

CALENDAR OF EVENTS April to May 2005

28 April 2005

2005 Industry Briefing on Business Opportunities for IT in the Public Sector
Venue: Suntec City Convention Centre, Ballroom 2
Time: 8.30am-12.00pm

The annual Industry Briefing on Business Opportunities for IT in the Public Sector will be held 28 April 2005 at Suntec Convention Centre. Organised by IDA, with participation from other government agencies, this is the single most important IT procurement briefing by the Singapore public sector. Industry players are welcomed to attend this event where they will get to hear more about major IT projects that are in the pipeline in Financial Year 2005.

3 - 6 May 2005

GridAsia 2005
Venue: Biopolis

This will be Singapore's first ever major GridAsia 2005 event co-organised by A*STAR, IDA, NGO, NTU and NUS. There will be four tracks of activities, namely, international, academic and research; technical; industry and exhibition for both research and commercial offerings. This new series with a Grid Computing theme caters to everyone, from interested individuals, to practitioners, to user organisations from both the industry and the research and development community.

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iDA
SINGAPORE

The Infocomm Development Authority of Singapore (IDA) is committed to growing Singapore into a dynamic global infocomm hub. IDA uses an integrated approach to developing info-communications in Singapore. This involves nurturing a competitive telecoms market as well as a conducive business environment with programmes and schemes for both local and international companies.

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Singapore demonstrates digital hub capability: Pg 3

Singapore paves way for end-to-end cross-continental digital transmission

Asia's first business rules management system centre of excellence opens in Singapore: Pg 4

Centre will help local infocomm companies generate S\$10m in project revenues over next three years

Singapore tops World Economic Forum Global IT Report for the first time: Pg 2

Latest accolade a result of Singapore's consistent and continuous efforts in fostering ICT penetration and able use of foreign technology





SINGAPORE RANKED AS WORLD'S NO.1 TECH NATION

SINGAPORE IS THE WORLD'S No.1 tech nation. According to the World Economic Forum's Global Information Technology Report 2004-2005, Singapore has emerged as the top economy in infocomm competitiveness. Singapore was ranked third in 2002, second in 2003 and finally hit the top spot in 2004, displacing previous winner USA, who fell to fifth position.

Commenting on this achievement, Mr Chan Yeng Kit, CEO, IDA said, "We are most heartened that Singapore is ranked first in the world in the World Economic Forum's Global Information Technology Report. The high rankings achieved by Singapore in the Networked Readiness Index are testimony to the commitment and efforts put in by Singapore to transform the public, private and people sectors through the innovative use of infocomm technology."

"Singapore's remarkable performance," the report said, "is a consequence of the government's consistent and continuous efforts in fostering ICT penetration and usage, as well as the quality of the country's educational system and its able use of foreign technology."

"Singapore's experience highlights the increasingly central role played by technology as an engine of growth and competitiveness," says Augusto Lopez-Claros, Director of the Global Competitiveness Program at the World Economic Forum and co-author of the report.

This is the first time that Singapore has been ranked as No.1 in the annual rankings which examines the readiness of economies according to the general macroeconomic and regulatory environment for infocomm technologies, the readiness of individuals, businesses and governments to use and benefit from infocomm technologies, and their current usage. Each nation is given a "network-readiness indicator" score which is based on the combination of the above factors. Singapore scored 1.73 followed by Iceland, Finland and Denmark and USA. A total 104 of nations were ranked this year.

Singapore took the pole position in several areas including government usage of infocomm, government readiness, effectiveness of laws, quality of math and science education, affordability of telephone connection charges and government prioritisation and procurement of infocomm technology.

"Moving forward, IDA Singapore will build on the current success to help Singapore through the next phase of infocomm development. Our vision is a Singapore where infocomm technology has helped to create a conducive environment for thriving businesses, smart workforce and a well-connected society. Called iN2015, it will be a vision to be created through the combined efforts of the government, industry and people," added Mr Chan.

