Tech Focus

# The spark of a tech conflagration

### SDNP Bangladesh reveals BDIX, a local internet exchange

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OR the first time ever in Bangladesh an effort to locally manage local internet traffic was made through the introduction of Bangladesh Internet Exchange (BDIX), a notfor-profit partnership between Sustainable Development Networking Programme (SDNP) Bangladesh. BDIX establishes a physical interconnection between ISPs to exchange internet

Bangladesh still depends on satellite bandwidth sharing, which causes any transfer of files or mails between local ISPs to go through the channels of foreign servers, taking up more band-width and resulting in a huge expenditure of foreign currency. The local server at BDIX will facilitate faster net access for any local traffic by providing faster connection between BDIX member ISPs.

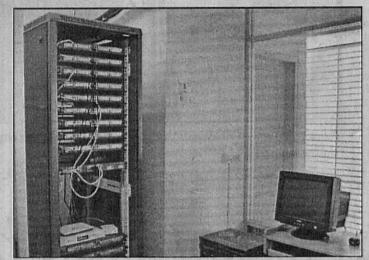
The bandwidth project was taken up in August 2004 by the Sustainable Environment Management Programme (SEMP) of the Ministry of Environment and Forest (MoEF), which is funded by UNDP and executed by Bangladesh Institute of Development Studies (Bids) and Internet Service Providers of Bangladesh.

advantages of BDIX were international routing of local discussed at a press briefing on traffic," said Dr M Asaduzzaman, November 6 at the BDIX Pilot office of SDNP Bangladesh in

Pantha Path. A detailed technical presentation on BDIX was made by Dr Hakikur Rahman, project coordinator of SDNPBD at the

research director and project director of BIDS and SDNPBD Bangladesh, lamenting that local web users in Bangladesh go all around the globe to send email to their next-door neighbors.

"We look forward to country-



The heart of the BDIX

Using Cisco routers to channel the local traffic, BDIX expects to manage all local internet traffic locally and thus enhance user compatibility and lower band-

"We are hoping to cut down the The current status and foreign currency loss due to

based international web-mails such as mail.yahoo.co.bd," states Dr Rahman. He commends the government's enthusiasm to support such efforts to collabo-" rate with internet giants.

"At present, six local ISPs are connected through our BDIX network," states Dr Rahman,

naming ISN, Bangladesh Online Ltd. (BOL), BDCom Online Ltd., SDNPBD, Link3 and AccessTel. Four other ISPs are in the queue to be connected through BDIX.

Most of these ISPs are using DSL or Radio-link connections to amend the quality of usage.

"We hope that the regulatory board will continue providing a supporting environment for such exchange server," said Dr

The exchange server membership at present is free of cost. We are still in the testing-

phase," he explained. Thus BDIX does not plan on acquiring any finance from its members as its project is wellestablished and runs on full-

comprehension. The expected time frame on such matters may well range from two to five months or a little more, while BDIX acquire further troubleshooting skills on the exchange server.

"All we are looking for is a larger number of members on the server, a good promotion, and then we can go ahead and claim our share of pioneering the effort," Rahman

The creators of the exchange server plan to establish a national data centre within a short period. The net exchange server will then include web server, local newspaper server, chat server and

net filter server. This data centre will also include a server for academic and research institutes of the country, corporate networks, financial sectors, and possibly all the local ISPs of Bangladesh.

**Future connection** 

plan to SDNP

regional nodes

SDNPBD has already set up radio links in Dhaka and Mymensingh to set up routing nods for the exchange. Other regional links yet to be set using VSAT nodes include Satkhira, Cox's Bazaar and Barisal districts. The server administrators are willing to take their efforts to the grass-root levels to offer the goods of net connection to the locals of such rural areas.

The submarine cable is expected to enter the country through Cox's Bazaar, which is

one reason why BDIX has chosen Cox's Bazaar to be one of the major routing nodes of the exchange server.

The administrators expect to establish multipurpose village information centres, which will be the ultimate target for BDIX. "We already have a successful model running in Phulpur," states Dr Rahman. BDIX will be using the routing nodes at Khulna, Barisal, and Cox's Bazaar to reach out the rural localities from these locations. At the same time, northern regions of Bangladesh will now be under specific emphasis. "Mid and southern Bangladesh have been attaining some development on IT sector expansion, unlike the northern regions," Dr Rahman added.

