Meraki

Reducing Cost & Complexity with Cisco Meraki Switches

Solution Guide & Customer Case Study

Table of Contents

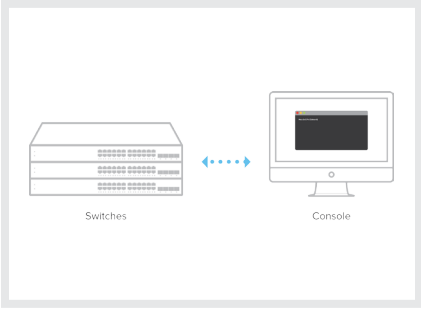
How cloud networking saves time and money	3
Six cost differentiators: Traditional vs Meraki switching	4
Real savings: Doing the math, feature by feature	7
Customer testimonials	12
What's next?	13

How cloud networking saves time and money

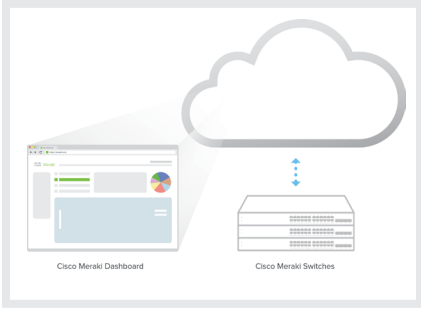
Upgrading network switches is often a significant financial and technological commitment. Switches are the foundation of any network and are expected to last anywhere from 5 to 10 years or more. In today's modern networks switches must be highly reliable, easy to manage at scale, and compatible with the latest technologies for the foreseeable future.

As networks grow in size and complexity, decision makers are beginning to look beyond the upfront hardware costs to include operational expenses, which can become a significant, recurring cost. This is often referred to as Total Cost of Ownership (TCO). Initial configuration, network complexity, troubleshooting, security, and revision management can add up to a substantial cost each year. Selecting the right solution can pay massive dividends and often significantly recover the costs of a network refresh over the lifetime of the deployment.

The goal of this document is to highlight real cost savings that Meraki switching customers have seen by leveraging the ease of management and unique technologies that are inherent to the Meraki cloud-managed solution.



CLI-based management



Cloud-based management

Example: A business with 300 switches, 1000 employees, and 150 locations can see cost savings of 80% when using a zero-touch cloud provisioning approach.

Meraki switches can be configured even before they are delivered by adding them to the cloud and then using powerful Meraki features such as Virtual Stacking and Configuration Clone to seamlessly replicate settings. Once connected, the switches will automatically update their software and configuration without anything but an internet connection, making staging a thing of the past! Read on for more real-life cost saving examples.

Six Cost Differentiators: Traditional vs. Meraki Switching

There are many components to installing and maintaining a healthy switching network, and each requires dedicated resources. Cloud networking technologies can drastically reduce the amount of time and effort necessary to maintain a modern network, yet still provide for a secure, efficient, and reliable enterprise solution.

STAGING AND DEPLOYMENT

Traditional

Command-based configuration of network switches can require both expertise and substantial labor hours. Various overlay platforms are now available to streamline this process, yet still require a significant time investment for training and initial setup.

Meraki MS

With Meraki cloud-managed switches, it is not necessary to pre-stage hardware, even for thousands of switches or ports. This provides significant cost savings and reduced complexity in the deployment stages of a network refresh.

Key Features
Zero-touch Provisioning
Automatic Cloud Updates

Average Cost Savings
60 - 80%

NETWORK MONITORING & MAINTENANCE

Traditional

Configuration changes and network monitoring are both a vital part of any network team's operations. Changes are made by connecting to a switch via IP, authenticating, and then making command-line changes to the desired ports and/or settings. Monitoring is often a manual process or requires sophisticated add-on systems that aggregate device logs and alerts.

Meraki MS

The intuitive Meraki dashboard with features like Network Topology make it easy to quickly locate devices, users, and troublesome spots in the network. Summary reports can be delivered via email to provide an overview of how the network is being used and even highlight how much energy is consumed by PoE devices, helping to guide reductions in operational costs.

Key Features
Visibility & Alerts
PoE Reporting & Port Scheduling

Average Cost Savings
40 - 60%

SUPPORT

Traditional

Supporting end users is a substantial portion of a network team's day-to-day responsibilities. Most user-reported issues are caused by faulty configuration, but narrowing down root causes can be difficult and complex, particularly in remote locations.