Singapore
wave
INFOCOMM NEWS FROM IDA

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SINGAPORE DEMONSTRATES DIGITAL HUB CAPABILITY WITH INTER-CONTINENTAL DIGITAL TRANSMISSION

SINGAPORE'S MOVES TO DEVELOP into a Digital Exchange got another shot in the arm last month with the successful pilot transmission of three movie trailers of blockbusters from Los Angeles to Singapore.

Demonstrating a viable model for the end-to-end delivery of cross-continental digital transmission between US and Singapore, IDA worked with the Singapore infocomm Technology Federation (SITF) and the Entertainment Technology Center at the University of Southern California USA (ETC) to galvanise the industry into a cohesive working group. The industry partners include Thomson Technicolor for project consulting, GlobeCast, StarHub and 1-Net for international and local circuit and data storage, Christie, Dell, Texas Instruments and XDC (EVS Group) for technology provision.

Trailers of Elektra, The SpongeBob SquarePants Movie and Star Wars Episode 3: The Revenge of the Sith, were transmitted directly from Culver City, Los Angeles, USA to the 1-Net data centre in Singapore. A total file size of 3.3 GB was delivered digitally via managed ATM fibre. These trailers were then played back from a XDC Cinestore Solo Server with Omega Decoder through a Christie CP2000 projector.

Called the "Cross-Continent Digital Content Transmission" or CCTx, the digital transmission model is the result of IDA's efforts to bring the various industry players together and establish a secure, reliable and cost-effective digital delivery platform that is viable for commercialisation. It is part of IDA's larger Digital Exchange game plan, which aims to develop Singapore into the modern digital trading hub.

Mr Khoong Hock Yun, Assistant Chief Executive of IDA, said, "The CCTx paves the way for a complete viable model that allows studios to deliver content digitally to Singapore, securely store it, localise it, and then distribute it to the region. As a Digital Exchange, Singapore has the capability to ensure reliable and accountable management, processing and distribution of digital content and assets from United States to the rest of Asia."

According to Motion Picture Association of America's former Senior Vice President, Mike Connors, "The pilot allows the industry to identify and resolve process and business issues critical to commercial adoption of a worldwide digital distribution system."





Mr Pierre Haren, CEO, ILOG and Mr Chan Yeng Kit, CEO, IDA inking a Memorandum of Understanding on the collaboration of the ILOG Business Management System Centre of Excellence

"In today's competitive business environment, time is money and having a quick turnaround to implement business policy changes is vital."

Mr Chan Yeng Kit
Chief Executive Officer
IDA

ASIA'S FIRST BRMS CENTRE OF EXCELLENCE OPENS IN SINGAPORE

ASIA'S FIRST BUSINESS RULES management system (BRMS) centre of excellence (CoE) was opened in Singapore last month. The result of a joint collaboration between IDA and the world's leading BRMS provider ILOG, the centre will help local infocomm companies like software providers and system integrators develop and implement BRMS-based solutions for local and international markets. The collaboration will help more than 15 local companies develop BRMS pilot projects in key verticals such as financial services, healthcare, logistics and telecoms. This is expected to generate S\$10 million in overall project revenue for the Singapore infocomm industry over three years. The project will also train 250 infocomm professionals to develop BRMS solutions.

BRMS is a sophisticated software solution that enables complex business policies and rules to be managed using simple English instead of traditional technical jargon. This means that business users can implement changes to their business rules directly instead of the traditional method of explaining what they need to IT staff, who then make the necessary code adjustments to implement the changes. Using a BRMS-based platform means the business can respond faster to market conditions and be able to compete better with its rivals.

The collaboration is off to a good start, with the first pilot project to be developed by a Singapore solutions provider, e-TREK. The project will incorporate BRMS in the development of a seamless straight-through-processing solution, and facilitate insurance claims between insurance

companies and healthcare service providers. In this instance, BRMS will complement web services to provide uninterrupted information exchange and transactions, even with frequent changes to rules and policies by the insurance companies and health service providers. This will enable business rules to be updated rapidly, and simultaneously bring greater convenience to patients as insurance claims can be processed faster. This solution will soon be deployed at Alexandra Hospital.

