

Service Title

Cisco Meraki from Cinos

Service Description

Cinos offer cloud native, advanced network cloud-based management systems that can provide centralised visibility & control over Meraki's wired & wireless networking hardware, without the cost and complexity of Software Defined Network controllers or overlay. The management system, integrated with Meraki's entire product portfolio, cloud management provides feature rich, scalable, and intuitive centralised management for networks of any size.

Service Highlights

- Designed and operated to meet the NCSC 14 Cloud Security Principles
- Company with UK government security cleared staff.
- Disaster tolerant — five Tier 3 data centres securely connected by high-bandwidth, low-latency dedicated connectivity enabling synchronous replication.
- Flexible connectivity options — connect via the Internet, Health, and Social Care Network (HSCN) or dedicated Ethernet & MPLS connectivity.
- A secure, highly available cloud managed solution
- Rapid deployment of solution through Zero-touch capabilities
- A cost-effective and scalable solution. Highly scalable and adaptable, adjust to the ebbs and flows of demand cost effectively.
- Employee Centric. Can be deployed in the campus, enabling homeworking, to provide connectivity and security on or off-net.
- All-in-one. All services are available through the same single interface and securely with out of the box integrated reporting, giving true end-to-end visibility of any citizen engagement. Reducing costs, improving service, and driving greater efficiency.

Service Features

Meraki's hardware products are built from the ground up for cloud management. As a result, they come out of the box with centralised control, layer 7 device and application visibility, real time web-based diagnostics, monitoring, reporting, and much more. Meraki networks deploy quickly and easily, without training or dedicated staff. Moreover, Meraki provides a rich feature set that provides complete control over devices, users, and applications, allowing for flexible access policies and rich security without added cost or complexity.

Meraki's cloud management provides the features, security, and scalability for networks of any size. Meraki scales from small sites to campuses, and even distributed networks with thousands of sites. And can provide wired and wireless connectivity, perform security operations to improve company security posture as well and advanced threat detection.

Meraki devices are self-provision via the cloud, allowing them to be deployed in branches with limited IT requirements. Meraki's cloud native solution provides firmware and security signature updates

delivered seamlessly, over the web. With a secure, PCI and HIPAA compliant architecture and fault tolerant design that preserves local network functionality during WAN outages.

Meraki's portfolio provides a wide range of products to suit all organisations' requirements, from wireless access points to IoT sensors and physical security solutions.

FEATURE	BENEFIT
Highly available, resilient infrastructure	99.99% availability SLA with Cloud native deployment Cloud Management service spans five geolocated data centre.
Scalability & Deployment	Ease of procurement based on modelling and scaling requirements. Enables fast zero touch provisioning of networks and wireless solution.
Management	Single-pane-of-glass management, zero-touch deployment, automatic updates, and enhanced, built-in security.
TCO	Reduces, the need for, on-site IT, hardware, maintenance, and travel, for, troubleshooting. Removed the need to Software defined controllers on premise.
Enhanced Visibility	Offers deep insights into network traffic and user behaviour.
Flexibility	Enables the ability of managing a wide range of technologies including; firewalls, wired and wireless networks, smart cameras, IoT sensors and MDM solutions.
Fully Managed Service	24x7 service monitoring and support from Cinos

Service Components

Meraki MX

Cisco Meraki MX is a cloud-managed firewall and SD-WAN platform that combines stateful L3/L7 firewalling, VPN (site-to-site and client), traffic shaping, and advanced threat protection (IDS/IPS, malware defence, content filtering) into a centrally managed, easy-to-deploy solution using the Meraki web dashboard. They are available to any organisation size requirements, from SMB to SME customers.

Security Features

- Stateful Firewall: Packet-level inspection with rules based on source/destination IP, port, protocol, VLANs, and applications.
- Intrusion Detection and Prevention (IDS/IPS): Detects and blocks malicious traffic, exploits, and network attacks.
- Advanced Malware Protection (AMP): Real-time scanning for malware, ransomware, and viruses.
- Content Filtering & Web Security: Block access to harmful or inappropriate websites and applications.
- Threat Intelligence: Automatic updates to protect against new threats using Cisco Talos threat intelligence.
- Geolocation Blocking: Restrict traffic from or to specific countries.

