

IRG Technology, Media and Telecommunications and Life Sciences Weekly Market Review



Week of 26 September - 2 October, 2004

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International

Internet

- **Enterprises now find Web services important in two application areas that cover business process-oriented services – financial and customer service – where many companies are making significant IT investments to compete.** From a financial standpoint, Web services play a significant role in enabling firms to carry out cross-application reporting across software from multiple vendors. This allows them to access, manipulate or combine financial data in real-time to produce useable and relevant information. Interest among enterprises to integrate financial applications with other critical business, such as databases and front-end applications, have increased over the past two years, partly due to the advent of XML-based integration platforms. According to International Data Corp, the use of Web services is highest among organizations that view IT as a strategic business driver. And the finance sector rates application integration as most critical compared with other IT investments. Several web services development platforms are available, the most popular being Microsoft's Net-connected Web services and Sun Microsystems' Java.
- **Hackers have exploited a newly announced flaw in Microsoft programs and have begun circulating malicious codes hidden in images that use the popular JPEG format.** Software tools to create the malicious images began appearing last month, and recently security experts saw images employing them posted on adult-oriented Usenet newsgroups. To get the malicious code, a visitor had to download the image and view it using Microsoft Windows Explorer Software, according to Symantec. The computer then contacts a server to obtain code that would let an attacker take over the machine remotely. Symantec said the current exploit was fairly limited but that there can be expected future attempts to create malicious images that would work on the more popular Outlook and Internet Explorer programs, also made by Microsoft. Microsoft disclosed the flaw in question in September. It affects people running Windows XP, Windows Server 2003 and later versions of Office. People who have earlier versions of Windows or Office may also be affected if they are running some specialized applications, such as Digital Image Pro and Vision 2002. The flaw is in technology that is used to render JPEG images.
- **Spit – Spam on Internet Telephony – is the term for voicemail solicitations that, within the next couple of years, are likely to deluge web-based phone networks, according to the British weekly New Scientist reports.** Internet telephony, also known as Voice over Internet Protocol (VoIP) enables users to make cheap phone calls by sending voice data to addresses on the Net instead of routing them via fixed phone lines. The number of VoIP users in the United States, for example, is touted to rise from 131,000 today to 17.5 million by 2008, driven by the expansion of broadband connections that can carry huge data stream needed to carry conversations. With that surge in subscribers, spammers are bound to follow, because VoIP messages – as in e-mail – can be splashed out to thousands of subscribers in one go. Qovia, a U.S. firm that has begun marketing an early “spit filter” while warning that spit messages could block phone lines.
- **Asian companies are realizing the benefits of adopting Web services to develop and integrate disparate applications to enhance business processes and strengthen relationships with their partners and customers.** According to Gartner report, Web services allow enterprises to improve how they interact, develop, sell and support products. The report says that by 2006, Web services will take hold as competitive differentiator in business relationships and product innovation. Leading software and hardware companies concur that in the highly competitive business landscape, enterprises with

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integrated information technology (IT) infrastructure have an edge over those that remain with islands of business applications that do not talk with one another. A study by Jupiter Research shows that businesses are adopting Web services to achieve cost-cutting goals. IT managers polled by the research firm were frustrated with inter-operability issues, particularly getting applications to work together and databases integrated with one another. IT analysts, however, said Web services technology was not only about integration, but would help reshape companies and industries. It should help streamline the technology behind supply chains, simplifying business processes such as order management and inventory tracking, reducing human touch-points, cutting transaction costs and improving customer service.

Japan

Internet

- **Nippon Telegraph & Telephone West Corp. has teamed up with Tokio Marine & Fire Insurance Co. to launch a computer security service that compensates clients for system damages if computer viruses are able to penetrate their defenses.** The service will be the first to remunerate customers for system damages after improving their security. With the service, NTT West uses the Internet to diagnose the security defects of their clients' servers and then provides countermeasures. When a client suffers damage after following the recommendations for improving the security, the service will cover the expense of continuing operations by up to 10 million yen (US\$90,565) and the cost of recovering data by up to 1 million yen (US\$9,057). Annual contracts for the service will carry prices starting from 368,000 yen (US\$3,334). The firms are targeting annual sales of 36 million yen (US\$326,157) for fiscal 2005 and 180 million yen (US\$1.6 million) for fiscal 2007.

Mobile/Wireless

- **NTT DoCoMo intends to keep treasury stock obtained as a result of share buybacks from exceeding 5% of its outstanding shares.** The cap is part of in-house guidelines on share buybacks that DoCoMo executives recently pledged to about 200 major Japanese and overseas institutional investors. In an attempt to increase profit sharing for its shareholders, the leading cellular phone service provider started actively repurchasing its own shares in fiscal 2003. Consequently, the company's treasury stock has grown to 3.43 million shares, representing 6.8% of its outstanding shares. It has retained these shares in consideration of using them to conduct mergers and acquisitions as well as selling them to procure funds in the future. Although DoCoMo intends to continue share buybacks, it will retire the treasury stock surpassing the 5% ceiling when its closes its books for this fiscal year.
- **Oki Electric Industry Co. has developed a communications device that conforms to the Zigbee standard for low power, short-distance wireless communications.** The device has a built-in antenna, a central processing unit and memory. Oki intends to offer the device to universities and research organizations for use in the development of Zigbee-compatible applications. In one possible use, Oki's device could be combined with sensors to build systems for the fine-scale control over lighting and climate-control equipment in a building. Such systems could be built for around 30% less money than the wired systems now available.
- **Softbank Corp. is ready to take legal action against Japan's telecoms ministry if the government does not allocate it third-generation bandwidth.** The comment comes as Softbank awaits the final decision of the Ministry of Public Management, Home Affairs, Posts and Telecommunications, to grant