Speaking at the launch of the BRMS CoE, Mr Chan Yeng Kit, Chief Executive Officer, IDA said, "In today's competitive business environment, time is money and having a quick turnaround to implement business policy changes is vital. The development and adoption by businesses of technological products and solutions like BRMS can be a critical differentiating factor in fast moving markets. It is important for local companies to develop and build capabilities in innovative BRMS solutions that can be exportable to the regional and international markets, and tap into this growing market, worth US\$279 million by 2008, worldwide."

Mr Pierre Haren, CEO, ILOG said: "Singapore is an established, trusted business hub with excellent infrastructure, and the generalisation of BRMS in Singapore will further reinforce the country's position as a centre of finance and business. The IDA's promotion of BRMS solutions helps underscore Singapore's competitive position as a technology leader and innovator."

ASIAN BANKERS GAIN INSIGHT ON SINGAPORE'S FINANCIAL TECHNOLOGY CAPABILITIES

ABOUT 30 BANKERS from Asia got a first-hand account of Singapore's banking industry and sophisticated financial technology solutions last month, in conjunction with The Asian Banker Summit 2005. The delegates were from Bangladesh, Brunei, India, Indonesia, Thailand and Sri Lanka. They were hosted by IDA and IE Singapore, on a one-day special programme to better understand Singapore's banking landscape and the use of infocomm technologies by local banks to raise their levels of service and operations.

The delegates were treated to a seminar comprising a distinguished panel of speakers including Mr Ted Tan, Deputy CEO, IE Singapore, Mr Pei Sai Fan, Director of Professional Training, Financial Supervision Group, Monetary Authority of Singapore, and Mr Bill Chua, Executive Vice President, Operations, United Overseas Bank.

Mr Tan, Deputy CEO, IE Singapore, said that Singapore is an attractive financial centre due to its strategic geographical location and access to Asian markets via the various free trade agreements. In addition, its excellent infrastructure, good IP protection, talented workforce and government's pro-business policies were some of the factors that have contributed to Singapore's growth as a financial hub in Asia. On the technology front, Mr Tan added that banks were building and upgrading to modern powerful integrated core banking systems to power their front, back and middle office operations.

Mr P. Ramakrishna, Director of Enterprise Development, IDA, hosted the networking lunch and shared with the delegates, the development of infocomm technologies in Singapore's banking landscape. He also added that Singapore's infocomm companies had developed into a strong cluster of solution providers for the banking industry and that Singapore had developed a world's first industry standard for implementing disaster recovery and business continuity.

During the networking luncheon, local infocomm companies including System Access, Integro Technologies, Frontline Technologies, FairEx, NETS and many more had a chance to rub shoulders with the visiting bankers. This was also an opportunity for the delegates to learn more about Singapore's homegrown infocomm solutions for the banking industry.

The delegates also visited four locations during the one-day event – BCS Information Systems to learn about Singapore's nationwide electronic cheque truncation system, OCBC's use of sophisticated CRM technology to provide tip-top customer service, DBS Bank and its world class credit card business infrastructure; and SingTel Expan on its disaster recovery and data centre solutions for banks.

SCHOOLS DEVELOP AND SHOWCASE INNOVATIVE MOBILE APPLICATIONS

IT HAS ONLY BEEN over a year, but the Mobile Club programme in educational institutions has taken off with a flying start. The number of participating educational institutions has expanded from five at programme inception to the current 20. More than 500 students have been trained by industry experts in mobile applications development and have developed over 220 applications have been developed including mobile games, educational aids, travel guides, ringtones and wallpapers.

Started in 2004, the Mobile Club is an initiative spearheaded by IDA to expose youths to opportunities in mobile technology, and encourage creativity and innovativeness. With the support and active participation of IDA, mobile clubs have been set-up at various schools, JCs and institutes of higher learning. The industry sponsors provide training, exposure and guidance to these mobile club members.

Earlier this year, the first Mobile Club Showcase was held for the students to exhibit the various mobile applications that they have developed. Many exciting and creative applications were displayed at the event. Here are some of them:

PUBLIC COMMUTING GUIDE

Maris Stella High School showed their mobile bus and MRT guide, a mobile phone application that gives users the ability to check for the costs of trips, commuting time and even bus services that pass through certain landmarks.