SD-WAN & Connectivity

- Site-to-Site VPN: Connect multiple branch offices securely over the Internet.
- Client VPN: Secure remote access for employees from anywhere.
- Dynamic Path Selection: Automatically selects the best path based on link performance for high availability.
- Load Balancing: Distributes traffic across multiple WAN links for optimal performance.

Networking & Routing

- Layer 7 Application Visibility: Identify and control application traffic, e.g., block P2P apps or prioritise VoIP.
- Traffic Shaping & QoS: Prioritise critical applications and limit bandwidth for non-essential traffic.
- High Availability (HA): Redundant MX appliances for failover and continuous connectivity.
- IPv6 Support: Native support for IPv6 addressing and routing.

Believe in Excellence

Cloud Management

- Meraki Dashboard: Centralised, web-based interface to configure, monitor, and troubleshoot MX devices.
- Zero-Touch Provisioning: Devices automatically adopt and configure themselves when connected to the Internet.
- Real-Time Alerts & Reporting: Instant notifications for security events, WAN outages, or unusual traffic.
- Historical Analytics: Track usage patterns, top applications, threat activity, and client behavior over time.

Scalability & Deployment

- Suitable for small offices to large enterprises, branch offices, and distributed networks.
- Supports multi-site management from a single dashboard.
- Easy cloud-based firmware updates and policy enforcement.

Integration

- Integrates seamlessly with other Meraki devices: MS switches, MR access points, MT sensors, and cameras for a unified network and security solution.
- Works with Cisco ecosystem tools for advanced threat intelligence and enterprise integrations.

Meraki Switches

Meraki switches are cloud-managed enterprise network switches that combine high-performance switching, advanced security features, and Power over Ethernet with zero-touch provisioning, centralised configuration, real-time monitoring, and troubleshooting via the Meraki Dashboard, significantly simplifying network deployment, management, and scalability across distributed environments.

Cloud Management & Dashboard

- Centralised Cloud Management: Configure, monitor, and troubleshoot switches remotely from the Meraki Dashboard.
- Zero-Touch Provisioning: Switches automatically adopt themselves when connected to the network.

- Real-Time Monitoring & Alerts: Receive instant notifications for link failures, port changes, or unusual traffic.
- Historical Analytics: Track bandwidth usage, client statistics, and network trends over time.

Switching & Networking

- Layer 2 & Layer 3 Switching: VLAN support, static routing, dynamic routing protocols (OSPF, RIP, etc.).
- Stackable Options: Some MS models allow stacking for simplified management and redundancy.
- Port Configurations: Flexible options including 1G, 2.5G, 5G, 10G, and even 40G uplinks.
- Power over Ethernet (PoE/PoE+ and UPoE): Power devices like phones, access points, cameras directly from the switch.
- Link Aggregation & Redundancy: Combine multiple ports for higher throughput and failover support.

Security Features

- Access Control & 802.1X Authentication: Secure device connections via RADIUS or Meraki Cloud Authentication.
- Role-Based Access: Assign different privileges to users or devices connected to the switch.
- DHCP Snooping & IP Source Guard: Protect against rogue devices or IP spoofing attacks.
- Port Security & MAC Locking: Limit devices per port to prevent unauthorised access.

Quality of Service (QoS)

- Traffic Prioritisation: Prioritise VoIP, video conferencing, and critical applications.
- Application-Aware QoS: Identify and shape traffic based on application type or protocol.

Automation & Analytics

- Automatic VLAN Assignment: Assign devices to VLANs dynamically based on user/device type.
- Topology Mapping: Visual representation of connected devices, links, and switches in the dashboard.
- Event Logging & Alerts: Logs of link failures, authentication attempts, and traffic anomalies.

