RFCODE

Case Study

American Greetings

Client Profile

Generating annual revenue of approximately $1.6 billion, American Greetings Corporation (NYSE: AM) is a creator and manufacturer of innovative social expression products that assist consumers in enhancing their relationships. Its major greeting card lines include American Greetings, Carlton Cards, Gibson, Recycled Paper Greetings and Papyrus, as well as other paper product offerings. The company also has one of the largest collections of greetings on the Web, including greeting cards at Cardstore.com and electronic greeting cards available at AmericanGreetings.com. In addition, American Greetings creates and licenses popular character brands through the American Greetings Properties group. The company is headquartered in Cleveland, Ohio.

AMERICAN GREETINGS

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Robert Hunt, American Greetings

Objective: Lower the Cost of Energy Use

Robert Hunt, manager of Enterprise Systems Management at American Greetings, was "looking to drive out costs" related to energy use in his company's central 2,200 square foot data center in Cleveland as well as in 10 remote plants housing rack servers running manufacturing systems and four facilities outside of the US. Hunt, who reports into the IT organization, is responsible for operations, mainframe capacity, cloud computing, ITIL/asset management and storage.

His goal stemmed from an initiative around Energy Star compliance in the Cleveland data center facility. (ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping to save money and to protect the environment through energy efficient products and practices.) His team's strategy to reduce energy usage and lower operating costs aimed at turning off a number of the air conditioning units (CRACs) that cooled the facilities.

Running "hotter" data centers aligns with the latest ASHRAE guidelines, which revise upward the allowable and recommended cooling guidelines. These new guidelines reflect the growing momentum in the industry for operating servers at higher levels of temperature and humidity and, of course, also address the extensive money and energy savings that can be attained by raising the baseline temperature inside the data center. (See related RF Code blog posting.)

According to Hunt, the $64,000 question was, "If we shut off the air conditioning, what temperature could we safely run at, without jeopardizing the equipment housed in the facility or violating the terms of equipment maintenance contracts?" What he needed was an environmental monitoring solution that would quickly provide the temperature and humidity data to help him know that "ideal" temperature.

After convincing his manager of the need for a monitoring solution related to the energy initiative, he began looking for a solution.

Selection Process

Hunt uses IBM® Systems Director Active Energy Manager (a plug-in to IBM® Tivoli® Monitoring software) to monitor and manage where power is being used and where additional cooling may be required on servers and other systems. Consequently, he was only interested in monitoring options that would easily feed temperature/humidity/leak detection data into Active Energy Manager. Once he found the right solution, he was planning on standardizing on it across all his facilities.

He piloted a wired monitoring solution but "didn't like it. It was difficult to run wires where I needed to, especially in hard-to-reach places like into the air conditioners. It was inflexible and clumsy. I had to run copper wire everywhere. It just wasn't practical."

Then he attended an IBM Pulse conference, where he heard about the RF Code Environmental Monitoring solution during a joint IBM/RF Code session on energy management. (RF Code is an IBM Business Partner, whose solutions integrate with IBM® Tivoli Monitoring and IBM Maximo® Asset Management, among others.) The RF Code solution consists of Active RFID hardware (sensors, tags and readers) and software that manages the data captured by the sensors and readers. Sensors capture environmental data about temperature, humidity, the presence of conductive fluid, air flow and much more and then transmit that data to readers who then send it on to software where the data is managed.

After seeing a demonstration of the integrated IBM/RF Code solution, Hunt decided it was worth testing out. He bought an Environmental Monitoring Starter Pack for one of his facilities that was asking for environmental monitoring. (The Starter Kit includes everything a user needs to introduce real-time, flexible environmental monitoring into their facility: a fluid detection sensor, a temperature sensor, a humidity-temperature sensor, a fixed reader and software to manage the environmental data.)

The plant had experienced a leaky air conditioning unit. They had managed to clean up the problem, but didn't want to have to be vulnerable to another leak. With an environmental monitoring solution, they would be alerted immediately, allowing them to proactively avoid a leak turning into a problem.

