Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

CISCO DESIGNED

Centralized Cloud Management for Security, Networking, and Application Control

The **Cisco Meraki MX Security & SD-WAN Appliances** are ideal for organizations considering a Unified Threat Managment (UTM) solution for distributed sites, campuses, or datacenter VPN concentration. Since the Cisco Meraki MX is 100 % cloud managed, installation and remote management are simple.
Cisco Meraki MX has a comprehensive suite of network services, eliminating the need for multiple appliances. These services include SD-WAN capabilities, application-based firewalling, content filtering, web search filtering, Cisco Snort-based intrusion detection and prevention (IPS/IPS), Cisco Advanced Malware Protection (AMP), web caching, 4G cellular failover and more. Auto VPN and SD-WAN features are available on our hardware and virtual appliances, configurable in Amazon Web Services or Microsoft Azure.

Highlights

The Cisco Meraki MX includes a complete, robust feature set right out of the box. No additional purchase required.

Identity-based Firewall

Automatically assign firewall and traffic shaping rules, VLAN tags, and bandwidth limits to enforce the right policies for each class of users.

Intrusion Prevention

Protect critical network resources from the latest security threats and vulnerabilities.

Auto VPN

Securely connect branch locations using mesh or hub-and-spoke topologies. Provide simple, clientless remote access VPN.

Content Filtering

Block undesirable web content across 80+ categories, and leverage cloud lookups to filter billions of URLs.

Advanced Malware Protection

Protect your network against malware using the latest threat intelligence, and identify previously unknown malicious files with retrospective detection.

High Availability & Failover

Provide device and connection integrity through multiple uplinks, warm spare failover, and self-healing VPN.

Application Visibility & Control

Identify which applications are being used, and then prioritize critical apps while limiting recreational apps.

Centralized Management

Seamlessly manage campus-wide Wi-Fi deployments and distributed multi-site networks from a single pane-of-glass.

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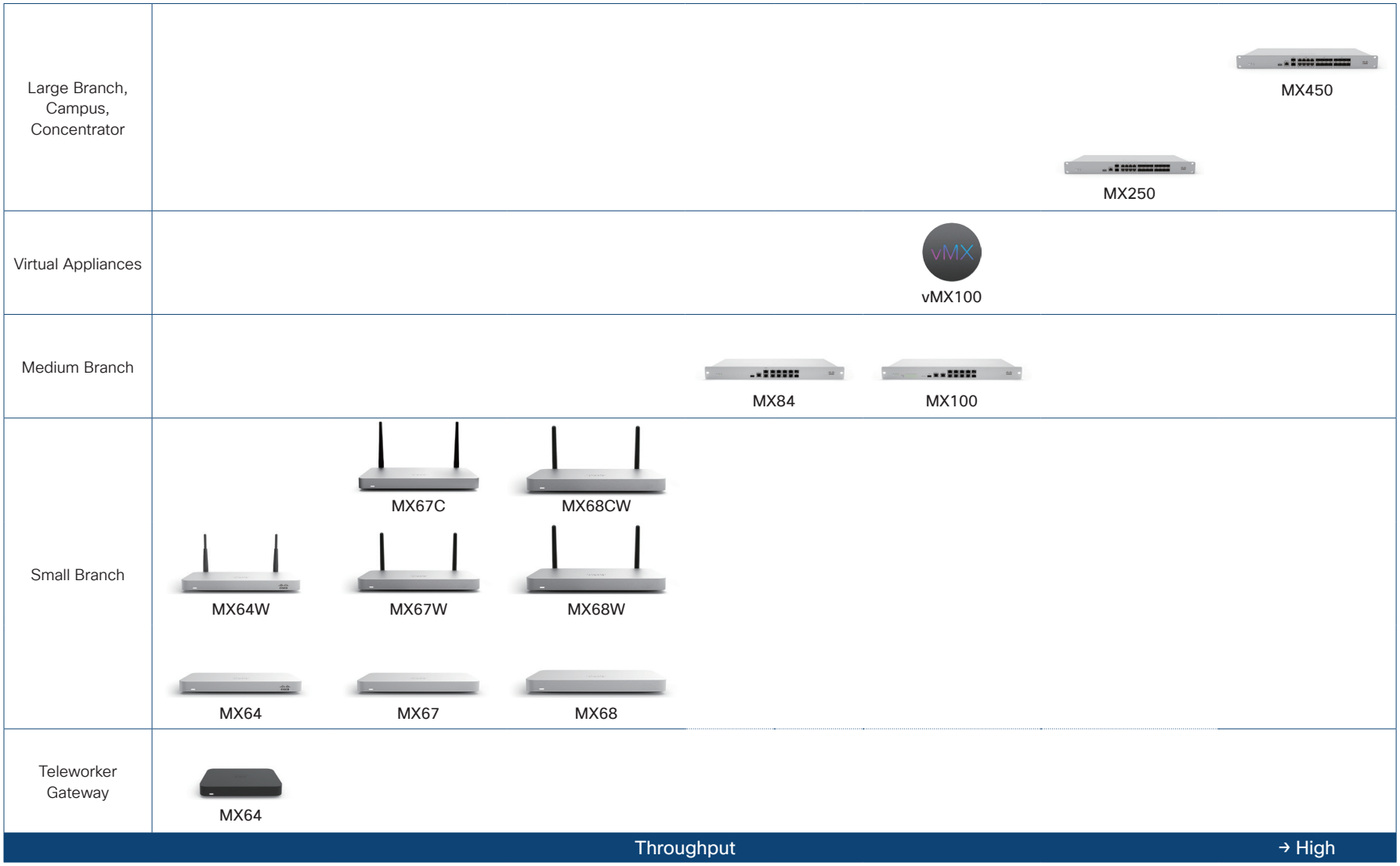
Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

