Tech News

A satellite boost

East West University launches personal VSAT

SADIA MAHFUZ

EAST West University has set a milestone in education by introducing its own VSAT into its education scheme. It is the first among the private universities to do so.

A launching ceremony titled "Introduction of VSAT for Advanced Learning in ICT Education" was organized at its auditorium on 11th June, 2003.

The dignitaries present on the occasion were Minister of Science, Information and Communication Technology Dr. Abdul Moyeen Khan, Bangladesh Telecommunication Regulatory Commission (BTRC) Chairman Syed Marghub Murshed and Head of Department of Computer Science and Engineering (CSE), Shahjalal University of Science and Technology Dr. Zafar Iqbal. The function was presided by Dr. Mohammed Farashuddin, president, board of directors, East West University.

The program started with the introduction of the concept of VSAT by faculty members of the CSE Department. Besides high connectivity the benefits will include greater bandwidth and delivery support of interactive media content, such as voice, video etc. In future the services will be improved to include distance learning for rural education, video conferencing and virtual classrooms, speakers said.

"It is an inspiring decision on part of the university to set up its own VSAT," said the minister.

Dr. Iqbal in his talk lauded the institution saying that the initiative would benefit not only ICT education but education as a whole.

VSAT, acronym for Very Small Aperture Terminal, is used to denote a small terrestrial based satellite. There may be multiple remotely dispersed satellites in a network connecting to a single master earth station. The other component of a VSAT network is the satellite itself, orbiting at about 36,000 km above the ground. It relays signals communicated between the VSATs and the master earth station.

In case of the university, a Hong-Kong based service provider will be responsible for the configuration, monitoring and management of the entire VSAT network. The geostationary satellite Asia Sat 3 will broadcast the signals dispatched from the ground-based master earth station to the rest of the network. The VSAT located in its premises, is directly connected to a DNS proxy server, which is in turn connected to 8 port Gigabit Switches. Twenty four port managed switch for each building connected via optical fiber backbone are linked up with the Gigabit Switches.

East West University was granted license by the BTRC for a period of five years. The organisers expressed hope that the VSAT will play a significant role in enriching the ICT education as well as ensuring increased student-teacher collaboration.

PHOTO: SYED ZAKIR HOSSAIN

The EWU VSAT

Adding another jewel

BRAC University also becomes a CISCO academy

MIR NADIA NIVIN

TO keep up with the current momentum of growing job market in networking technology, BRAC University has become an authorised CISCO Networking Academy.

In addition to their own curriculum, BRAC University is now offering the CISCO Certified Network Associate (CCNA) programme, a programme recognised the world over for its quality.

The orientation programme was held on June 14 at the BRAC University building in Mohakhali.

The main objective of the course is to build up readily available specialized manpower in the networking sector. The programme may be undertaken by anyone having a minimum of a higher secondary degree, but then as it is a professional course, professionals and graduates are encouraged.

The duration of the entire CCNA course is basically eight months, equivalent to 280 hours of instructions as per Cisco guidelines and divided into four modules, to be taught in four semesters. The four modules are Networking Basics, Routers and Routing Basics, Switching Basics and Intermediate Routing and lastly WAN Technologies.

"It is our aim to ensure quality training in every phase so that students get proper theoretical and hand-on practical experience that may help them be leaders in relevant fields," said Dr. Sayeed Salam, project head of the CCNA programme.

The opening ceremony was attended among others by the Cisco Networking Academy Country Coordinator Erika Hoffman-Kiess, Assistant Resident Representative of UNDP Dr. Najmus S. Sadiq and the former country co-ordinator Katakam Madhukar.

"We congratulate BRAC on being a part of the Cisco family worldwide. It is also heartening to see the gradual interest of people in our networking curriculum," said Hoffman-Kiess.

Erika Hoffman-Kiess welcomes the students

Dr.Najmus Sadiq provided an insight into the role of UNDP in ICT. "We all have our own parts to play in the ICT development of the country," said Dr. Sadiq.

The goal of all Cisco academies, worldwide, is to prepare students for industry standards and enrich the skill set required to succeed in a changing economy.

Up until a few years ago, the only Cisco academy in Southeast Asia was in Hyderabad. In our country BUET was the pioneer in opening up such an academy. Now, besides BRAC, some other universities like Shahjalal University of Science and Technology (SUST) and AIUB are also authorised networking academies of Cisco.

Established in 2001, BRAC University is as yet a young institution but has come quite far in a very short time. Dedicated to providing broad based education and armed with excellent lab facilities together with class resources, it is expected that the university will succeed in its latest endeavour.

Dr. Syeed Salam presents the CISCO curriculum to the first batch of students at the orientation

Photo Tech

PHOTO: AFP

This NASA handout image obtained on June 16 from the Mars Global Surveyor (MGS) Mars Orbiter Camera (MOC) provides a glimpse of the layered sedimentary rocks in southern Galle Crater on Mars. The picture covers an area about three km (1.9 mi) wide.