Redundancy & Reliability

- High Availability: Stackable models and redundant uplinks support failover scenarios.
- Spanning Tree Protocol (STP): Prevent network loops automatically.
- Link Layer Discovery Protocol (LLDP): Provides device discovery and network mapping.

Meraki Access Points

Meraki access points are cloud-managed enterprise wireless networking devices that deliver fast, reliable, and secure Wi-Fi by supporting the latest wireless standards, automatic radio frequency optimisation, intelligent traffic shaping, advanced security (including WPA3 and intrusion prevention), seamless client roaming, detailed usage analytics, and centralised provisioning, configuration, monitoring, and troubleshooting through the Meraki Dashboard, enabling easy deployment, consistent policy enforcement, and scalable management across single or multi-site networks.

Cloud Management & Dashboard

- Centralised Management: Configure, monitor, and troubleshoot access points remotely via the Meraki Dashboard.
- Zero-Touch Deployment: Automatically adopt and configure when powered on and connected to the Internet.
- Real-Time Monitoring & Alerts: Detect client connectivity issues, rogue APs, interference, or downtime.
- Historical Analytics: Track client usage, application usage, and Wi-Fi performance trends.

Wireless Performance

- High-Speed Wi-Fi Standards: Supports Wi-Fi 5 (802.11ac) and Wi-Fi 6/6E (802.11ax) for faster speeds and higher capacity.
- Automatic RF Optimisation: Adjusts power levels and channel selection to minimise interference.
- Seamless Roaming: Supports fast roaming (802.11r/k/v) for uninterrupted client connectivity.
- MU-MIMO & OFDMA: Efficient multi-client performance, reducing latency in dense environments.

Security & Access Control

- Enterprise-Grade Security: WPA3, WPA2-Enterprise, and 802.1X authentication support.

Believe in Excellence

- Rogue AP Detection & Prevention: Detects unauthorised access points and mitigates threats.
- Client Isolation & VLAN Assignment: Secure guest networks or segregated VLANs for internal devices.
- Intrusion Detection & Prevention (IDS/IPS): Protects the network from wireless attacks.

Advanced Features

- Location Analytics & Presence Detection: Track client locations, foot traffic, and dwell time.
- Traffic Shaping & Application Visibility: Prioritise critical applications like VoIP or video conferencing.
- Mesh Networking: Enables wireless uplinks in hard-to-wire locations.
- Captive Portal & Guest Access: Customisable guest onboarding experience with bandwidth limits and access control.

Integration & Automation

- Seamless Integration with Meraki Stack: Works with MS switches, MX firewalls, MT sensors, and cameras for a unified network.
- API Access: Supports Meraki APIs for automation, custom reporting, and third-party integrations.
- Automated Alerts & Notifications: Receive instant warnings about connectivity issues, high interference, or security threats.

Meraki Smart Cameras

Meraki smart cameras are cloud-managed, AI-enabled surveillance devices designed for enterprise environments, offering high-definition video capture, motion detection, and advanced analytics such as people counting, vehicle detection, and facial recognition; they provide secure cloud-based storage with end-to-end encryption, automated alerts, and detailed event logs, all managed through the Meraki Dashboard, which allows centralised configuration, live monitoring, historical video search, and scalable deployment across single or multiple sites, simplifying physical security management while providing actionable operational insights.

Cloud Management & Dashboard

- Centralised Cloud Management: Configure, monitor, and troubleshoot cameras from anywhere via the Meraki Dashboard.
- Zero-Touch Deployment: Cameras automatically adopt when connected to the network.
- Real-Time Alerts & Notifications: Receive instant alerts for motion, line crossing, or unusual activity.

Believe in Excellence

- Historical Video Search: Quickly search recorded footage by time, motion, or specific analytics events.

Video Quality & Performance

- High-Definition Recording: Supports 1080p, 4MP, and 4K models with sharp, clear video.
- Onboard Storage: Local storage with solid-state drives (SSD) for edge recording, reducing dependence on continuous cloud upload.
- Efficient Video Compression: Uses H.264/H.265 encoding to save bandwidth and storage while maintaining quality.
- Wide Field of View & Optical Options: Various models offer fisheye, varifocal, or panoramic lenses.