MOBILE TOURIST GUIDE

Maris Stella also developed a convenient mobile guide for tourists that contains useful information and available services. Tourists can get the latest information about local events, useful tourist tips, special prices for hotels, and even the ability to book rooms online.

MOBILE WRITING KIT

Another school, the Catholic High School, showcased their Mobile Writing Kit, a portable Chinese idiom and phrases translator. The user only needs to enter a few keywords, and the matching idioms and phrases will be displayed, together with explanatory information. These will appear in both English and Chinese, together with useful tools like sample sentences, synonyms and antonyms.

IDA, MICROSOFT AND NIE LAUNCH BACKPACK.NET CENTRE

WITH THE LAUNCH of Backpack.NET centre, Singapore continues her march towards leveraging on sophisticated infocomm technologies in the education sector by bringing teaching and learning to the next level. A world's first, this education and technology centre is a strategic collaboration between IDA, Microsoft and the National Institute of Education (NIE).

The Backpack.NET Centre, located at NIE, has been specifically designed to showcase and prepare teachers, educators, students and policy makers for how technology will influence pedagogical methods and improve the learning environment. It will also act as a focal point for industry partners to exchange ideas with academics. The centre provides the ideal platform for partners of Backpack.NET, to market their capabilities and solutions to local and foreign education decision makers, helping them drive innovation and grow revenue.

Mr Chan Yeng Kit, CEO, IDA said at the launch, "Through Backpack.NET Centre, IDA hopes to provide opportunities for the local Infocomm industry to showcase innovative software and digital content innovation for use in education. Already, we are witnessing regional interest with executives from the Korean, Malaysian and Indonesian education sectors flying in especially for the launch to learn more about how technology will impact the learning environment in the future."

Associate Professor Philip Wong, Ph.D, Divisional Director, Academic Computing and Information Services, NIE said, "BackPack.NET Centre will help to communicate and demonstrate the role of technology in the future of education. Over the next five to ten years, we will witness a dramatic change in the culture of the classroom to support and motivate independent learning and thinking among students and teachers



Digital Mandarin Lessons on Tablet PCs

through use of innovative technology in the education system."

Mr Chan also announced that Catholic High School has joined the Backpack.NET initiative, bringing the total number of participating schools to four. The other schools are River Valley High, Crescent Girls' and Monk Hill Secondary.

INAUGURAL E-SOCIETY EXCELLENCE AWARDS HONOURS FIVE BIG WINNERS



(From left to right): Mr Chan Yeng Kit, CEO, IDA; Dr Ow Chee Chung, Executive Director, The Society for the Physically Disabled; Mr Koh Tong Hai, Assistant Director of Corporate Services, Singapore Prison Service; Dr Balaji, Senior Minister of State; Mr S Vivakanandan, CEO, SINDA; Mr Leng Chin Fai, President, Project 180; Mr Norikazu Karasuda, Group CEO, Fujitsu Asia Pte Ltd; Mr Pek Yew Chai, First Vice Chairman, SITF

WHAT DO YOU do with 20,000kg of unsold bread every month? Don't just throw them away. Deliver them to welfare homes and the needy. That's what the Food-From-The-Heart (FFTH) voluntary program has been doing for the last two years, taking unsold bread from the bakeries in Singapore and redistributing them to the charity homes.

To help FFTH ensure efficient operations and avoid food wastage, Fujitsu Asia came up with its Food-Trek solution which lets FFTH staff track and manage the delivery of the food to the charities every day. Food-Trek presently supports over 2,000 FFTH volunteers and its server handles at least 200 SMS messages daily. For its sponsorship of the Food-Trek system, Fujitsu Asia won the inaugural e-Society Excellence Awards 2005 last month.

Project 180 (Youth Services) started by the National Council for Social Services, was also one of the other four winners. It won for its e-generation blog site with online counseling services for youths and young adults. The other winners include SINDA for its New PC program that helped bridge the digital divide for needy families, The Society for the Physically Disabled for its specialised assistive technology centre and the Singapore Prison Service for its inmate video conferencing service.