Dr. Tech

Dear Dr. Tech,

I have a old 4X Sony CDR. Sometimes when I try to write CD, a message appears saying 'Buffer Underrun' and the CD is damaged. What is this and how can I stop this?
Istiaq

Dear Istiaq,

A buffer underrun occurs when the buffer runs out of information unexpectedly. You normally see this when you're writing a CD-R and it ends up not getting info fast enough; trashing the disk you were trying to write.

Here's a little more on CD-Rs and buffer underruns:

CD-R drives put information from your hard drive into a "buffer" (i.e.memory area) before they write it to the CD. The idea behind a buffer is to maintain a steady flow of information to the unit.

When you burn a CD, it's done on the fly. The CD-R drive tries to keep its buffer full (or close to it) at all times. As long as there is information in the buffer, the CD-R drive can write to the CD.

If the buffer gets emptied out and not refilled (usually due to the computer being busy with something else) the CD-R drive has nothing to write to the CD that's

Game Tech

Taking the PlayStation online

BBC ONLINE

FIRST things first. Forget about getting your PlayStation 2 (PS2) on the net if you do not have broadband at home.

PS2 network adapter

Sony has decided to limit its gaming network to people with fast net access, rather than have gamers with different connection speeds.

If you do have broadband, you need to buy an extra bit of kit called a network adapter to hook up the console to the internet.

The Network Starter Kit retails for £24.99 or for £39.99 with a copy of the car action game Twisted Metal Black Online.

The pack has everything you need to go online, including a network adapter, a broadband cable and the connection software.

Make the connection

Attaching the adapter is child's play.

All you have to do is switch off the console, unplug from the mains and fit the slim black plastic unit into the back of the console.

It slots in easily and you do not even need any tools as the screws can be tightened with a penny.

But be warned. Make a note of the serial number of your console before attaching the adapter. You will need this later in the registration process.

Otherwise, halfway through the process of going online, you will need to switch off the console and remove the adapter to get access to the number.

Once the adapter is on, the connection software should work out your internet settings automatically.

In most cases, you should not need to worry about IP addresses, DCHP settings or Nat configurations. But there is a way to do this manually if you run into trouble, though it is not for the faint-hearted.

Central registration

Once you are connected, you have the option to register for Sony's gaming service called Central Station.

At the moment, you do not have to register to play. But you will have to sign up to play future online titles, such as Gran Turismo 4.

Filling in your details is a tad tedious using the on-screen keyboard. You will need the serial number of your console as well as the number on a voucher which comes as part of the starter kit.

Unlike Microsoft, Sony does not run its own dedicated paid-for gaming network. So you do not have to hand over your credit card details - just your name, address and a valid e-mail address.

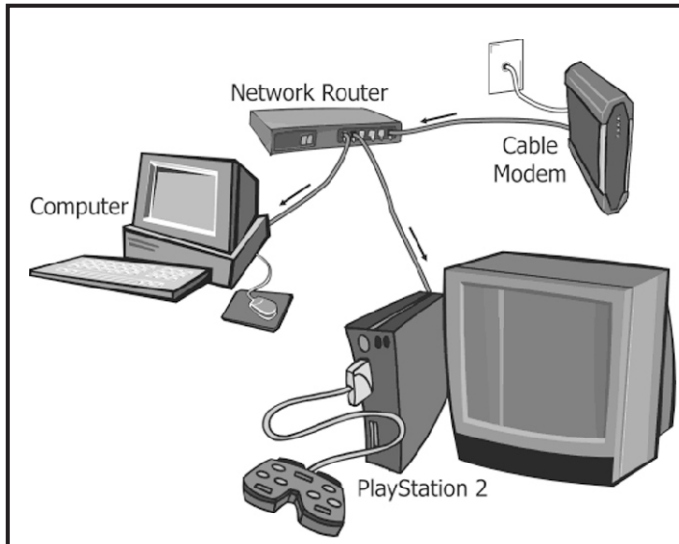This is important as Sony will e-mail you a final Pin to complete your registration.

If you do not, your account will be suspended after 90 days, meaning you could have problems playing future releases.

Sony says the idea behind Central Station is to provide regular updates or be able to send out new network discs with more features. But it also means the company has a powerful marketing tool, with a list of all the PS2 gamers who are online in the UK.

It also leaves a way open to charge for premium content further down the line, an option which Sony has not ruled out.

Initially, only a handful of titles are available in the UK. But Sony is promising to have about dozen in the shops by Christmas, ranging from action to sports titles.