Hunt integrated RF Code into IBM Tivoli Monitoring software. The plant experienced another leak, but this time, the RF Code solution immediately alerted personnel who quickly made sure the leaky water would drain properly.

Challenges

Hunt jokingly says his biggest challenge happened during the proof of concept phase. That's when he accidently left a box of environmental sensors back at one of the remote locations. He discovered this only after driving four hours to the next facility in which he was going to install the sensors. He had to drive back, pick up the sensors, and then return to the next facility: an eight-hour round trip.

Value of the Solution

Sometimes the value of a solution is manifested by its absence. Such was the case here: In June, the data center in Cleveland experienced intermittent power shortages caused by the power utility that provided the juice to the facility. These outages brought down the CRAC units cooling the equipment. The servers in the racks, however, were still running (on battery power).

As the room became increasingly hotter, a decision had to be made about if and when to power down the server equipment. With no monitoring system in place, there was no way to know if the temperatures in the rack cabinets were exceeding the server manufacturers' specified temperature thresholds. Violating such thresholds effectively nulls the equipment warranty.

Better safe than sorry ruled the day, as Bob and his team turned off the servers. Naturally, shortly after the servers were shut down, the power to the building came back up, which meant Bob and his team had to then bring them back up—a task that took four hours. Such a loss of productive time could have been avoided with RF Code's monitoring, says Hunt, helping them to avoid the binary on/off decision they ultimately made.

"We would have known if we were hitting a temperature threshold, getting close to it or still safe. RF Code would have bought us more time, during which we could have, for example, turned on fans to cool the equipment and perhaps stave off having to shut it down and bring it back up."

Implementation

"We began with the pilot and just did it," says Hunt. "We didn't need to use any professional services, it was that easy to deploy." That pattern has repeated: Just he and a member of his staff are installing RF Code, outfitting the American Greetings facilities with temperature, humidity and leak sensors.

Results and Next Steps

Currently, Hunt is using RF Code's Active RFID sensor-based monitoring for leak detection and temperature and humidity monitoring in several remote locations. He has just started deploying in the Cleveland data center at American Greetings headquarters and plans to have it fully equipped within six months. Plans also call for all sites to be fully standardized on RF Code by the end of February 2013. Again, Hunt and his staff will do the deployment.

"Everything is running smoothly," says Hunt. So smoothly, in fact, that he's looking to bring in RF Code's Asset Management solution (active RFID hardware and management software) to track and manage the company's laptops and desktops.

He says RF Code Asset Management will be a boon for the desktop team. As in all companies, assets move and it's difficult to keep track of where they are. "It's a problem not knowing who has what asset and where it is," says Hunt, adding that "Assets move in and out of the depot all the time, so without an automated tracking system it's difficult to keep tabs on where they are and where they go. They are usually found later on, often after the reconciliation process. "

"They may be in break/fix, they may be in the depot or somewhere else," he says. "If we can't find them, then we need to replace them and that's expensive. Having a real-time tracking solution will help keep tabs on our IT inventory as well as reduce the cost of replacing lost assets."

All in all, Hunt is more than satisfied with the value RF Code has brought his company to date. He anticipates that when the Cleveland data center is fully equipped, American Greetings will experience significant energy savings. Summing up the move to deploying RF Code's environmental monitoring, Hunt says, "It's been more cost effective than other solutions. In fact, it was a lot less expensive than I thought it would be. And it works better than I ever expected."

About RF Code

RF Code is a provider of active IT asset management and environmental and power monitoring solutions as well as a leader in providing technology used by third parties to enhance their DCIM, BMS, ERP, EAM and other solutions. The company's unique active RFID-based solutions provide IT professionals with a more efficient, cost-effective approach to managing IT assets and keeping technology environments in an optimal state.

RF Code's fully automated, wire-free solutions significantly reduce costs, eliminate manual labour, and deliver an immediate return on investment. Recently, the company received a Product of the Year award from Searchdatacenter.com. For more information, please visit http://www.rfcode.com.

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