The e-Society Excellence Awards aims to honour organisations that have been proactive in helping Singaporeans embrace infocomm and transforming our society into an e-inclusive one. The awards aim to honour those who take the lead in getting all segments of the population connected and inspire other organizations to help build Singapore into an e-Society. It is jointly organised by IDA and the Singapore Infocomm Technology Federation and supported by IT Management Association; Ministry of Community Development, Youth and Sports; Ministry of Finance and the Singapore Computer Society.

Apart from the top five winners, merit awards were also given out to: Clementi Community Centre Management Committee for Project Clementi Online, Hewlett Packard for eGarage, IBM Singapore for IBM KidSmart Early Learning Programme, Microsoft Singapore for Microsoft Unlimited Potential Community Learning Programme, and the North East Community Development Council for its Financial Assistance Cashless Electronic Card System.

SYSTEM ACCESS AND SUN CLINCH US\$4.5 MILLION DEAL WITH LEADING CHINA BANK

LOCAL BANKING SOFTWARE PROVIDER System Access and Sun Microsystems have jointly closed a US\$4.5 million deal with the China Development Bank, one of the top five banks in China. The bank implemented System Access' end-to-end core banking solution called Symbols, running on Sun Fire Ultra Sparc IV servers at the bank's main office in Beijing and across 33 branches nationwide.

With the new software, the bank is now equipped with a cutting-edge IT infrastructure that enables it to provide a highly efficient management information system that strongly supports the development of new products and expedite the response to market needs.

This new customer win is a result of the Overseas Development Program (ODP) initiated by Sun Microsystems and IDA in 2003. The ODP was instrumental in creating the opportunities

necessary to address the various nuances in securing a successful business venture in China. Under this scheme, System Access, who is a key ISV and iForce partner of Sun, gained regional presence and benefited from the Sun-IDA Overseas Development Program for China to offer its solution to address the robust IT needs of China Development Bank.

"Competing in overseas markets can be a challenging task for Singapore infocomm companies without established overseas business networks. The Overseas Development Programme was introduced to help bridge this gap, creating business opportunities and bringing our local companies closer to their foreign counterparts," said Mr Chan Yeng Kit, CEO, IDA.

"Sun's business network has been critical for us to build up our competitive advantages in the

China market," says Mr Leslie Loh, CEO and Chairman, Systems Access, Singapore. "Through ODP, we are pleased to have implemented the Symbols system to optimise China Development Bank's international banking segments and execute localisation work to meet specific Chinese market requirements."

LOCAL INFOCOMM COMPANIES GAIN EXPOSURE TO CHINA MARKET

As part of the ODP marketing efforts of Sun China, six local infocomm companies showcased their solutions for over 110 banking and healthcare industry members in China last month. System Access, PeridotHealth, Antlabs, Novasprint, Comex and Talariax participated in the "Experience Sharing - Singapore Day" conference in Beijing.

SINGAPORE INFOCOMM COMPANIES TAP INTO THE MIDDLE EAST MARKET

LOCAL INFOCOMM COMPANIES gained a first hand insight of the business opportunities in the Middle East recently. CrimsonLogic, Maxtel, NCS and the Singapore Computer Systems joined officials from IDA and the Ministry of Communications, Information and the Arts in a three-day 13-man delegation to the 3rd Asia IT Ministers' Summit in Bahrain last month.

The delegation was led by Senior Parliamentary Secretary of Ministry of Information, Communications and the Arts, Mr Yatiman Yusof. During the Summit, Mr Yatiman Yusof delivered Singapore's country report on ICT development and met the Bahraini Minister of Transport, H.E. Shaikh Ali bin Khalifa bin Salman Al Khalifa.

Reinforcing the notion that open sharing allows learning for all, IDA's Deputy Chief Executive and Director General (Telecoms), Mr Leong Keng Thai also presented to the delegates on lessons from "Singapore's Infocomm Journey".