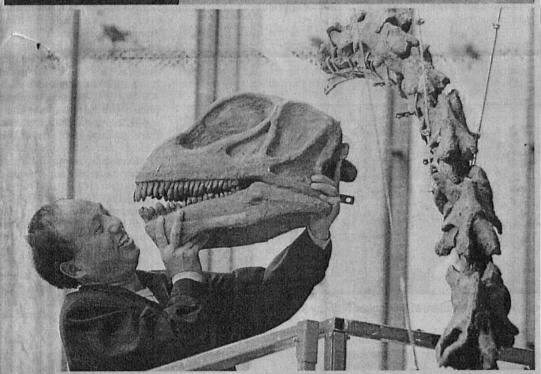
SDNPBD will now focus on development of these locations using specific terms and supporting regulations hoped to be offered by BTRC.

SDNPBD has received remarkable donations from Packet Clearing House (PCH), a US-based non-governmental organisation (NGO), which has supplied SDNPBD with remarkable numbers of computers along with two Cisco routers and a Sun Solaris server. In turn, SDNPBD has distributed computers to sixty-four schools throughout the country including rural locations of Chuadanga, Natore, MunshiGanj and Jhinaidaha.

Other achievements of SDNPBD so far include establishment of news and media support programme in major press clubs throughout the country in partnership with the National Press Club. Objectives of such an effort include a quicker and efficient news flow throughout the country as well as removing digital division among journalists. This is expected to build a stronger local and international media network.

There is no doubt that this enormous project will be a boon for the rural ICT development for Bangladesh once implemented. The exchange server has already started taking local bandwidth loads within three months of its existence. More frontline ISPs should join hands to make this project a success and help build a technologically independent





Peng Guang-Zhou from the Zigong Dinosaur Museum in China, lifts the head of a Mamenchisaurus youngi dinosaur into place as it is assembled at the Melbourne Museum on November 8. The Mamenchisaurus was one of the largest dinosaurs to roam the earth 150 million years ago with its heart alone weighing more than a ton and is part of largest exhibition of dinosaur skeletons to tour Australia.

#### Tech Group

### JPGroup - the voice of the programmers

SYED TASHFIN CHOWDHURY

IFTED and suitable programmers are I discouraged by unnecessary requirements that most computer-related job vacancies demand at present," said Md. Ashikuzzaman, moderator, Java Programmers Group (JPGroup), and senior software engineer, THERAP (Bangladesh) Limited.

Ashik was speaking at a gathering of the 'Java Programmers Monthly Meet', where noted programmers of the country were present.

"We aim to initiate a panel from our group who would act as the proper intermediary agency between programmers and employers," he added.

The planned panel will have honorary members, consisting of faculty members from the CSc departments of these institutions.

The group plans to have

chapters at various universities, which would collaborate with career placement offices. All Computer Science students would maintain a portfolio of the projects and internships and programs that he or she has developed over four years of university study. The portfolio and academic background of the student will be judged by the panel and will be submitted to the firms needing the expertise of such programmers and IT

The group primarily discussed the various problems currently affecting post-graduate and graduate computer science (CSs) students.

It was pointed out that annually over a thousand students graduate from different universities all over the nation. Owing to nepotism and red tape, most graduates are deprived of appropriate careers.

As a result, many disillusioned

students are moving abroad to complete their post-graduate degrees or find jobs.

"If such students could be retained, they would be an essential tool towards the development of our nation in various sectors, as far as information communication technology (ICT) is concerned," said Ashik.

The Java Programmers Monthly Meet was held at THERAP (Bd) Limited, a subsidiary of THERAP Services, LLC, based in the USA.

JPGroup is an email-based forum initiated in late August of 2003. The forum's membership is comprised of 187 local computer programmers and IT architects.

proper intermediary agencies for the recruitment of such personnel to various employee-seeking

In an effort to increase communication and encourage extensive knowledge sharing,



Programmers at JPGroup's monthly meet

network of programmers consisting of students from various universities that would increase communication and lead toward extensive knowledge-sharing.

"We would like to have a more hands-on approach to encourage

Photo Tech

They blamed the lack of JPGroup is planning to start a CSc students to stick to their respective majors and in turn, aid the nation as a whole," said Haque.