Cisco Meraki MX Security & SD-WAN Appliances Positioning Map



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Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

Cisco Meraki MX Security & SD-WAN Appliances

Product SKU	Recom-mended Clients	Throughput			Concurrent VPN Tunnels	Web Caching	WAN Ports				WAN/LAN Port	LAN Ports			WLAN	Power Supply*2	Rack Mount
		Stateful Firewall	Advanced Security*1	VPN			1GE RJ45	Built-in Cat 3 LTE	Built-in Cat 6 LTE	USB Cellular Modem	1GE RJ45	1GE RJ45	1GE PoE+ RJ45	1GE SFP	11ac AP		
MX64-HW	50	250 Mbps	200 Mbps	100 Mbps	50		1			✓*3	1	4				External	*4
MX64W-HW	50	250 Mbps	200 Mbps	100 Mbps	50		1			✓*3	1	4			✓	External	*4
MX67-HW	50	450 Mbps	300 Mbps	200 Mbps	50		1			✓*3	1	4				External	*4
MX67W-HW	50	450 Mbps	300 Mbps	200 Mbps	50		1			✓*3	1	4			✓	External	*4
MX67C-HW-WW	50	450 Mbps	300 Mbps	200 Mbps	50		1		✓	✓*3	1	4				External	*4
MX68-HW	50	450 Mbps	300 Mbps	200 Mbps	50		2			✓*3		8	2			External	*4
MX68W-HW	50	450 Mbps	300 Mbps	200 Mbps	50		2			✓*3		8	2		✓	External	*4
MX68CW-HW-WW	50	450 Mbps	300 Mbps	200 Mbps	50		2		✓	✓*3		8	2		✓	External	*4
MX84-HW	200	500 Mbps	320 Mbps	250 Mbps	100	1 TB	2			✓*3		8		2		Internal	1 RU
vMX100				500 Mbps	250												

*1 Advanced security license is required. *2 Power cord is sold separately. *3 Sold separately. *4 Desktop or Wall mountable with included mount hardware.

Cisco Meraki Z Cloud Managed Teleworker Gateway

Product SKU	Recom-mended Clients	Throughput			Concurrent VPN Tunnels	Web Caching	WAN Ports				WAN/LAN Port	LAN Ports			WLAN	Power Supply*1	Rack Mount
		Stateful Firewall	Advanced Security	VPN			1GE RJ45	Built-in Cat 3 LTE	Built-in Cat 6 LTE	USB Cellular Modem	1GE RJ45	1GE RJ45	1GE PoE+ RJ45	1GE SFP	11ac AP		
Z3-HW	5	100 Mbps		50 Mbps			1			✓*2		3	1		✓	External	*3
Z3C-HW-WW	5	100 Mbps		50 Mbps			1	✓		✓*2		3	1		✓	External	*3

*1 Power cord is sold separately. *2 Sold separately. *3 Desktop or Wall mountable with included mount hardware.

