



*TOMORROW
starts here.*

Cisco *live!*



Cloud Managed Security with Meraki MX

BRKSEC-2900

Joe Aronow

Product Specialist, Meraki MX

#clmel

Cisco *live!*

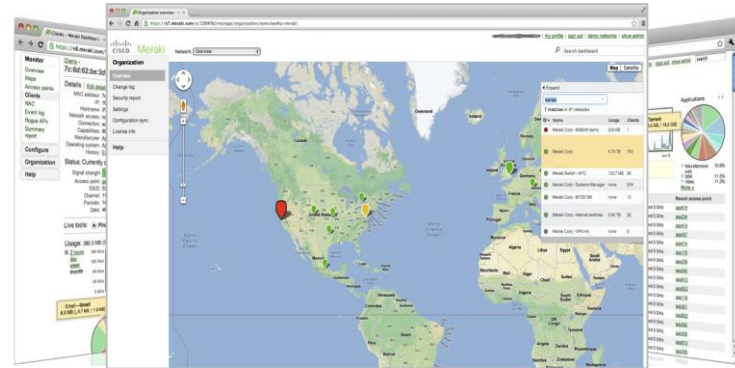
Agenda

- Introduction: Cloud networking
- Demo
- IWAN
- Product Families
- Q&A



Cisco Meraki: who we are and what we do?

- Complete cloud-managed networking solution
 - Wireless, switching, security, WAN optimisation, MDM
 - Integrated hardware, software, and cloud services
- Leader in cloud-managed networking
 - Among Cisco's fastest-growing portfolios
 - Over 100% annual growth
 - Tens of millions of devices connected worldwide
- Recognised for innovation
 - Gartner Magic Quadrant
 - InfoWorld Technology of the Year
 - CRN Coolest Technologies



Wireless LAN



Enterprise Security

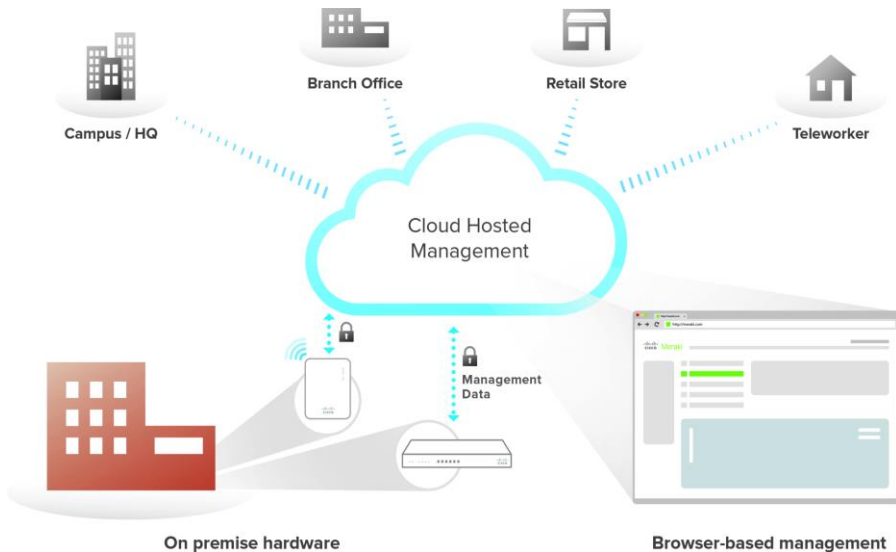


Access & Aggregation
Sw itching



Mobile Device
Management

Networks Centrally Managed Over The Internet



- **Secure**
 - No user traffic passes through cloud
 - Fully HIPAA / PCI compliant (level 1 certified)
 - 3rd party security audits, daily penetration testing
 - SSAE 16-certified data centres
- **Scalable**
 - Unlimited throughput, no bottlenecks
 - Add devices or sites in minutes (zero-touch)
- **Reliable**
 - Highly available cloud with multiple data centres
 - Network functions even if connection to cloud is interrupted
 - 99.99% uptime SLA

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

A nighttime photograph of a city street. In the foreground, there are long, curved light trails from traffic, primarily in shades of yellow and orange. In the middle ground, a pedestrian bridge with blue lighting spans across the street. In the background, there are several tall buildings with lit windows and some flags on poles. The overall scene is illuminated by city lights.

