Liebert UPS Systems Become Integral Part of IP Telephony Deployment

The Situation
New technology has allowed many organizations to save money and have a more efficient communications system by implementing IP Telephony systems. This innovative concept combines both telephone and data communications over the same local network.

By utilizing the network infrastructure to operate the telephone system, the need for a traditional, separate PBX system is eliminated. The telephone system resides in the server. This allows users to expand both voice and data systems at the same time for less cost than traditional methods.

Spring Arbor University, located near Jackson, Michigan, has implemented an IP Telephony strategy for its data and voice systems. As part of this approach, the institution has installed Cisco Catalyst® IP telephony switching equipment in various points around its campus, as well as at 14 different outlying sites. The switches are housed in a number of network equipment closets located around the campus.

The Solution
To protect the operation of these vital components, the university purchased a number of Liebert UPStation® GXT 2U UPS systems. The goal is to be able to keep the telephones operating through shorter power outages. Various sizes of GXT 2U systems are being used in the network closets, as well as in the school’s data center.

UPS systems were sized according to how many IP switches were being supported at each location. Ranging in number from one to six in each closet, these switches draw more power than other network components because they are providing power to the telephones. The UPS systems used in the equipment closets range in size from 700VA up to 2kVA.

Five 3kVA capacity GXT 2U units are also used to protect critical systems in Spring Arbor’s data center. Two additional battery cabinets are used with each of these UPS systems. The units in the data center include OpenComms Web Cards, which provide an interface with network monitoring software used to oversee the UPS systems. This software utilizes information that is generated by the Web Card.
The Results
Spring Arbor had previously used competitive power units, but not for the same type of equipment. NETech Corporation of Grand Rapids, the Liebert VAR that worked with Spring Arbor on the project, recommended Liebert on-line double conversion UPS protection for the new Cisco switches. The vast majority of the network closets now utilize the Liebert units.

Marty Moll of Spring Arbor University, who oversees the network systems, says the university has also installed servers at its outlying adult and masters degree centers. There is a GXT 2U UPS at each of these sites, protecting the IP phone systems as well as the local servers used at each remote location.

According to Tim Engen of NETech, “The equipment used to operate IP telephony plus data networks must have proper power protection. The switches can be extremely sensitive to even the briefest of power outages. In many cases, even a line-interactive system will not transfer to battery before the switch shuts down, requiring a manual reboot. A true on-line UPS is the only way to protect against a sudden loss of operation.”

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