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Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

Cisco Meraki MX Licensing

Cisco Meraki MX has licenses on a per-model basis, so every Meraki MX model has a corresponding license. Please note that these licenses are non-transferrable between appliance models. For example, a Meraki MX64 will not be covered by a Meraki MX84 license; it will require a Meraki MX64 license.

Cisco Meraki MX has multiple license editions: Enterprise and Advanced Security. Please note that the Meraki MX licensing edition is uniform across the Organization. For example, you can have all 25 appliances using Enterprise edition or Advanced Security edition, but you cannot have 20 appliances using one edition and 5 using the other edition. If you wish to use Enterprise edition for some appliances and Advanced Security edition for other appliances, you need to create two Organizations, one for your appliances with the Enterprise edition, and another for the appliances with the Advanced Security edition.

Cisco Meraki Insight

Cisco Meraki MX with the Cisco Meraki Insight provides an easy way to monitor the performance of web applications and WAN links on their network and easily identify if any issues are likely being caused by the network or application;

- Application Analytics
  Give Meraki customers an easy way to monitor the performance of web applications on their networks and easily identify if any issues are likely being caused by the network or the application.
- WAN Health
  Monitor ISP connections and help with troubleshooting and reporting for these connections. In addition to active/primary ISP uplinks, WAN Health will also monitor secondary/failover connections (such as WAN2 and LTE connections). WAN Health will help in troubleshooting network outages to determine if the issue is caused by a LAN-side issue or if the outage is a WAN-side/ISP issue.
- VoIP Health
  monitor network links for the performance of the uplink for VoIP. This feature will monitor the path from each ISP uplink to the VoIP servers (i.e., PBX or SIP server) configured by the admin. The admin can use this information to estimate the call quality along each path.

Cisco Meraki MX License Comparison

Feature	Enterprise	Advanced Security	Meraki Insight
Next-Generation Firewalls (NGFW)	✓	✓	
VLAN to VLAN Routing	✓	✓	
Link Bonding and Failover	✓	✓	
3G/4G Failover via USB Modem	✓	✓	
Traffic Shaping and Prioritization	✓	✓	
Auto VPN Self-Configuring Site-to-Site VPN	✓	✓	
Client VPN	✓	✓	
MPLS to VPN Failover	✓	✓	
Splash Pages	✓	✓	
Configuration Templates	✓	✓	
HTTP Content Caching (Web Caching)	✓	✓	
Group Policies	✓	✓	
Client Connectivity Alerts	✓	✓	
Active/Passive High Availability*1	✓	✓	
SD-WAN	✓	✓	
Geography-based Firewall Rules		✓	
Cisco Snort IDS/IPS		✓	
Content Filtering (with Google SafeSearch)		✓	
Anti-Virus and Anti-Phishing		✓	
Youtube for Schools		✓	
Application Analytics			✓
WAN Health			✓
VoIP Health			✓

*1 No license required for Meraki MX deployed as Warm Spares.
*2 Cisco Threat Grid License is required.

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Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