At the sidelines of the Summit, four local infocomm companies got a first hand account of opportunities in Bahrain and UAE. Organised by IDA, the business mission was led by Ms Samantha Fok, Deputy Director for Enterprise Development.

During the business mission, the local companies visited several Bahrain government agencies and Alnadeem (a Bahraini ICT company). In UAE, there were productive discussions with Dubai e-Government, Dubai Health Care City, and Dubai Department of Economic Development.

"The business mission was a good platform for our companies to share experiences and forge strategic partnerships with government officials and companies in the Middle East. Our companies have gained significant insights into ICT opportunities and this would provide a good starting point for them to participate in the region's growth," said Ms Fok.

Commenting on the value of the business mission, Mr Lum Hon Fye, Chief, Global Business, NCS said, "The mission has been very successful. The



Mr Yatiman Yusof, Senior Parliamentary Secretary of Ministry of Information, Communications and the Arts; and H.E. Shaikh Ali bin Khalifa bin Salman Al Kalifa, Minister of Transport, Bahrain

Middle East region has a lot of potential in the coming years. NCS, which is the biggest IT services provider in the Singapore market, can play a significant role in many areas such as e-government, health care, banking and intelligent building solutions".

GAMES BAZAAR EXTENDED TO INCLUDE MARKETING AND PROMOTIONS PROGRAM

IDA NOW GIVES game developers and publishers even more reasons to locate their game servers in Singapore as a launchpad into the region. With a scalable pay-as-you-use platform, they can also reap better cost efficiencies with the extension of a marketing and promotions program.

Launched last month, the Games Bazaar's Marketing and Promotion Program adopts an integrated approach that will help games companies extend their market outreach through Singapore to Asia. The programme will roll-out in Thailand, Malaysia and Singapore for a start and scale-up to include other cities over the next two years.

Mr Khoong Hock Yun, Assistant Chief Executive, Industry, IDA said: "To successfully deploy games that truly interest Asian gamers, games companies need an affordable, quick and

scalable means to test market their games to different online gamers in Asia. Games Bazaar's promotion programme addresses this by offering games companies a marketing platform to put beta titles into the hands of their target gamers. This in turn will accelerate their commercialisation into Asia."

The promotional programme aims to assist game publishers in overcoming cultural and technical hurdles for each of the Asian gaming markets and also makes available a complete deployment and commercialisation platform. Singapore's recently launched business continuity and disaster recovery standard also ensures that hosting facilities for distribution and multiplayer games have a higher level of reliability and security.

Today, Games Bazaar has achieved early success. For instance, Singapore's online games service

providers, iGames Asia and 10Tacle have leveraged on Games Bazaar to host and distribute their games titles. Korean games companies have also come onboard.

LOCAL COMPANIES SHOW THEIR METTLE AT GDC

In a showcase of local games capabilities, IDA led a delegation of games companies to the Game Developers Conference, held in San Francisco last month. This was an excellent opportunity for the local companies to seek partnership opportunities with US games companies looking to enter Asia. The companies that participated are Mikoishi - a game developer specialising in multiplayer mobile games, Pacific Internet, SingTel, and Teckwah Online - an online games distributor and games service provider.

LOCAL COMPANY WINS PRESTIGIOUS ASIA-PACIFIC INFOCOMM AWARD

IT MAY BE A YOUNG COMPANY, thus far three years old, but JadeLite is no pushover in the education and training technology arena. They focused for two years on R&D and testing, and since commercializing its products, JadeLite has won many leading Education, MNC, and Government customers - 16 satisfied customers within 12 months.

In fact, JadeLite has done so well that it has caught the attention of the industry. In December 2004, the company emerged as the winner in the Best Education and Training category for the prestigious Asia Pacific Information and Communications Technology Award (APICTA). This is the first time that a Singapore company has reached the pole position in the annual award that gives recognition to the best infocomm products and services in the region.

While JadeLite has an entire suite of education and training technology products, its flagship products are JadeLite EduCampus - a comprehensive ERP solution specific for the education industry; and JadeLite EduCorp, an advanced and fully integrated Performance/Appraisal/Training Management system incorporating People Developer Standards.