Meraki MX Security Appliances

Cisco *live!*

A Complete Unified Threat Management Solution



Security

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



Networking

NAT/DHCP, 3G/4G Cellular, Static Routing, Link Balancing



Application Control

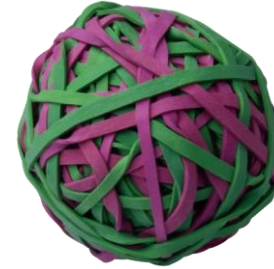
Traffic Shaping, Content Filtering

What's Driving the MX's Growth?



MX security proposition:

- Easy deployment & operation
- Best-in-class IPS, malware, FW protection
- Cost savings: no device limits, controllers, complex licensing, or hidden fees
- Seamless integration with wireless, security, MDM for holistic view



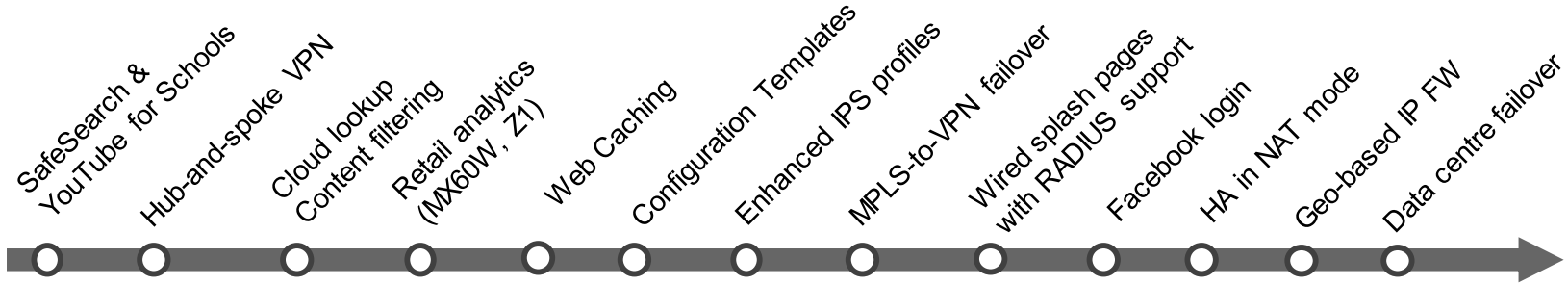
Industry challenges:

- Distributed sites, multi-vendor deployments, management complexity, rapid growth
- Malicious traffic, ensuring uptime
- Licensing, hardware costs & oversight
- BYOD, bandwidth bottlenecks, app abuse, guest access, lean IT resources

Feature Velocity in Every MX

2013

2014





Demo

Cisco *live!*



IWAN

Cisco *live!*

What is IWAN?

“Intelligent WAN” (IWAN) is a collection of Cisco technologies and products that enable transport independence, intelligent path control, application optimisation, and secure connectivity for multi-site deployments.



Transport Independence

- IPSec overlay (Auto VPN)
- Scalable (Cloud Controller)
- Traffic distribution over multiple pathways (Internet, cellular, MPLS-to-VPN failover)



Application Optimisation

- App visibility & control (Meraki dashboard, group-based policies, traffic analytics)
- Application QoS & bandwidth optimisation (Traffic shaping)



Intelligent Path Control

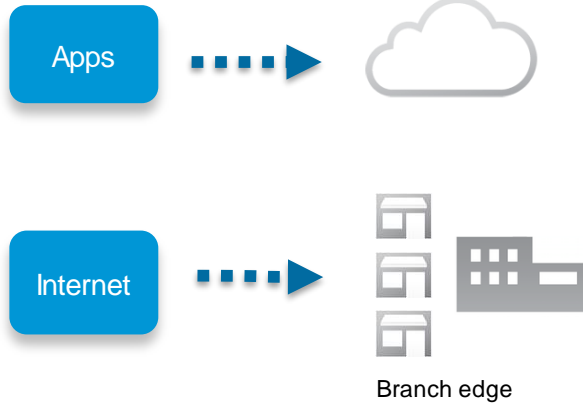
- Uplink chosen by link latency, data loss, etc. (PfR, aka performance-based routing)
- Uplink assigned by traffic protocol, subnet, source, destination, etc. (PbR, aka policy-based routing)



Secure Connectivity

- Intuitive, automatic, scalable VPN solution to connect remote branch sites (Auto VPN)

Why IWAN?