Intelligent Analytics

- People and Object Detection: Detects and counts people, vehicles, and other objects.
- Motion Detection: Automatically records and triggers alerts based on movement.
- Cross-Line Detection & Zones: Alerts when objects or people cross predefined areas.
- Facial Recognition Integration (optional with third-party tools): Detect known individuals and unauthorised access.
- Heatmaps & Occupancy Analytics: Analyse foot traffic, peak times, and dwell time for operational insights.

Security & Privacy

- End-to-End Encryption: Video streams are encrypted in transit and at rest.
- Role-Based Access Control: Limit access to cameras, video clips, and analytics to authorised users.
- Tamper Detection: Alerts if the camera is blocked, moved, or tampered with.
- Secure Cloud Storage: Automatic backup to the Meraki cloud with optional retention policies.

Integration & Automation

- Meraki Dashboard Integration: Unified interface with MR access points, MS switches, MX firewalls, and MT sensors.
- APIs for Automation & Reporting: Access video data, analytics, and alerts programmatically.
- Network Health Monitoring: Cameras provide insights into the network through Meraki sensors for PoE, latency, and connectivity status.

Believe in Excellence

Meraki MT Sensors

Meraki MT sensors are cloud-managed environmental and security monitoring devices designed to provide real-time visibility into physical spaces, capable of measuring temperature, humidity, water leaks, door and window activity, motion, and occupancy; they offer automated alerts, threshold-based notifications, historical data logging, and detailed analytics, all centrally managed through the Meraki Dashboard, enabling proactive facility management, preventive maintenance, and operational efficiency across distributed locations with minimal on-site intervention.

Cloud Management & Dashboard

- **Centralised Management:** Configure, monitor, and troubleshoot MT sensors remotely via the Meraki Dashboard.
- **Zero-Touch Deployment:** Sensors automatically adopt when powered and connected to the network.
- **Real-Time Alerts & Notifications:** Receive instant notifications for threshold violations, leaks, door/window activity, or environmental changes.
- **Historical Data & Analytics:** View trends, graphs, and logs over time for better decision-making.

Environmental Monitoring

- **Temperature Monitoring:** Track ambient temperatures for comfort, energy efficiency, or equipment protection.
- **Humidity Sensing:** Monitor humidity levels to prevent equipment damage, mold, or product spoilage.
- **Water Leak Detection:** Detect leaks early in server rooms, bathrooms, or utility areas to prevent costly damage.
- **Ambient Light Detection:** Monitor lighting conditions for energy optimisation and workspace comfort.
- **Occupancy & Motion Detection:** Track movement and presence for security or space utilisation insights.

Security & Access Monitoring

- **Contact Sensors for Doors/Windows:** Detect when doors or windows are opened or closed.
- **Tamper Detection:** Alerts when a sensor is physically disturbed.
- **Integration with Other Meraki Devices:** Work alongside MX firewalls, MR access points, and MV cameras to enhance physical security.

Believe in Excellence

Automation & Integrations

- Alerts & Notifications: Configure thresholds for temperature, humidity, motion, or leaks, and get real-time email or SMS alerts.
- APIs for Automation: Integrate sensor data into custom applications, dashboards, or alerting systems.
- Historical Reporting: Analyse long-term trends to improve facility management and operational planning.

Reliability & Deployment

- Battery-Powered & Wired Options: Flexible deployment in hard-to-wire locations.
- Scalable Across Sites: Manage multiple sensors across locations from a single Meraki Dashboard.
- Low Maintenance: Cloud management reduces on-site IT intervention, and battery sensors can last for years.

Meraki Mobile Device Management (MDM)

Meraki MDM is a cloud-based platform that allows organisations to centrally manage, secure, and monitor all their mobile devices, laptops, and desktops from a single interface. It provides streamlined device enrollment, automated policy enforcement, remote configuration, application deployment, and content distribution, along with real-time monitoring, location tracking, and remote troubleshooting. Integrated with the Meraki Dashboard, it offers granular visibility into device status, compliance, and usage, enabling IT teams to enforce security standards, prevent data loss, simplify device lifecycle management, and ensure consistent operational efficiency across distributed environments without requiring on-site management.