Mr. Narinder Singh, CEO of JadeLite, said that "what sets JadeLite apart from its competitors is that the company remains exclusively focused within the Education and Training Verticals. This focus ensures that we can maintain our advanced domain expertise and continually channel resources into R&D, thereby maintaining our edge over the competition". JadeLite's Chairman, Mr. K.H. Wun added "another key to our success is having Singapore as our HQ and primary R&D centre. Singapore being a Global leader in utilizing cutting edge technology has been an excellent resource in our development and preparation for our global expansion".

Traditionally, the education vertical has been amongst the slowest to embrace ERP systems. However, with the sea of changes occurring within this sector, cost efficient, flexible, scalable and fully integrated web based Education specific ERP systems are quickly emerging as a necessity.

Customers are no longer required to bear with piecemeal applications from different vendors, glued together with middleware technologies which are cumbersome, inefficient, and costly to maintain.

The scenario within the MNC and Government sectors is somewhat different; these organizations are already equipped with ERP systems. SAP and Oracle emerge as the predominant ERP applications here. JadeLite being a niche market player quickly understood the opportunity to provide their EduCorp products here - fully integrated with their existing ERP systems, and allowing them to automate and rapidly actualize their additional needs.

With JadeLite's solution, built on the cutting edge Microsoft.NET platform, interoperability with varying applications is easy - the web services architecture ensures that systems of varying platforms can talk to each other and connectors with leading applications such as Oracle and SAP are provided by Microsoft itself. In addition, quicker time to deployment and ease of customization stand out as additional attractive components.

The architecture of the JadeLite products also stands apart from the competition. Adopting a modular framework, their customers are afforded a plug and play environment, where scalability in features sets and modules, as well as performance is easily achieved. Customers can choose to start with a core set of modules and can then add on additional ones. This makes it easier for the users to acquire the initial core platform, then scale to more applications as and when they are ready for it.



EYE TO EYE – PIERRE HAREN, FOUNDER AND CEO, ILOG

WHEN THE SPACE SHUTTLE Columbia broke up into pieces upon re-entering the Earth's atmosphere in 2003, there was a sudden deluge of the shuttle parts put up for sale on eBay. Taking advantage of a tragedy for profit was something that the management of eBay frowned upon, so it wanted to block sales of the shuttle parts on its website. Stopping the sale of shuttle parts was not something that eBay could have predicted when it built its IT systems, yet, it was able to change its policies and processes to give effect to the ban within the hour. This quick turnaround time was possible, thanks to the software technology of software provider ILOG.

ILOG is a US-French software provider that has three main products – optimisation, visualisation and more recently business rules management systems (BRMS). BRMS is ILOG's newest product but it is its fastest growing and biggest revenue generator. Three years ago, BRMS only accounted for 5% of ILOG's revenues, now it is 40%. BRMS is software technology that enables corporations like eBay to quickly change its business rules and processes to react and respond to the constant changes in the business environment.

Pierre Haren, founder and CEO of ILOG said that in the past, switching business policies was a complicated and time-consuming matter. First the business executives would decide on what to change (like banning the sale of certain products on their web-site or changing the price of goods) and then communicate this to the IT team. The IT team would then work their coding magic, using technical language that is incomprehensible to ordinary mortals, to give effect to the IT changes to reflect the change in business policy. This was a time consuming process, plus often the IT guys would misunderstand the exact business requirement, and end up with errors. With ILOG's BRMS system, the IT system is pre-configured to speak in ordinary language, so the business managers can themselves make the

policy changes directly, eliminating translation errors and increasing the company's responsiveness to market changes.

"With BRMS, there is only one language that users need to know, and the business guys can now do their own 'programming' without wasting time talking to the IT guys. In short, it helps them to make better decisions, and to execute them fast," said Mr Haren.

While ILOG is not the only BRMS provider in the market, it is the leader of the pack. In 2003 and 2004, market research firm IDC ranked ILOG as the top dog in BRMS software, with 25% and 27% market share respectively in terms of total revenues.