Cisco Meraki MX Enterprise Licenses

Product SKU					Compatible Model
1-Year	3-Years	5-Years	7-Years	10-Years	
LIC-MX64-ENT-1YR	LIC-MX64-ENT-3YR	LIC-MX64-ENT-5YR	LIC-MX64-ENT-7YR	LIC-MX64-ENT-10YR	MX64
LIC-MX64W-ENT-1YR	LIC-MX64W-ENT-3YR	LIC-MX64W-ENT-5YR	LIC-MX64W-ENT-7YR	LIC-MX64W-ENT-10YR	MX64W
LIC-MX67-ENT-1YR	LIC-MX67-ENT-3YR	LIC-MX67-ENT-5YR	LIC-MX67-ENT-7YR	LIC-MX67-ENT-10YR	MX67
LIC-MX67W-ENT-1YR	LIC-MX67W-ENT-3YR	LIC-MX67W-ENT-5YR	LIC-MX67W-ENT-7YR	LIC-MX67W-ENT-10YR	MX67W
LIC-MX67C-ENT-1YR	LIC-MX67C-ENT-3YR	LIC-MX67C-ENT-5YR	LIC-MX67C-ENT-7YR	LIC-MX67C-ENT-10YR	MX67C
LIC-MX68-ENT-1YR	LIC-MX68-ENT-3YR	LIC-MX68-ENT-5YR	LIC-MX68-ENT-7YR	LIC-MX68-ENT-10YR	MX68
LIC-MX68W-ENT-1YR	LIC-MX68W-ENT-3YR	LIC-MX68W-ENT-5YR	LIC-MX68W-ENT-7YR	LIC-MX68W-ENT-10YR	MX68W
LIC-MX68CW-ENT-1YR	LIC-MX68CW-ENT-3YR	LIC-MX68CW-ENT-5YR	LIC-MX68CW-ENT-7YR	LIC-MX68CW-ENT-10YR	MX68CW
LIC-MX84-ENT-1YR	LIC-MX84-ENT-3YR	LIC-MX84-ENT-5YR	LIC-MX84-ENT-7YR	LIC-MX84-ENT-10YR	MX84
LIC-VMX100-1YR	LIC-VMX100-3YR	LIC-VMX100-5YR			vMX100

Cisco Meraki MX Advanced Security Licenses

Product SKU					Compatible Model
1-Year	3-Years	5-Years	7-Years	10-Years	
LIC-MX64-SEC-1YR	LIC-MX64-SEC-3YR	LIC-MX64-SEC-5YR	LIC-MX64-SEC-7YR	LIC-MX64-SEC-10YR	MX64
LIC-MX64W-SEC-1YR	LIC-MX64W-SEC-3YR	LIC-MX64W-SEC-5YR	LIC-MX64W-SEC-7YR	LIC-MX64W-SEC-10YR	MX64W
LIC-MX67-SEC-1YR	LIC-MX67-SEC-3YR	LIC-MX67-SEC-5YR	LIC-MX67-SEC-7YR	LIC-MX67-SEC-10YR	MX67
LIC-MX67W-SEC-1YR	LIC-MX67W-SEC-3YR	LIC-MX67W-SEC-5YR	LIC-MX67W-SEC-7YR	LIC-MX67W-SEC-10YR	MX67W
LIC-MX67C-SEC-1YR	LIC-MX67C-SEC-3YR	LIC-MX67C-SEC-5YR	LIC-MX67C-SEC-7YR	LIC-MX67C-SEC-10YR	MX67C
LIC-MX68-SEC-1YR	LIC-MX68-SEC-3YR	LIC-MX68-SEC-5YR	LIC-MX68-SEC-7YR	LIC-MX68-SEC-10YR	MX68
LIC-MX68W-SEC-1YR	LIC-MX68W-SEC-3YR	LIC-MX68W-SEC-5YR	LIC-MX68W-SEC-7YR	LIC-MX68W-SEC-10YR	MX68W
LIC-MX68CW-SEC-1YR	LIC-MX68CW-SEC-3YR	LIC-MX68CW-SEC-5YR	LIC-MX68CW-SEC-7YR	LIC-MX68CW-SEC-10YR	MX68CW
LIC-MX84-SEC-1YR	LIC-MX84-SEC-3YR	LIC-MX84-SEC-5YR	LIC-MX84-SEC-7YR	LIC-MX84-SEC-10YR	MX84

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Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

Cisco Meraki Z Enterprise Licenses

Product SKU					Compatible Model
1-Year	3-Years	5-Years	7-Years	10-Years	
LIC-Z3-ENT-1YR	LIC-Z3-ENT-3YR	LIC-Z3-ENT-5YR	LIC-Z3-ENT-7YR	LIC-Z3-ENT-10YR	Z3
LIC-Z3C-ENT-1YR	LIC-Z3C-ENT-3YR	LIC-Z3C-ENT-5YR	LIC-Z3C-ENT-7YR	LIC-Z3C-ENT-10YR	Z3C