Meraki MS

The Meraki Dashboard includes powerful remote troubleshooting tools that are easy to access and understand. These include dynamic network topology, cable testing, remote packet captures, and many other tools, all of which significantly enhance multi-site troubleshooting even in locations where IT is not present.

Key Features
Visibility & Alerts
Remote Live Tools

Average Cost Savings
60%

REVISION MANAGEMENT

Traditional

Software updates, security patches, and revision management for switches are a vital part of keeping a network secure and efficient, but can also be time consuming to enforce. These changes often require a manual upgrade process per switch with additional servers for log collection and software image hosting.

Meraki MS

Meraki switches securely upgrade via the cloud during a convenient time window. This ensures they are always running the latest and safest software while saving considerable amounts of time. Automatic change logs capture every change and make it easy to revert a device's configuration.

Key Features
Reporting
Automatic Cloud Updates

Average Cost Savings
60%

SECURITY

Traditional

Implementing and managing wired security can be a daunting task that requires per-switch configuration of access servers, as well as a timely training process each time a new employee is hired.

Meraki MS

Meraki switches make wired security easy to manage and configure with network-wide access policies that can apply to thousands of switches and ports. Extend security to your endpoints with Meraki Systems Manager, an MDM solution that seamlessly integrates with Meraki MS Switches.

Key Features
Visibility and Alerts
Enterprise Security

ENERGY CONSUMPTION

Traditional

Energy costs associated with power consumption of networking hardware and connected peripherals can add up but are often underestimated as an operational expense. Additional platforms for reporting and control are available but require time and expertise to setup.

Meraki MS

Reducing power consumption through intelligent PoE energy budgeting and port scheduling features reduces the annual energy costs of running switches and powered devices like phones and access points.

Key Features
PoE Reporting and Port Scheduling

Average Cost Savings
60%

Real savings: Doing the math, feature by feature

Many networking solutions claim massive Return on Investment (ROI), yet few include the features that provide these returns without additional overlay platforms and expensive software to maintain. Meraki switches have many built-in, easy-to-configure features that can all quickly reduce a business's operational expenses:

ZERO-TOUCH PROVISIONING

40 - 60% Cost Savings

When it comes to a new switch deployment, the majority of time is spent on provisioning and configuration. Meraki has a unique approach to this process that reduces the time it takes to initially provision network switches, leading to cost savings of between 60% and 80% when compared to traditional command-based solutions.

Rapid provisioning

No need to even unbox the switch, just add it to the Meraki dashboard and start configuring. The cloud will deliver the updated configuration whenever it's time to deploy.

Do the math:

Company Profile: Financial company with 200 locations

2 hours of onsite configuration per location at an average onsite hourly rate of $100 would cost a 200-location business **$40,000**, or select Meraki and apply these savings towards the initial investment.

Automatic cloud updates

When managing many remote sites, keeping devices updated with the latest software can be a daunting task. Any time a new software update or patch is released, it can require significant downtime and weeks of work before the entire switch network has been updated. With Meraki, simply select a desired upgrade window and when a new software update becomes available, the cloud will seamlessly upgrade network devices while you sleep!

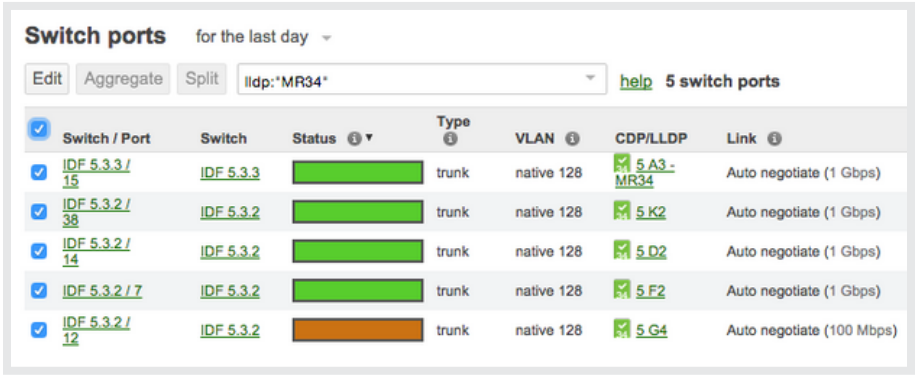
Do the math:

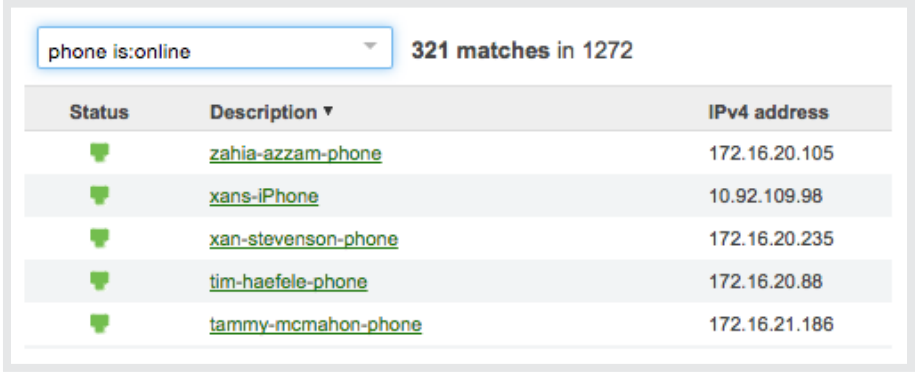
Company Profile: Retailer with 150 locations

At 150 locations with 2 switches per store, each switch takes approximately one hour of installation and configuration. This would add up to 300 hours or **$30,000** in wages at an average onsite rate of $100 per hour. Use Meraki switch clone and automatic software updates to reduce install time to just 10 minutes and save **$25,000** in provisioning costs.

Virtual stacking & automatic device discovery

A unified search interface for all of switch ports makes it easy to search for, select, and make changes to as many ports, on as many switches as required.





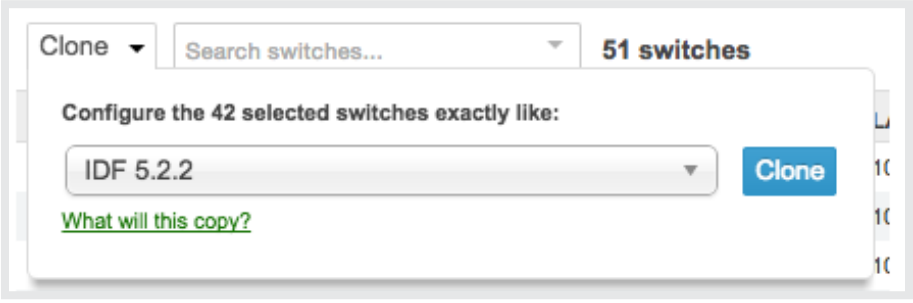
Do the math:

Company Profile: Restaurant chain with 400 locations

It takes at least 10 minutes to find a device behind a switch port using various commands. Doing this once per location per week, result in over 3400 hours or **$170,000** in wages at an average $50 per hour salary. Make this a 30-second task with the Meraki built-in client search and save over **$160,000** (95%).

Switch Clone

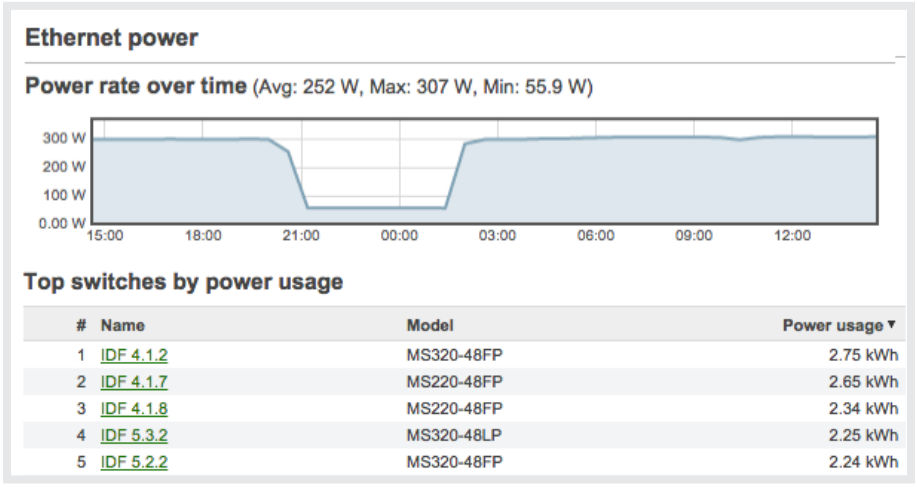
Copy the configuration from one switch to another with one click.



POE REPORTING & PORT SCHEDULING

40% Cost Savings

Want to see how much power is being consumed by VoIP phones and access points? Use the summary report to quickly find energy consumption per switch and for the network. Then use features like port scheduling to shut off power outside of business hours and see real savings at all locations.



Do the math:

Company Profile: Manufacturing company with 3 mid-sized campuses.