Network Router
Cable Modem
Computer
PlayStation 2

Connecting the PS2 to the internet

Tech Toon

"You said I should spend more time with our children, so I turned their faces into icons."
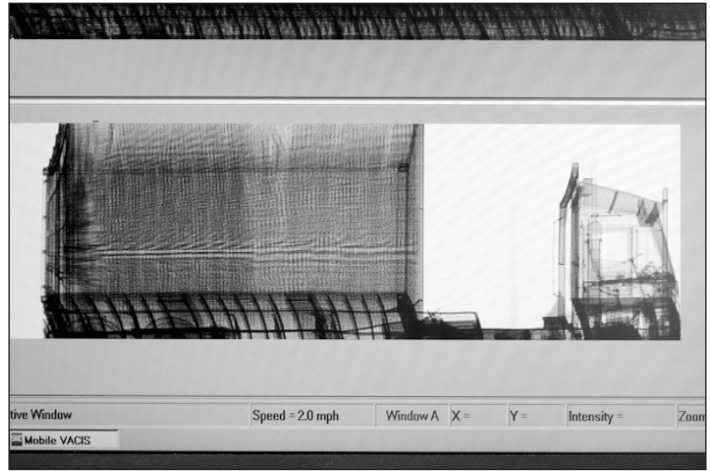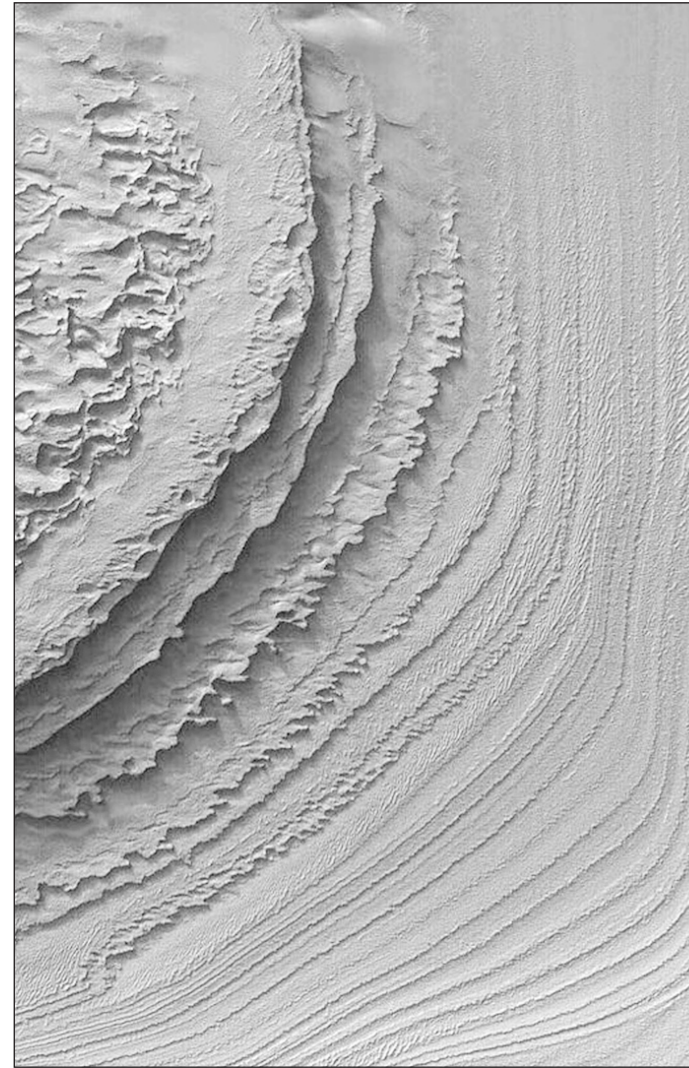
GLASBERGEN

Tech Security

PHOTO: AFP

An X-ray image on a computer monitor shows a shipping container and truck at a Mobile Vacis unit at the Port of Los Angeles on June 12 in Los Angeles, California. U.S. Secretary of Homeland Security Tom Ridge today announced new port security initiatives and investments for increased international cooperation, greater use of technology, and funds for port security enhancements. Ridge promised more than $19 million in security grants for the ports of Los Angeles and Long Beach.

Mysterious Astronomy

Strange star puzzles astronomers

Achernar is one of the most distorted stars ever observed by astronomers. It is shaped like a child's spinning top.

Scientists have been able to show the star's equatorial radius is 50% larger than its polar radius.

Distorted stars are known in astronomy. They are generally pulled out of shape by the gravity of a companion.

Achernar, on the other hand, is distorted because it is spinning rapidly - but this does not fully explain its ovoid shape, say researchers.

Achernar, otherwise known as Alpha Eridani, is the 9th brightest star in the sky. It is a hot star, several times more massive than our Sun, and is fairly close to us, being about 145 light-years distant.

Fast spin

It was observed by the European Southern Observatory's interferometer at the Paranal Observatory in Chile.

The interferometer consists of a combination of telescopes that combine their signals to provide more detailed observations than any of individual telescopes can provide.

When Achernar was observed, it was found to be much flatter than expected.

Analysis of the interferometer data suggests the distinctly ovoid shape of the star is the result of its fast rotation - 225 kilometres per second; a centrifugal effect has caused it to flatten.

However, this high degree of flattening poses a puzzle for theoretical astrophysicists. Their models cannot currently explain the behaviour.

They wonder if the star is spinning faster than their data indicates. Effects such as a "north-south" circulation in the star's atmosphere are also under investigation.

- BBC Online