The Challenge

Republic Polytechnic is committed to its vision of an e-learning platform, which has been hindered by Power Quality and Monitoring challenges at its old campus.

The Solution

- Liebert GXT2 UPS
- Liebert OpenComm EM temperature and humidity monitoring sensors
- Turnkey Solutions

The Emerson Network Power Difference

- Technology leadership
- Reliability
- Best Total Cost Solutions

REPUBLIC POLYTECHNIC GETS POWERED WITH EMERSON

The Situation

Singapore's newest and youngest polytechnic, Republic Polytechnic, has a reputation of a being a daringly different educational institution. It is Singapore's only school with a truly e-learning platform where every student is equipped with a laptop and has wireless Internet connection anytime, anywhere within the school compounds.

Emerson Network Power, the global leader in enabling Business-Critical Continuity, has played a critical role in ensuring that this e-learning platform is, and remains available to the students at Republic Polytechnic's new 20-hectare campus in Woodlands 24 x 7.

With the move to their new campus, Republic Polytechnic chose to install Emerson Network Power's reliable power technologies in all LAN rooms to help safeguard the Internet, phone and computer networks from electric power outages and disruptions, ensuring efficient running and maintenance of its entire IT network.

• Challenges

Back at the old campus, the school faced a huge wastage of electricity. LAN rooms had to be air-conditioned 24x7 because of the stacks of switches which gave off a lot of heat.

Additionally, the school did not have a dedicated engineer to fix Power problems so when these problems actually occurred, there were major disruptions in some classes. "At times, power on entire floors went out, making it inaccessible to students and staff," Ivan recounted, "and it took over an hour to get things rectified."

These problems could potentially hinder Republic Polytechnic's IT and pedagogical visions from materializing. As such, the Republic Polytechnic IT team set out to find a robust and reliable power quality and monitoring solutions that can efficiently keep their system running at all times.

• Solutions

Republic Polytechnic's first choice was Emerson Network Power for its up-to-date technology, reliability and value for money. To date, they have ordered 70 sets of Emerson's Liebert GXT2 UPS and Liebert OpenComm EM temperature and humidity monitoring sensors. They have deployed about 50 sets in the first phase of installation and the second phase is progressing on schedule. The deployment is carried out by Singapore Computer Systems (SCS), a Cisco Gold Certified Partner.

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"It has always been a waste of electricity to turn on two air conditioners on full power just to keep one switch and one UPS (uninterruptible power supply) running in our LAN rooms. So we thought about what we could do at this new campus to try and cut costs"

Ivan Ang
IT Manager
Republic Polytechnic

Currently, the Emerson solution is supporting more than 6000 students and staff. The figure is set to grow to more than 14,000 users after Republic Polytechnic establishes itself as a full-fledged school in 2009.

"The benefit Liebert GXT2 UPS offers include complete isolation of the critical load from mains power, frequency variation and transient protection, internal automatic / manual bypass capability and extended runtime capability as well as sophisticated management and monitoring capabilities", said Stanley Lee, Channel Manager from Emerson Network Power. Users can customize the Liebert GXT2 to meet their specific requirements through a Windows® software program.

• Benefits

Driven by its vision of a wireless campus, Republic Polytechnic demands a stable and top-notch power quality and monitoring solutions to be installed in all its 117 LAN rooms to ensure network is up at all time, so classes and learning carry on whatever the circumstance.

Emerson not only helped Republic Polytechnic achieve its vision, but also helped them become more manpower efficient. The technical staffs are now able to proactively monitor any abnormal conditions using the monitoring component of the UPS.

"We connected all the devices via SNMP, so that we can monitor the ambient temperature in the room and then we stat it to do a historical graph," said Ivan, "if the mechanical ventilation in the room is not working, we can inform the Estates to take action." There is also now no need to schedule monthly checks and 'walkabouts' of all the LAN rooms in the campus, thus manpower costs are saved.

This polytechnic is also all prepared for any emergency power failure. When that happens, Emerson's UPS will supply power to all switches and IT equipment. "We have a centralised alerting system which sends out an SMS to our mobile phones as well as the standby engineer's mobile phone so that they can go down to the LAN room and fix the problem before the UPS battery runs out," said Ivan.

With the help of Emerson Network Power, Republic Polytechnic is striving to facilitate students and staff with the latest software and mobility enabled laptops for them to stay productive on the move while heading towards an "automated kind of system which requires minimum monitoring and human intervention" because lesser manpower simply translates to lower costs!

About Emerson Network Power
Emerson Network Power, a business of Emerson (NYSE: EMR), provides a full spectrum of reliable power solutions, including inbound power, connectivity, power supplies, power protection systems and precision cooling, backed by the largest global services organisation in the power industry. Emerson Network Power serves the needs of telecommunications networks, data centres, health care and industrial facilities worldwide. For information, visit www.emersonnetworkpower.com.

About Emerson
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