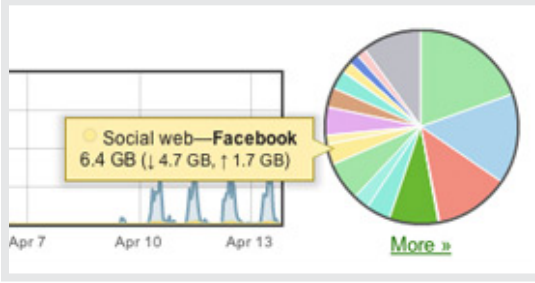
With approximately 50 access switches, 150 access points, and 200 VoIP phones per campus, PoE power consumption is an estimated 2.5kWh per switch per day (**$16,500** per year at $0.12/kWh). By using PoE scheduling, this consumption can be reduced by 60%, saving nearly **$10,000** per year in energy costs.

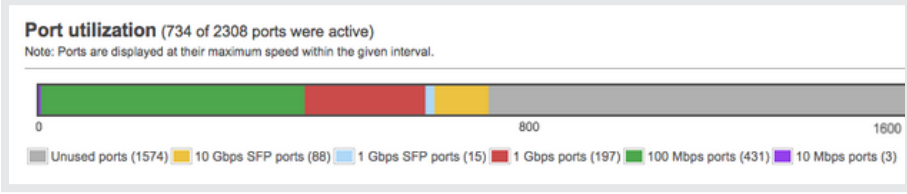
REPORTING, VISIBILITY, & ALERTS

60% Cost Savings

When managing a large campus or many remote sites, getting a general overview of all networks and devices can be a daunting task. Adding reporting and visibility per site often requires additional solutions to be set up and maintained, increasing up-front and operational costs. Meraki has built-in alerting and reporting features so there is no need for maintaining yet another solution.

- Network Alerts
- Deep L7 Traffic Analytics
- Network Topology
- Summary Reporting (with Email Scheduling)
- Built-in Event Logging
- Configuration Change Log





Do the math:

Company Profile: Tech company with 5 small-sized campuses.

Looking for a solution to collect logs and send alerts for each site, with network topology for easily troubleshooting each network? This requires three separate solutions which each have up-front costs, require complex configuration and on-going maintenance, and cost an average of **$10,000 or more**. Meraki is the only solution with all of these tools and more, saving thousands of dollars in hardware, licensing, and continuous maintenance costs.

Customer Testimonials

We asked a few Meraki customers to describe their experience using cloud-managed switching and how it has saved them both time and money.

THE FIELD MUSEUM

The Field Museum in Chicago is one of the largest and most visited natural history museums in the world with nearly 2 million visitors a year. Their network typically sees a staggering 3TB of data per day!

Network Profile: 31 MS 220/320/420 Switches
IT Staff: 3 team members dedicated to network management

"In the past, finding the cause of broadcast storms required a specific set of skills and physical access to the switches. Now with Meraki, the switches have the robust hardware and intelligent software to prevent broadcast storms. Using the built in tools, we can troubleshoot the switches remotely by shutting off ports from home, instead of having to make the 30 minute drive into the office."
– Mike Yoshida, Manager of Technology Operations and Tony Lam, Systems Engineer at The Field Museum

---

BRYAN INDEPENDENT SCHOOL DISTRICT

Located in central Texas, Bryan ISD serves over 16,000 students and 4,000 faculty and staff members.

Network Profile: 30 campuses covered by Meraki
IT Staff: 3 team members dedicated to network management

"Before Meraki, all switches were hand-configured. We had text file scripts written for the configuration and that process took about 30-40 minutes per switch. With Meraki, we grab a box, go to the campus, power it on, and plug it into the network. The switch comes up in dashboard, you tell it what you want it to do, plug your hardware into it, and walk out the door. What used to take at minimum an hour is now 30 minutes or less."
– Brandon McCord, Network Manager at Bryan ISD

"We have multiple closets with multiple switches in each. Configuring them from a command line was really our Achilles heel. Meraki came in and made this easier for us, and I no longer have to pay $25k for extra features or software."
– Brandon McCord, Network Manager at Bryan ISD

What's Next?

There are many factors to consider when updating a network. While most solutions claim cost savings, only Cisco Meraki offers cloud-managed switches that truly deliver zero-touch configuration, with a refreshingly simple approach to networking.

Risk-free Evaluation
meraki.com/eval

Meraki Blog
meraki.com/blog

Contact your Meraki rep
meraki.com/contact

Cost Calculator
meraki.com/buy/cost-calculator

cisco Meraki