opengear

SMART SOLUTIONS FOR DISTRIBUTED NETWORKS

POWER Engineers deploys Opengear to remote sites to decrease overhead and improve MTTR (Mean Time To Repair)

SUMMARY

POWER ENGINEERS

Industry:
Energy Consulting and Engineering Services

Customer Profile:
POWER Engineers is global company dedicated to becoming their client's first choice for consulting services and engineering design in the energy, food and beverage, facilities, communications, environmental, and federal markets. As part of that effort, the Operations Division within POWER Engineers is responsible for the efficient installation and ongoing support for thousands of worldwide remote sites for both POWER Engineers and their customers.

Objectives:
‣ Decrease new site deployment overhead
‣ Decrease the MTTR for remote site issue remediation
‣ Leverage Power-Over-Ethernet to simplify cabling and speed up deployments
‣ Consolidate the number of tools and equipment used by installation and response teams
‣ Improve root cause analysis through local logging
‣ Support for differing out-of-band access methods such as DSL, Cellular and modems

Opengear Solution:
‣ ACM5504-2-P Power-Over-Ethernet Console Managment Gateway

Results:
‣ Lowered IT overhead while expanding remote site management
‣ Session logging to reduce the time to assess root cause, lowering MTTR
‣ Simplifying remote site management and expanding access options for IT groups

THE CHALLENGE

As a global consulting and engineering services firm, POWER Engineers has 45+ Offices and Remote Locations accross the country and beyond. POWER's Operations Division is responsible for the efficient installation and ongoing support of all of our Remote Offices worldwide. This enables our Production Divisions to support thousands of customers around the world.

The Operations Group was looking for a solution that would help them:

‣ Consolidate multiple out-of-band management tools into a single easily accessible access solution

‣ Centralize access for all users and groups reducing risks inherent in allowing access to critical infrastructure systems while training new team members yet providing a familiar and enabling access mechanism.

‣ Allow multi-session individually authenticated access for training opportunities

‣ Adapt for a wide variety of different remote site setups in a multi-vendor environment

As a result of deploying Opengear ACM5504-2-P console servers, remote sites are now initially deployed with more efficiency and lower overhead. Operators now have a consistent access point that helps them quickly identify root cause reducing MTTR and increasing productivity.

> "The ACM5504 allowed us to provide a secure and consistent access point experience for all our sites. Consolidating multiple tools from five different vendors into a single scalable solution from Opengear."
>
> **- William Audette**
> Senior Network Engineer
> POWER Engineers

THE SOLUTION:

Flexible Form Factor / Consolidating Hardware / Consistent End-User Experience

With such a wide deployment of remote sites, POWER Engineers was looking for a remote access solution that could offer a consistent access experience across all sites while accommodating for a variety of connection types. The Opengear ACM5504 product family offers support for multiple connectivity paths such as primary Ethernet links (DSL, WAN connections, and fiber transceivers), 3G/4G LTE links and analog modem connections. This allows the Operations Group to select the most appropriate remote access path for each site without compromising on features and security. This had the added benefit of reducing the number of individual pieces and tools required to manage each site further reducing potential points of failure along our Management Path.

The ACM5504 product family includes options for four built-in Ethernet switch ports, power over ethernet (PoE), built-in hardened firewall, built-in modems, support for managed power strips, UPS monitoring and alerting, and temperature and humidity sensors, all in one unit.

Rapid Deployment:

POWER Engineers was able to reduce new install overhead by shipping units directly to new sites and letting the Opengear ACM5504 "check in" with the Operations Group. This saves the time of having each unit shipped to corporate headquarters to be preconfigured before being deployed. This had the additional benefit of freeing up the installer and their laptop to do other work and saved the time and overhead of driving technical staff to remote locations.

Decreasing MTTR & Operational Overhead:

When issues do occur, the Operations Group is now enabled to respond faster and smarter by first reviewing console logs to determine root cause and then decides on the best course of action. The ability to interact with an unresponsive device prior to rebooting also saves response time by providing deeper insight into the current state of the device. If the image of a device needs to be reinstalled or a configuration needs restoring, they are able to use the built-in TFTP servers of the ACM5504 and the included 4GB of flash storage. Additional storage can be physically shipped to remote sites via USB Thumb drive and directly attached and mounted for use via one of the included USB Ports on the ACM. This reduces MTTR by saving the time required to send or drive new IOS images to the site.

ACM5504-2-P Remote Management Gateway

- Complete remote management solution in one box

- Built-in TFTP server & 4GB flash storage for remote configuration

- Integrated console server, managed router, switch and firewall serial & USB consoles

- Deploy in wiring closets, branch offices, communications cabinets and harsh remote sites

- Military-spec security, FIPS 140-2 SSL and SSH, stateful firewall, OpenVPN & IPSec

- IEEE802.3af compliant PoE on primary Ethernet

- Automatically detect and recover from network outages and repair equipment faults

> "It's a big deal for us to leverage the built-in TFTP server and flash storage of the ACM5504. New units now check in with us when they first boot up. Previously we had to have products shipped to me first for initial configuration. Now we can ship units directly to the remote site and have them load their image and configuration from the ACM5504. This speeds up deployments and reduces the number of tools we have to use."
>
> **- William Audette**
> Senior Network Engineer
> POWER Engineers

Key Features:
Opengear ACM5504-2-P

- Power-over-Ethernet (IEEE 802.3af)

- Built-in TFTP server & 4GB flash storage for remote configuration

- Local session logging

- Extensible root-level scripting access

- Custom dev kit for specialized applications

- Manual and automatic remote power control

About Opengear:

Founded in 2004, Opengear designs, manufactures and delivers the most feature rich, cost effective, flexible solutions for secure remote infrastructure management. Opengear enables companies to access and manage virtually any electronic device on their network remotely and securely from anywhere, even if the network is down, to improve efficiencies and maximize business continuity. The company is headquartered in Sandy, Utah, has substantial operations in the UK and Australia, and sales partners worldwide. For more information, please visit www.opengear.com

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