Cisco Meraki Insight Licenses

Product SKU			Supported Throughput	Compatible Model
1-Year	3-Years	5-Years		
LIC-MI-S-1YR	LIC-MI-S-3YR	LIC-MI-S-5YR	450 Mbps	MX6*x*
LIC-MI-M-1YR	LIC-MI-M-3YR	LIC-MI-M-5YR	750 Mbps	MX84
LIC-MI-XS-1YR	LIC-MI-XS-3YR	LIC-MI-XS-5YR	100 Mbps	Z3, Z3C

Cisco Meraki 1000BASE Small Form-Factor Pluggable (SFP) Modules

Product SKU	Description	Max Distance	Compatible Model
MA-SFP-1GB-TX	1000BASE-T SFP Module	100 m	MX84
MA-SFP-1GB-SX	1000BASE-SX SFP Module	550 m	MX84
MA-SFP-1GB-LX10	1000BASE-LX10 Module	10 km	MX84

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Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

Cloud Management Architecture

Cisco Meraki's architecture provides feature-rich network management without on-site management appliances or Wi-Fi controllers.

Every Meraki device —including access points, switches, security & SD-WAN appliances, and cameras— connects over the Internet to Meraki's datacenters, which run Meraki's cloud management platform.

These connections, secured via SSL, utilize a patented protocol that provides real-time visibility and control, yet uses minimal bandwidth overhead (typically 1 Kbps or less.)

In place of traditional command-line based network configuration, Meraki provides a rich web-based dashboard, providing visibility and control over up to tens of thousands of Meraki devices, anywhere in the world. Tools, designed to scale to large and distributed networks, make policy changes, firmware updates, deploying new branches, etc. simple and expedient, regardless of size or location. Meraki's real-time protocols combine the immediacy of on-premise management applications with the simplicity and centralized control of a cloud application.

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Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