While ILOG's BRMS business is relatively new, the company itself has been in Singapore since the early 90s, with Singapore as its base for the Asia-Pacific region. ILOG's traditional solutions have been quietly powering Singapore's public infrastructure behind the scenes. ILOG's optimisation technology has been helping Changi airport efficiently allocate the landing gates to the arriving airplanes, the SMRT to optimise its rostering of bus drivers and bus routes as well as the Ministry of Education in its time tabling for schools. ILOG's visualisation technology is used by PSA to visualise the position of ships at various container yards and at the Changi Airport for a bird's eye view of the on/off status of the landing lights at the runways.

THE POTENTIAL OF SINGAPORE SOFTWARE COMPANIES

Mr Haren said that it was naturally difficult for Singapore software companies to grow big because of the small domestic market. "You need to be able to grow to a certain size domestically before you can expand to other overseas markets. Singapore's small local market means it is tough for the local boys to first reach that status," said Mr Haren.



The good news, however, is that "Singapore has "a set of world-class problems," he added, meaning that the solutions that local software developers develop to solve these local "world-class problems" can be easily exported for its overseas projects."

But the biggest inhibitor, said Mr Haren, was the culture and attitude of big customers here. "In the US, our customers see us as a valuable partner and want to help us to grow with them so they are generous and fair with the software and solution providers. Here, the culture is to squeeze every cent possible out of the software providers, making it difficult for the latter to grow."

"IDA has already done an excellent job in developing the infocomm industry with its funding, training and smart use of money. The more difficult challenge is to change the attitude of the big customers – to make them see the local software providers as a potential life-time partner instead of a service provider that they can milk," Mr Haren added.

GRID COMPUTING

COMBINING THE POWERS of many into one. That's the fundamental notion behind Grid Computing, which harnesses the processing power, storage and other computing resources of distributed computer systems. It enables virtual, collaborative organisations to share resources in an open, heterogeneous environment. Computing power that previously required expensive supercomputers can now be harnessed with distributed server farms running on a grid network. Resources are not limited to data files, but also include equipment, instruments, sensors, applications software, services, licenses and many others.

In November 2003, Singapore's National Grid Office (NGO) successfully launched the National Grid Pilot Platform (NGPP), with a 1Gbps high-speed network that connects seven institutes of higher learning and research institutes sites, making available over 200 CPUs of heterogeneous computing resource for sharing. Some applications include distributed computer-assisted cell animation, geo-rectification of satellite images for environment monitoring, e-cell and gene simulation and collaborative engineering design and simulation. IDA, together with various industry partners, have also launched several major programmes that contribute to capability development in Grid-related domain. These include HP's Adaptive Enterprise (AE@SG), IBM's Grid Innovation Zone (GIZ) in NUS, Oracle's Enterprise-g and NUS's Collaborative Engineering Programme (CEP).

This year, NGO is launching the inaugural Grid Asia event on 3-6 May 2005 in conjunction with its partners. This event is co-organized by the Agency for Science, Technology and Research; Infocomm Development

Authority of Singapore; Nanyang Technological University; and National University of Singapore. The "Father of Grid Computing"; Dr. Ian Foster, will be delivering the keynote address via an Access Grid (a multiple group-to-group Grid communication technology with high-speed multicast network) from the Argonne National Labs, USA.



This mega event caters to everyone, from the interested individuals, practitioners and user organisations in industry to the research and development community. There will be four activity tracks, namely, international academic and research track; technical track; industry track and exhibition of both research and commercial offerings. This is an exciting combination of Life Science Grid workshop, Digital Media, Manufacturing and Physical Science Symposia and also our very own contributions within the industry track from HP's AE@SG and NUS's CEP. For example, in the CEP workshop, there will be questions pertaining to how could a construction or manufacturing company use the CEP tools in context of their existing IT systems and the types of business problems that CEP aim to solve. The exhibition track will feature solutions, products and applications from vendors which will provide a glimpse of how Grid can apply to the industry. Hewlett-Packard, IBM, Intel, Sun Microsystems, Platform Computing and Oracle are the event sponsors.