

How Granite's Project Management and Field Services Upgraded Infrastructure at over 1,000 Locations.

Challenges

A global energy leader was undertaking a network infrastructure upgrade to implement consistent advanced connectivity across thousands of locations with insufficient wiring at legacy sites and needed replacement of existing networking equipment, cabling and wireless access points.

Complex Installations:

Project demanded expert implementation with skilled technicians across the US to manage complex wireless and wired network installation at sites with challenges like outdoor locations, high ceilings, RFI issues, concrete floors and walls, and heavy machinery.

Business Continuity Risks:

Close coordination with facility management was critical to minimize operations interruptions; installation team needed to follow strict and varied health, safety, security and environment standards.

Bandwidth Issues:

Unique network requirements included use of advanced technologies and high-bandwidth applications for video and geological analysis, mapping and modeling software.

Solutions

Granite's solution included next-generation wired and wireless LAN infrastructure that was coordinated with the company's network and systems engineers to understand priorities, applications, bandwidth and latency requirements, and site connectivity needs.

Granite Project Management Strategic Planning

- Granite developed comprehensive rollout schedules to address priorities and safety regulations, minimize site interruptions and ensure on-time completion.
- Proposed cabling design—including fiber and racking specs—to deliver consistency, reliability, security, high bandwidth and low latency across all sites.
- Using customized mapping software, reviewed each facility's layout, developed preliminary cabling and WAP locations plans and validated specifications with onsite visits.

Granite Managed Field Services Implementation

- Executed end-to-end deployment, including scheduling, operations coordination, custom equipment rental, installation, testing, and environmentally-friendly disposition of old wiring and equipment
- Comprehensive documentation detailing WAP and jack locations and addresses, wiring diagrams and rack configuration was delivered electronically, simplifying site maintenance and future upgrades.

Customer Profile

Industry

Energy

About

Global Integrated
Energy Provider

Results

Successful Implementation With Efficient, Global Deployments

- Solution first rolled out in high-priority US locations; based on the success of these deployments, was extended to all US locations, and now across all sites around the world. To date, Granite has installed over 30,000 WAPs, 2,000 switches, 250 racks, 200k ft of OM-4 fiber, and nearly 1 million feet of Cat 6a cabling

Improvement In Store Connectivity With Efficient, Reliable Bandwidth

- Granite Managed Field Services and Project Management coordinated multiple site cutovers per month, demonstrating the scale and agility required for large-scale rollouts.
- All locations successfully upgraded to meet all customer bandwidth, latency and reliability requirements and was completed on time and on budget

Ensured Business Continuity & Network Modernization

- Granite's standards-based modern cabling design and expert installation, along with clear documentation, minimizes downtime, simplifies maintenance and enables future expansion.
- With a high-performance fiber backbone, the Granite NOC team saw a significant decrease in service issues, leading to improved network reliability.