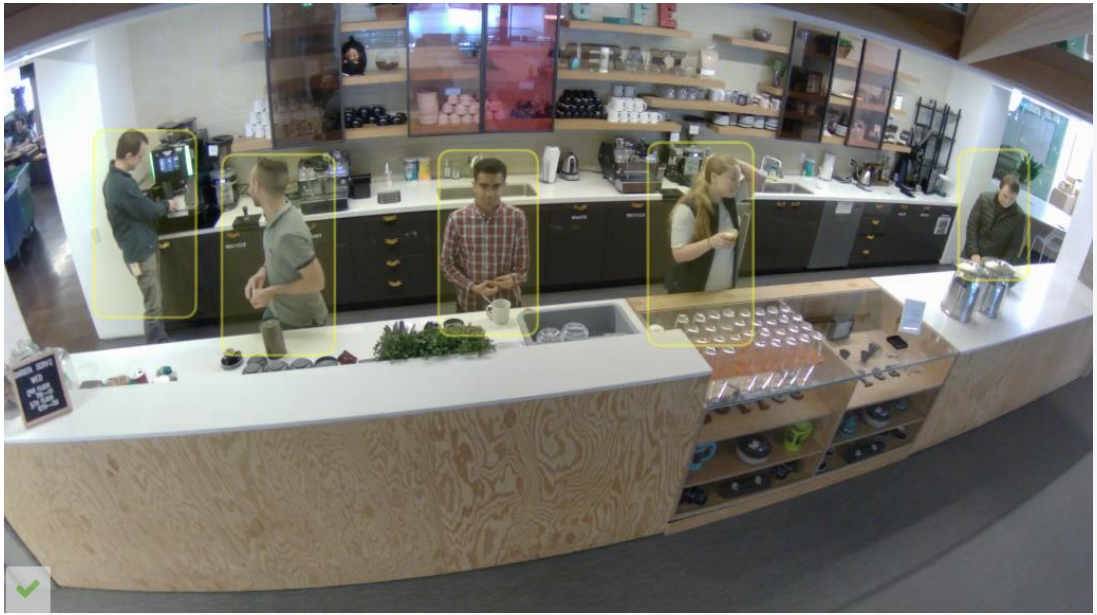
Advanced on-board analytics and machine learning

A family of indoor mini dome cameras designed with more than just security in

What is machine learning?

Cameras get smarter over time

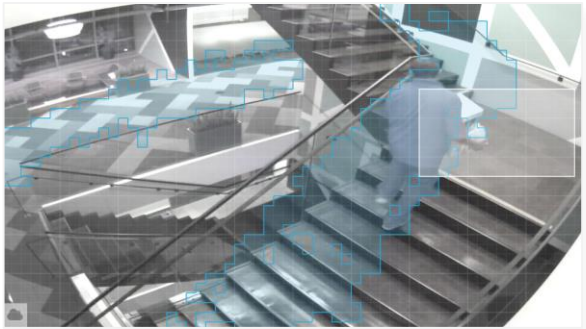
Object Detection



FUNCTIONALITY:
Anonymized person detection for business intelligence

EXAMPLE USE CASE:
People counting to better understand in-store customer behavior patterns

Physical Security Meets Business Intelligence

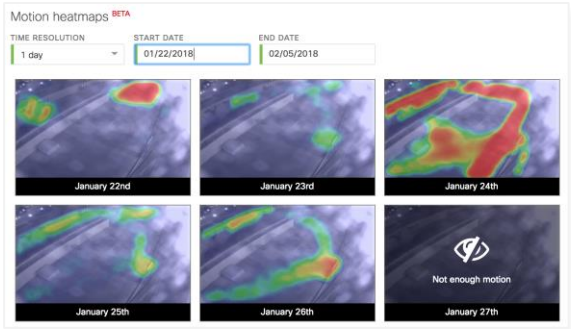


MOTION SEARCH

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

Easily export important video segments

Available on all MV models



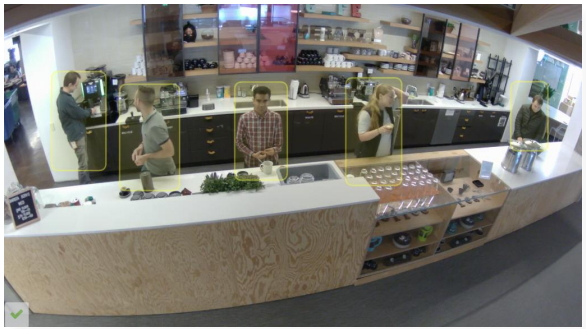
MOTION HEAT MAPS

See relative motion in an area over time

Choose hour-by-hour or day-by-day view

Generated entirely from metadata

Available on all MV models



PERSON DETECTION

Identify what is a person, and what is not

Additional functionality coming soon!

Available on MV12 models

DEMO: MV Cameras

Thank You!

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