Quest TECHNOLOGY MANAGEMENT | CREE

DATA CENTER LIGHTING

# Lighting the Path to the Internet of Things

Quest deploys Cree's SmartCast® Power over Ethernet Technology, an intuitively simple, scalable intelligent lighting platform.

## Opportunity

Quest is a worldwide leader in technology management, offering a portfolio of professional, cloud, and managed services. The company goes to great lengths to ensure a resilient, secure, high-performance environment for the clients operating out of its service delivery centers.

Quest's Roseville, CA, high-availability business center (HABC) is a prime example. Opened in 2014, the 120,000-square-foot facility is built on a seismically secure site above the floodplain. It includes a 24 x 7 network operations center, co-location, business continuity/disaster recovery, and managed and cloud services tailored to meet clients' individual needs.

The Roseville HABC features leading-edge technology throughout, including a just released intelligent lighting solution. In February of this year, Cree introduced its SmartCast® Power over Ethernet (PoE) Technology — a simple, scalable and open platform that enables the Internet of Things for buildings through better light. SmartCast® PoE technology seamlessly integrates hardware, software, and the user experience into a simple and powerful lighting intelligence platform that saves time, money, and energy. It totally redefines intelligent lighting by making it so intuitive and simple, it just works.

Quest is a Cisco Gold partner and has installed SmartCast® PoE based on the Cisco Digital Ceiling framework. The solution is now in place in the Roseville Data Center, employee break room and training room with additional lights installed throughout the facility in the coming weeks.

The solution includes 100 Cree® CR Series 2'x2' LED luminaires equipped with Cree SmartCast® PoE technology with color-tuning to create customized lighting environments — a warm color temperature for the break room and a cooler temperature conducive to video conferencing in the training room.

As a Cisco systems integrator, Quest will be showcasing this technology as a potential lighting solution for its clients in their own facilities.

**Intuitively Simple**
Commissioning

**Color Tuning**
For customized environments

**Future-Ready**
Open platform

## Interested in learning more?

**Contact your Cree representative**
**visit www.questsys.com/cree or email cree@questsys.com**

## Solution

Cree SmartCast® Technology offers considerable flexibility for Quest by simplifying occupancy sensing and color tuning for greater energy efficiency and end-user comfort. A key benefit with Cree SmartCast® Technology, commissioning is intuitively simple — up to 1,000 devices at a time, all with the push of just one button. "I think it took us under a half hour to get it up and running and then do all the adjustments," says Vladimir Pivtorak, Quest's Infrastructure Services Manager. "It was an easy and cost-effective deployment."

Lights, light switches, and dimmers operate with Cisco® Catalyst 3850 Series Switches. The platform provides power and networking with a CAT5/CAT6 Ethernet cable. By communicating with one another over the PoE network, the fixtures learn and sense things, interact with people and places, and gather and share data.

SmartCast® Manager allows for changes to the system and settings, enabling real-time visibility into system status and advanced energy savings strategies. The best part? Because SmartCast® PoE is built on a future-ready open platform with a standards-based API, the sky's the limit for third-party cloud-based applications.

**"I think it took us under a half hour to get it up and running and then do all the adjustments"**

*— Vladimir Pivtorak | Infrastructure Services Manager, Quest*

## Benefits

Pivtorak values the ability to tune the colors in the two rooms where SmartCast® PoE technology is now installed. Being able to adapt the warmth of the color to function is "a huge plus," he says, something he wasn't able to do with his previous fixtures.

Pivtorak also appreciates the technology's motion-sensing capability: "It's built into each fixture, and it's really precise." And with regards to reliability, he says, "With SmartCast® PoE, if the PoE switch goes down, those switches have redundant power supplies in them."

Quest CTO Mike Dillon likes the prospects of this investment. He cites, in particular, the ability to keep lowering energy costs and controlling lighting as needs change. "All those cool things – those bells and whistles – are all great," Dillon says, and Quest is, as yet, only scratching the surface.

Pivtorak concurs. He talks of the potential of features that could be created with the SmartCast® API. For example, in the event of an emergency, the lights could turn red. The SmartCast® API is, to his mind, the most exciting feature of the SmartCast® technology.




According to Pivtorak: "I don't think people know the potential of this technology yet. I think it's going to be huge." Although it is early yet in the deployment, he can foresee overall enhanced workforce productivity as a result of the improved quality of the light and the ability to color tune. "We are definitely going to be expanding [the technology]," Pivtorak affirms.