> The group owns a blog at http://jpgroup.blog-city.com and further information can be found by contacting the group at jpgroup@yahoogroups.com.

#### Tech News

## Countdown to SOFTEXPO 2004 begins

deadline for applications for the 'IT Entrepreneurship Development Program' ends today, Bangladesh Association of Software Information and Services (Basis) would still be will to carry on with their evaluating further applications till November 20.

"We are hoping to choose and select some innovative and useful projects which would be exhibited at a separate pavilion at the upcoming SOFTEXPO 2004," said Forkan Bin Quasem, general secretary, Basis, while talking to StarTech about the 'IT Entrepreneurship Development Program'.

The program has been initiated to encourage young IT entrepreneurs, with creative and innovative projects. Through this program, a qualified panel of judges would review, analyse, and evaluate these projects and finally select 10 entrepreneurs. These projects would be awarded and thus exposed throughout the SOFTEXPO-2004.

Basis has already received over 40 applications and is expecting more within the next the National Press Club

that, even though Bangladesh has its own vine of talented software developers, yet such developers are never given the much-desired appreciation and thus, are rejuvenating their relentless efforts," said

He further pointed out that despite the innovation, creativity and technical knowhow being used after each project, only the lack of

LTHOUGH the few days. "It has been observed business value hinders the entire appraisal of such projects. "We would also be providing important tips and suggestions to these amateur programmers," he added.

> The association also hopes to receive some positive response from the immense number of local and foreign investors, to such projects and other software and applications, which will be exhibited at the exposition.

The 'SOFTEXPO2004' will be



Organisers of SOFTEXPO 2004 at a press briefing on November 2 at

held from November 25 to 29, this year. The reputed software and IT enabled service providers exposition would be held at the Bangladesh China Friendship Conference centre at Agargaon, Dhaka.

An impressive line-up of 120 local and foreign ICT companies are expected to participate at the exposition. A series of seminars have also been planned, at the occasion. Sponsored by South Asian Enterprise Development Facility (SEDF), more than 10 seminars on important issues such as E-governance, Ecommerce, Road map for ICT sector in Bangladesh, Animation and BPO export are in the schedule.

Three international cosponsors Intel, Microsoft and Sun Microsystems will sponsor the event along with AKTEL. Nescafe will be the official drink for the event.

The event website, www.softexpo.com.bd, has already been set up by Basis members, for individuals seeking further information about the event.

SYED TASHFIN CHOWDHURY

#### Tech News

### **GM** bacteria may filter well water arsenic: scientists

MUSTAK HOSSAIN back from Montreal, Canada

ANADIAN scientists are currently working on using biotechnology to filter arsenic from well water for countries like Bangladesh with the help of genetically modified (GM) bacteria.

"Bugs from Australian gold mines may be used to remove arsenic from well water in Bangladesh," said Dr Peter Singer, professor of medicine at the University of Toronto at a briefing of science journalists, last month.

Arsenic contamination is a serious threat to human health. In Bangladesh, for example, chronic exposure to arsenic has been linked to serious medical conditions, including hyperten-sion, cardiovascular disease and a variety of cancers.

Singer said the technology to filter arsenic from water would be applied practically after necessary experiments at the labora-

Between 35 million and 77 million are at risk of drinking

contaminated water in Bangladesh, according to an estimation of the World Health Organisation (Who).

The scale of this environmental disaster is greater than any seen before; it is beyond the accidents at Bhopal, India, in 1984, and Chernobyl, Ukraine, in

Scientists said cutting-edge science could be the salvation of the developing world.

"In every region of the world there are two to three countries that are really innovative. The other 20 or 30 do not have a high level of technology and are learning from the two or three," said

Canada recently announced it would contribute \$1 billion to government research and development in developing countries. In Canada, about \$22 billion is devoted to research and develop-

Taking science to the people and blending it with common practices could end suffering from disease, poverty and infant mortality, mentioned Singer at the science writers meeting.



An employee of Japan's electronics giant Hitachi demonstrates a prototype of its new biometric security device (front) for the identification and authentification to read venous patterns of the user's finger instead of a password at its headquarters in Tokyo on November 8. People are able to use the device not only indoors but also outdoors because it utilises nearinfrared rays from sunlight as well as a light source equipped in it to read vein image. The company is aiming at practical use for cars hree years later.