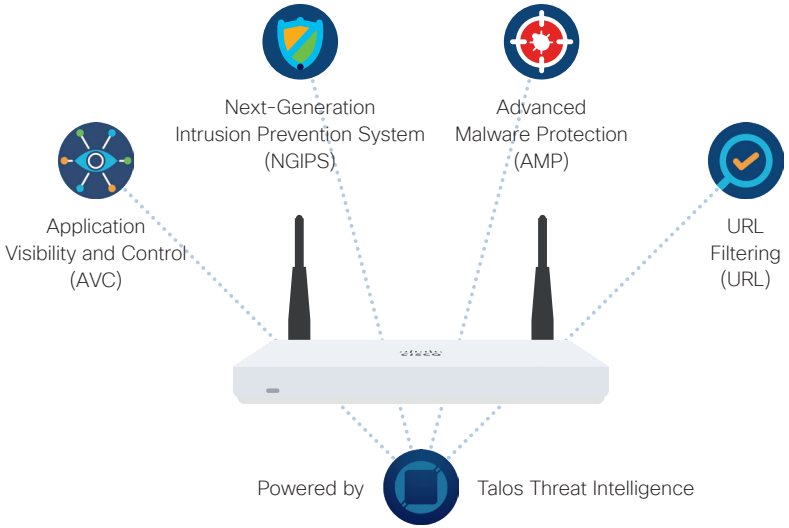
Ironclad Security

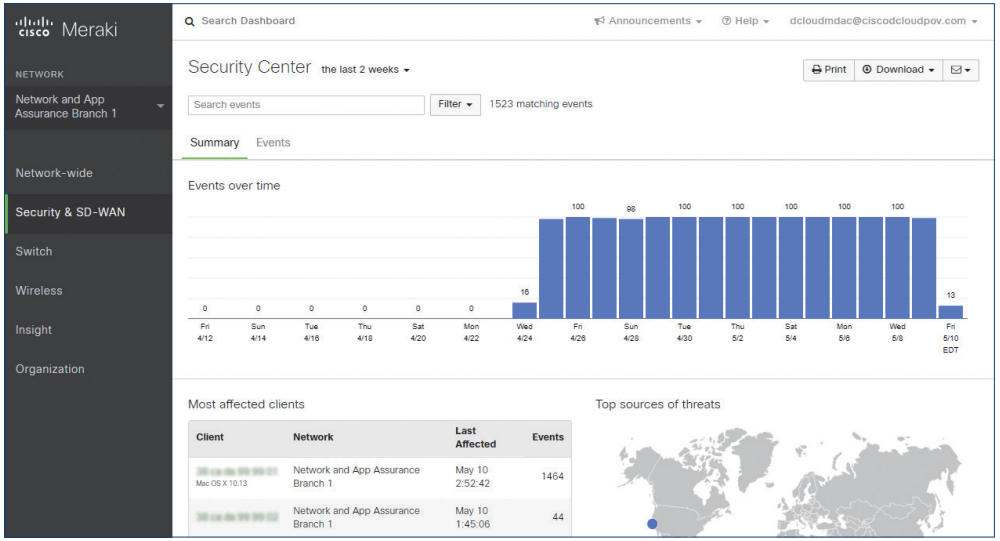
The Cisco Meraki MX has an extensive suite of security features including IDS/IPS, content filtering, web search filtering, geo-IP based firewalling, IPsec VPN connectivity, and Cisco Advanced Malware Protection (AMP), while providing the performance required for modern, bandwidth-intensive networks.

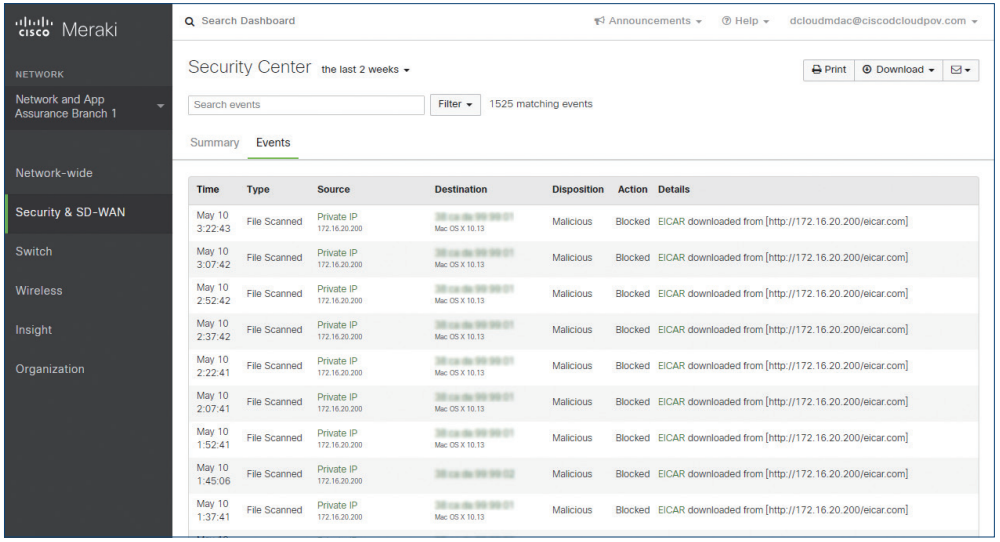
Layer 7 fingerprinting technology lets administrators identify unwanted content and applications and prevent recreational apps like BitTorrent from wasting precious bandwidth.

The integrated Cisco Snort engine delivers superior intrusion prevention coverage, a key requirement for PCI 3.2 compliance. Cisco Meraki MX also uses the Webroot BrightCloud URL categorization database for CIPA/IWF compliant content-filtering, Cisco AMP engine for anti-malware, AMP Threat Grid Cloud, and MaxMind for geo-IP based security rules.

Best of all, these industry-leading Layer 7 security engines and signatures are always kept up-to-date via the cloud, simplifying network security management and providing peace of mind to IT administrators.







