Paperless university: Kuktem leads the way

KUALA LUMPUR: Avaya Inc has announced the deployment of the first fully operational Avaya 10GE (Gigabit Ethernet) network in South-East Asia, and possibly Asia Pacific, using its local area network (LAN) switches.

The state-of-the-art network has been installed at the University College of Engineering and Technology Malaysia (Kolej Universiti Kejuruteraan dan Teknologi Malaysia or Kuktem) in Kuantan, Pahang.

This is presently the first and only true converged site which uses complete end-to-end Avaya's solutions — 10GE LAN, WiFi and IP (Internet Protocol) telephony, the company said in a statement.

With all lecturers and students equipped with notebooks and on wireless LAN, Kuktem (**www.kuktem.edu.my/**) is moving towards a paperless university model, Avaya said.

The huge bandwidth provided by the 10GE network will power a paperless study environment where books, lecture notes and examinations are all online, the company added.

In an immediate return, the bandwidth made possible the university's Library-on-Server application where reference books are stored on the server for students to read online or download into their notebooks.

This has drastically reduced the cost needed to maintain and upkeep a large library of books and a team of librarians to manage it, Avaya claimed.

To minimise and speed up administrative work, all lecturers are required to attend meetings with their notebooks to tap into Kuktem's wireless LAN, which enables the dissemination of the minutes of meetings to be shared immediately afterwards.

With the first online examination scheduled next month, Kuktem is also setting the pace for examination results to be finalised and released with minimum wait time while at the same time reducing the lecturers' workload.

The Avaya 10GE network is the first networking technology with the capacity to handle data traffic up to 10,000 megabits per second (Mbps).

"We wanted a solution that will live up to our name of the University College of Engineering and Technology," said Wan Maseri Wan Mohamad, head of ICT of Kuktem.

Kuktem's e-community puts everything literally at the fingertips of lecturers and students. To ensure that all students and lecturers reap maximum benefit from the provided infrastructure and applications, the university made notebook ownership compulsory for students.

"Kuktem now has more than 3,604 voice/ network nodes and near limitless wireless access powered by 168 Avaya Wireless Access Points, which are connected throughout the entire campus that spreads over 29 buildings," said Alan Kam, country director of Avaya Malaysia.

"All the points and gateways ride on the 10GE network that carries voice and data on this single backbone," he added.

Avaya's Interactive Voice Response (IVR) system has also been integrated with Kuktem's campus management system for students, staff and public to gather information, results and round the clock scheduling.

When the next phase of development is completed, Kuktem's database will be fully integrated with the IVR to provide rapid 24x7 service to call-in requests, Avaya said.

The network was installed by Avaya's business partner iTANIA (M) Sdn Bhd working together with Anugerah Mutiara E-Services Sdn Bhd (AMES), the contractor awarded the project.

With Kuktem due to set up its first remote campus by 2006, the converged site is also expected to provide the same connectivity and services to lecturers and students at the remote campus.

Kuktem was established in 2001 specifically to provide training in leading edge technologies. Although funded by the Malaysian Government, its board of directors comprises leaders in the automotive engineering and petroleum and gas industries.