

If you are responsible for a facility with critical equipment and systems, foresight keeps your facility running and your reputation intact. Although you will never be able to predict EVERY threat to your facility, you can learn from the experiences of others and put their lessons to work.

The Value of a Broad Vision

In his role as director of the University of Northern Colorado IT Telephone Services Department, Marcus McCutchen has anticipated and avoided potential threats that could have brought the campus computer and phone network to its knees. Beyond the obvious hard costs of downtime, McCutcheon know it's his reputation on the line if disaster strikes.

Lucky for the staff and students at UNC, McCutchen has a whole-facility view of his systems. He knows equipment has vulnerabilities and redundancies are necessary. But more importantly, he looks beyond the equipment itself and considers the environment that surrounds his equipment.

Two Rooms, Many Hazards

Upon looking around his facility with a critical eye, McCutchen came to RLE with two vulnerable, yet critical locations. His first site was the telephone systems room. The nexus for all phone services on campus, it is located in the basement of Gray Hall. McCutchen identified potential sources of water both above and below his equipment:

- The room is cooled by a water-cooled air conditioner.
- An array of water pipes is hidden in the room's drop ceiling.
- The room itself has a floor drain. While the mere presence of a floor drain indicates water's a real possibility on the floor of that room, McCutcheon also knew there had previously been a sewage backup from that very floor drain.

Then McCutchen moved on to the second room he needed to protect: the computing control center located in Carter Hall. This site is the heartbeat of the campus and encompasses all critical data networking, servers, and IT services. The most critical threat in this room is the water pipes hidden in the drop ceiling. Since they feed the water-cooled air conditioning system, they're transporting water all the time. And since they hang suspended above all the servers, switches, and networking equipment, they're a disaster waiting to happen.

Know What You're Looking For Before You Start the Search

When McCutchen called the experts at RLE, he had a clear set of requirements:

- He needed a system that was proactive he didn't want to clean up a big mess. Instead, he wanted to know about a tiny leak so he could intervene and resolve any problems in their early stages.
- Next, he needed a system that was cost effective. The whole reason he wanted a leak detection system was to avoid the major expense associated with a leak but there were still budgets to consider.
- Third on his list of priorities was a system he could easily use and install, from a company that provided good technical support. A system that requires a service call every time you want to tweak something is simply a hassle.
- Finally, McCutchen was looking for a company filled with knowledgeable people. He needed well informed sales representatives to make sure he received the right products the first time. He wanted to work with a company that communicated



clearly and promptly and answered questions in a timely manner.

Problems Solved!

After researching the options, Marcus concluded that RLE Technologies had what he needed. And after one conversation with Cam Rogers, RLE's Director of International & Western US Sales, Marcus was convinced he had come to the right place. Rogers guided him toward a SeaHawk/Falcon solution that would not only monitor both rooms for leaks, but also notify McCutchen and his staff when a leak was detected in either location. And knowing every second matters, he made sure McCutchen received his quote and subsequent equipment as quickly as possible.

Just as important, RLE's leak detection systems were affordable. They offered a wide variety of controllers and solutions that could be tailored to any size facility and budget. This enabled McCutchen and Rogers to design the perfect protection at the perfect price.

The UNC team wanted to install the system themselves and found the RLE products just as user-friendly as described. Since the UNC team works with cable on a daily basis, the SeaHawk Leak Detection cable was a great match for them. McCutchen appreciated the flexibility of the SeaHawk cable and placed it directly around the air conditioning units and critical servers, along the floor drains, and tied it to the pipes in the drop ceiling.

The team then linked together the leak detection systems in the two Halls, so they could monitor both facilities through one centralized controller, housed in Carter Hall.

The RLE solution provided the team with a multifaceted approach to leak detection monitoring. McCutchen finds the product, "Easy to manage. I like that the system is web accessible. I can pull up the web interface and monitor my own leak detection system without calling the manufacturer. It's nice to be able to see it all online."

McCutchen has also established a variety of additional parameters for leak detection notification via the controller. Depending on where and when a leak is detected, text messages are distributed to a variety of cell phones.

And Then It Happened

Once the system was installed and fully operational, a leak in the telephone switch room put it to the test. RLE's system detected water, and the controller issued an alert.

McCutchen checked the area above the drop ceiling and noticed some dampness on the cable and on one of the ceiling tiles. He notified the campus plumbers, who could not identify an immediate leak. McCutchen's persistence, and faith in his leak detection cable, urged the plumbers to further examine the situation.

Ultimately, they determined that there was a crack in the floor sink in the custodians' closet which was causing a leak – directly above the long distance recording equipment.

"The nice thing was," notes McCutchen, "We could identify the water issue, and the plumbers could find the location of the problem, even though we couldn't see any actively leaking water. It could have been disastrous over time, but fortunately we got to it early."