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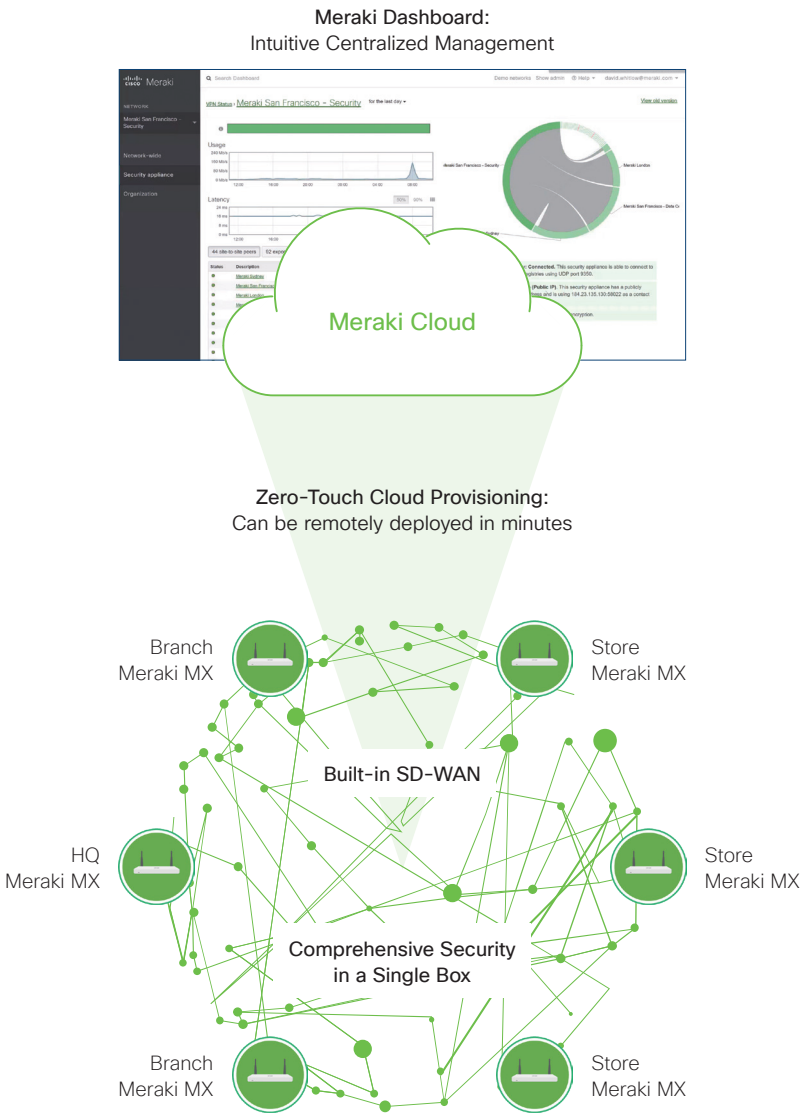
Cisco Meraki MX Cloud Managed Security & SD-WAN Appliances

CiscoSoftware-Defined WAN (SD-WAN)

Cisco SD-WAN (powered by Meraki) is ideal for lean IT environments in which full-stack management of WAN, LAN, and security is valued, along with simple management, orchestration, and automation, or where Meraki is the predominant architecture.
Cisco Meraki MX is equipped with SD-WAN capabilities that enable administrators to use available bandwidth more efficiently and ensure the highest possible level of performance for critical applications without sacrificing security or data privacy.
The following features can lower your operational costs and improve resource usage:

- Dual-Active VPN Uplinks
  In addition to supporting dual WAN uplinks and automatic VPN failover, Cisco Meraki MX also has the ability to build multiple VPN tunnels that are active simultaneously on both uplinks, whether they are Internet or MPLS connections. Traffic can then be load-balanced across these tunnels to make optimal use of available bandwidth.
- Policy-based Routing (PbR)
  PbR functionality allows administrators to assign traffic to a particular VPN path based on criteria such as traffic protocol, source, destination, or application.
- Dynamic Path Selection
  Dynamic path selection allows administrators to set performance thresholds for different types of traffic, in order to ensure that critical applications and data transfers always use the best path based on the loss, latency, and jitter over the available VPN tunnels.
- Meraki Insight WAN Health
  The WAN Health feature is specifically designed to monitor ISP connections, and it will help with troubleshooting and reporting for these connections. In addition to active/primary ISP uplinks, WAN Health will also monitor secondary/failover connections (such as WAN2 and LTE connections).



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