- Increasing WAN costs over MPLS
- Bandwidth congestion
- Complexity

OpEx savings:

- Use low-cost Internet
- Maintain MPLS-like reliability

Improved bandwidth:

- “Internet as WAN” offers cheaper bandwidth
- Application control
- Uplinks intelligently assigned

Ease of deployment, ease of use:

- Deep visibility and control
- Highly scalable architecture
- Secure connectivity

New IWAN Features for the MX

Dual-active path:

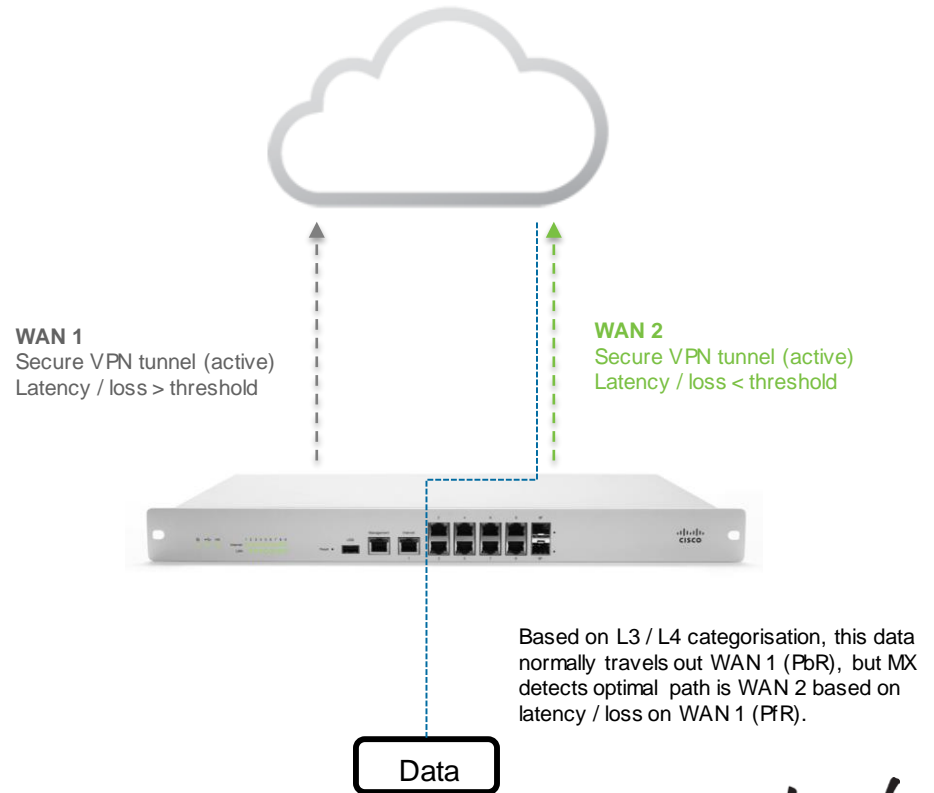
- Active-active VPN
- Active-active VPN & MPLS

Performance-based routing (PfR):

- Ensures the best uplink is used based on latency and loss metrics

Policy-based routing (PbR) :

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



Deep Dive: life insurance customer saves \$858K



Projects / Pain Points:

- Implement a BYOD platform at 50 remote sites
- Managed Service Provider & MPLS costs

Solution:

- Complete Meraki Stack: MR, MS, MX
- Phase off MPLS to Broadband

Business Outcomes:

- Reduced Telco Spend by 40%
- Single platform in branch improved IT efficiency

Projected Costs for Legacy 3-Year WAN Run Rate

Internet Connectivity (3 years)	\$2,016,000
Traditional T1 VPB hub-and-spoke model x 45 sites (1,544-4.632Mbps Ethernet)	\$582,000 / year
WAN at HQ & DR (45Mbps x 2)	\$90,000 / year
Content Management (3 years)	\$153,000
Content filtering software	\$51,000 / year
Maintenance	\$24,750
Hardware security appliance	\$8,250 / year
Total Spend (3 years)	\$2,193,750