Device Enrollment & Provisioning

- Zero-Touch Enrollment: Devices can be automatically enrolled during initial setup with Apple DEP, Android Zero-Touch, or other enrollment programs.
- Multi-Platform Support: Manage iOS, Android, macOS, Windows, and ChromeOS devices from a single dashboard.
- Bulk Enrollment: Easily add large numbers of devices with minimal manual configuration.

Device Configuration & Policy Management

- Automated Policy Enforcement: Enforce password requirements, encryption, device restrictions, and compliance rules.

Believe in Excellence

- Wi-Fi, VPN, and Email Profiles: Configure network access and enterprise accounts automatically.
- Application Management: Push, update, or remove apps remotely on managed devices.
- Geofencing & Network Restrictions: Apply location-based policies or restrict access based on network or region.

Security & Compliance

- Endpoint Security Enforcement: Detect jailbroken or rooted devices and enforce compliance.
- Remote Lock & Wipe: Secure devices in case of loss or theft.
- Device Tracking & Location Services: Monitor the real-time location of devices.
- Compliance Reporting: Generate reports for regulatory compliance or internal audits.

Monitoring & Troubleshooting

- Real-Time Device Status: View device health, connectivity, storage, battery, and installed applications.
- Remote Support & Diagnostics: Remotely troubleshoot and configure devices without requiring physical access.
- Alerts & Notifications: Receive instant notifications for policy violations, security threats, or connectivity issues.
- Usage Analytics: Track app usage, device adoption, and resource consumption.

Integration & Automation

- Meraki Dashboard Integration: Unified interface with MX firewalls, MS switches, MR access points, MV cameras, and MT sensors.
- APIs for Automation: Access device data, automate workflows, or integrate with third-party solutions.
- Scalable Across Sites: Manage devices across multiple offices, schools, or retail locations from a single interface.

Professional Services and Training

The Professional Services required for the installation of this solution will be dependent on the Buyer's specific site requirements and existing infrastructure.

Professional Service & Training pricing is provided in the Price Document and required Professional Services to be confirmed at Call Off or during the contract by variation.

Support Options

Buyers are able to scale up and down the support of this solution, through the purchase of Cinos Support Tokens. This allows Buyers to enable an existing support provider to support the solution or have Cinos fully support the solution or something in-between or enhance regular incident support with event support.

Support tokens allow flexibility so that the Buyer can procure the appropriate volume of support for their specific needs. Required quantity of Support Tokens to be confirmed at Call Off or during the contract by variation.

Why Cinos?

Cinos is an industry-leading, agile, and innovative systems integrator. Our mission is to deliver integrated technology solutions to a global marketplace, driving digital transformation for organisations of all sizes.

Our expertise lies in providing comprehensive technology solutions that cover Collaboration, Connectivity, Networks, Security, Infrastructure, and Audio Visual. This unique combination enables us to offer true end-to-end solutions, setting us apart from other providers and giving our customers the confidence that their entire technology estate can work together seamlessly, managed by one trusted partner.

Whether that is an SME traversing the world of cloud communications for the first time or facilitating real-time collaborative decision making in highly complex command and control environments, Cinos is recognised as the go to partner for the delivery of seamless and reliable technology solutions.

We pride ourselves on the art of simplification, removing the burden of managing multiple technologies so our customers can focus on their strategic objectives. By employing a cross-architecture approach to technology integration, we empower organisations to embrace digital transformation, thereby streamlining efficiencies, fostering innovation, and enhancing their competitive edge.

We work with the leading manufacturers and technology providers to ensure the correct solution is identified, delivered, and maintained; enabling you and your customer base to work in a collaborative and more effective manner. Furthermore, our leading aftercare and managed services allow you to gain optimal performance and longevity from your technology investments.

Believe in Excellence