

Taking inventory of hundreds of computers, printers, monitors and other electronic equipment can now be accomplished in a single day, instead of several weeks.

By Claire Swedberg

Aug. 2, 2010—At a state energy agency in northern New York, it often took several weeks to complete a biannual audit of assets valued at more than \$100 apiece, including computers, monitors, printers and scanners. Each item was pulled away from the wall, or turned over, so a worker could locate its serial number. That number was then written down or manually matched against an inventory list, and the name of the item's user was written next to the serial number. Items often were not where they were expected to be, and in some cases, a device's location had changed by the time one building's audit was nearly complete. So if a number was transposed, and if staff members went back in search of that item for verification purposes, it simply wasn't there anymore.

"We have a small staff to keep track of what we purchase, to ensure we take care of it for the taxpayer," says Glen Kaatz, the agency's operations support manager. "We did the audit every other year, but we wanted to do it annually."

To make this feasible, Kaatz began seeking a more automated way of taking inventory that would be feasible within his limited budget. He found a solution provided by [inLogic](#), using EPC Gen 2 passive ultrahigh-frequency (UHF) RFID tags from [Confidex](#) to identify both the assets and their users.

The system was installed approximately 18 months ago, Kaatz says, and has been utilized in one audit—which, he says, required only one day instead of the three weeks or so it previously took using the old manual method.

The energy agency has three offices in Albany, N.Y., as well as satellite offices in other areas of New York State. The three Albany offices employ 350 workers, who collectively use 1,400 electronic devices worth more than \$100 apiece.

The agency and inLogic developed a system in which a Confidex Steelwave Micro tag was attached to every device, as well as to each employee's nameplate on doorways and cubicles, says Bill Compitello, Confidex's director of sales. When a new piece of equipment is received, a tag is attached to that item, the RFID number of which is scanned, while the asset's serial number and description are input into the system, either manually or via another bar-code scan.

When a staff member takes possession of an asset, a worker in Kaatz's department uses a [Motorola MC9090-G](#) handheld RFID interrogator to read the ID number encoded to that item's tag, along with the ID encoded to the tag attached to the staff member's nameplate. The asset and employee ID numbers are linked in the inLogic RFTTrack.NET software system, so that the agency knows which individual has possession of which asset at any particular time.

When an audit is undertaken, the agency's IT staff uses one of two handheld readers loaded with the RFTrack.NET software. A worker enters a cubicle and reads the badge ID of the employee assigned to that location, then proceeds to read the RFID tags of each asset. The software displays a green or red light as the assets are read, indicating whether the asset is with the user to whom it was assigned, and that information is then stored in the handheld reader software.

The display on the handheld also offers a series of prompts that can be pressed if an asset is not found, or if that item is discovered in the wrong cubicle. "Before you leave the room, you know what's missing," says Scott Porter, a principal at inLogic.

Once the audit is complete, the employee simply places the reader in a PC cradle and presses a prompt to sync the two devices, and the updated audit data is then loaded into the agency's back-end system. The RFTrack.NET software can also run reports indicating which assets are in which areas, as well as which items are missing.

What was previously a three-week process, Kaatz says, now "can be done in one Saturday."

The key challenge, Kaatz notes, involves ensuring that IT staff members attach a tag to each asset and input its ID number into the system. The employees have also been using the bar-code scanner on the handhelds to scan bar codes on magnetic tapes used for computer backups, he adds, though they are not part of the annual asset audit.

According to Kaatz, the energy agency's staff has currently tagged all of its 1,400 assets.