Projected 3-Year Costs with Meraki (Incl. Rip & Replace)

Internet Connectivity (3 years)	\$673,495
HQ + 37 branches (50Mbps DSL broadband)	\$212,040 / year
WAN Management vendor (one-time setup)	\$37,375
Meraki Hardware & Licensing	\$599,141
MX, MS, & MR x 41 branches	\$382,896
Content Management	Included
Wireless installation (one-time setup)	\$62,257
26 branches wired for MR	
Total Spend (3 years)	\$1,334,893

Cisco's IWAN Solutions:

Cisco ISR



- DMVPN
- Dynamic routing & advanced features: L2-L7 services, IPv6
- Modularity requirements (WAN diversity, UC/Voice, Compute)
- 3rd party integration or management (Akamai)

Lower TCO & improved flexibility

Meraki MX



- Unified Threat Management (UTM)
- Ethernet or 4G drop-off
- Auto VPN (automatic, fault-tolerant)
- WAN load balancing
- 100% cloud managed

Lower TCO & simplified operations

The MX64 / MX64W

Speed

- Industry's first 802.11ac UTM
- ~3X speed of 11n wireless
- 2-3X faster than MX60 / MX60W

Security

- UTM provides one-stop security
- IPS, content filtering, malware / anti-phishing
 - Seamless, automatic updates
- PCI 3.0-certified cloud backend

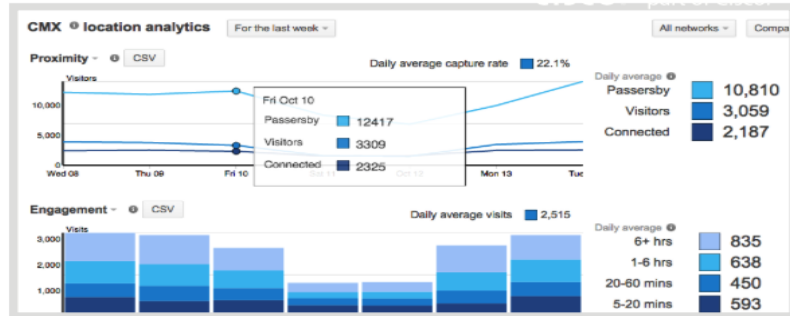


Typical Customer Scenario: Multi-site Retailer

- PCI Level 1 cloud architecture
- Secure branch locations
- Dynamic retail analytics (MX64W)
- Branded, in-store connectivity
- Easy deployment & maintenance



Wired splash pages with Facebook Login enable intuitive guest access while promoting your brand.



Location analytics built into the MX64W measures key customer statistics over time.

Choosing The Right MX For Your Environment



MX64 / 64W

Where

Small branches
(~50 users)

Unique Features

802.11ac Wireless
(MX64W)

FW Throughput

200 Mbps



MX80

Mid-size branches
(~100 users)

Large Web cache (1TB)

250 Mbps



MX100

Mid-size branches
(~500 users)

Large Web cache (1TB)

500 Mbps



MX400

Large
branch/campus
(~2,000 users)

Power redundancy
Modular interface
Large Web cache (1TB)

1 Gbps



MX600

Large
branch/campus
(~10,000 users)

Power redundancy
Modular interface
Large Web cache (4TB)

2 Gbps



Z1

For teleworkers
(1-5 users)

Dual-radio wireless

FW throughput: 50
Mbps

All devices support 3G/4G



Q & A

Cisco *live!*

Complete Your Online Session Evaluation

Give us your feedback and receive a Cisco Live 2015 T-Shirt!

Complete your Overall Event Survey and 5 Session Evaluations.

- Directly from your mobile device on the Cisco Live Mobile App
- By visiting the Cisco Live Mobile Site
<http://showcase.genie-connect.com/clmelbourne2015>
- Visit any Cisco Live Internet Station located throughout the venue

T-Shirts can be collected in the World of Solutions on Friday 20 March 12:00pm - 2:00pm



Learn online with Cisco Live!

Visit us online after the conference for full access to session videos and presentations. www.CiscoLiveAPAC.com



Thank you.

Cisco *live!*



CISCO