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licenses for the 800 Megahertz range. Earlier this month, Softbank called the government's preliminary plan to reallocate the bandwidth to incumbent players "unfair" saying that none of the existing mobile phone carriers such as NTT DoCoMo Inc and KDDI Corp. had immediate plans to make use of the bandwidth. Softbank has been looking to obtain the 800-MHz license to enter the mobile-phone market in Japan, as it would enable the company to use 3G mobile technology such as Qualcomm Inc.'s CDMA2000 1x. Softbank already operates Internet services via Yahoo BB and fixed-line telephone services through its newly acquired Japan Telecom unit. It has said it hopes to enter the mobile market and provide a cheaper service than those now available.

- **NTT DoCoMo said it plans to develop fuel cell-powered mobile phones together with Fujitsu.** The two expect to complete development of the fuel cell mobile phones by the end of March 2006, though they did not say when they expect to be able to market the new products. Fujitsu is one of DoCoMo's main handset suppliers. In July, DoCoMo's rival KDDI Corp. said it will develop methanol-based fuel cell power systems to run mobile phones with Toshiba Corp and Hitachi Ltd. Unlike lithium ion batteries, which take time to recharge, fuel cell systems enable users to operate mobile devices, such as phone handsets, notebook personal computers or portable music players, by replacing the methanol fuel cartridges or refilling them with methanol fuel. Even with a single load of methanol, a fuel cell power system can supply such devices for a much longer period of time than lithium ion batteries.

Telecommunications

- **The Nippon Telegraph and Telephone Corp. group said Friday that it will lower charges for fixed-line telephone services in December and January.** This move coincides with the slated December launch of discount fixed-line phone services by rival carriers KDDI Corp. and Softbank corp. NTT East and NTT West said they will cut their basic monthly charges in January 2005 by up to 540 yen (US\$5) for household users and up to 590 yen (US\$5.30), depending on such factors as whether the customers use touch-tone services. In urban areas, the new basic monthly charge would be as low as 1,600 yen (US\$14.4) for residential users and 2,400 yen (US\$22) for office users. This would mark the first reduction in basic monthly charges since NTT was privatized in 1985. From December, KDDI and the Softbank group plan to launch discount fixed-line phone services in which the monthly basic charges are up to 250 yen (US\$2) lower than NTT's current rates, with separate installation fees of 100 yen (US\$0.90) per month for five years. Both companies have announced flat long-distance rates of about 15 yen (US\$0.14) for three minutes for household users.
- **Britain's Cable and Wireless was in talks to leave Japan by selling its money-losing Japanese unit to Softbank or a Tokyo-based investment firm, a report said.** Cable and Wireless was expected to hammer out a basic accord with either Internet service provider Softbank or MKS Partners as early as in October, the Nihon Keizai Newspaper reported, without citing sources. Negotiations are under way for the sale of the Japanese unit, Cable and Wireless IDC, at 12 billion yen (US\$108 million), the economic daily said. The sale would leave Britain's Vodafone as the sole major foreign carrier operating in Japan. The Japanese unit was born out of Cable and Wireless's buyout of IDC, a Japanese international telephone operator, in June 1999 by winning a bidding war against Japanese telecom giant Nippon Telegraph and Telephone (NTT).

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Software

- **Oracle Corp Japan said its parent net profit for the three months ended in August fell 14.7% to 2.7 billion yen (US\$24. 4 million), as it suffered from falling sales in consulting service operations.** The parent operating profit during the period also dropped 4.6 billion yen (US\$42 million), down 13.9% from a year-earlier profit of 5.4 billion yen (US\$48.7 million), the company said. Parent sales fell to 17.4 billion yen (US\$157.8 million), off 6.0% from 18.5 billion yen (US\$167.9 million) last year. But the Japanese unit of the U.S. database giant Oracle Corp. said both its sales and profits were in line with its expectations, and its database technology business and support services were resilient during the quarter. Sales from its database technology business rose 12.4% year on year, contributing significantly to the firm's software product business. The software product segment booked 7.8 billion yen (US\$70.2 million) sales in three months to August, due to the popularity of "Oracle Database 10g," the company said. The firm's sales from support services fell 15% year on year to 9.7 billion yen (US\$87.4 million) during the same period. Oracle Japan's financial year ends in May.
- **Microsoft Co., the Japanese unit of Microsoft Corp., released a Japanese-language version of the Windows CE 5.0 operating system that incorporates TRON (The Real-Time Operating System Nucleus) of the TRON Association of Japan.** The product is the first fruit of the collaboration agreement reached in September, 2003 between Microsoft and TRON on the development of operating systems for network appliances. TRON is known for its speed and superiority in controlling equipment, but has few available software applications. In contrast, Windows CE has a great graphical user interface, but its processing speed is lower than TRON's, which makes it less suitable as an operating system for controlling wireless communications of mobile phones and other appliances. The new version of Windows CE makes full use of TRON's equipment control capability to overcome the previous one's shortcomings. At the same time, Microsoft has disclosed 80% of Windows CE 5.0's source code, allowing electronics makers to use it in programs for their network appliances. Authors of programs must obtain a license from Microsoft before selling them, but will be allowed to retain their copyrights.
- **NEC announced that it plans to boost its Linux-related systems development business by strengthening maintenance services.** The company began offering maintenance services for Linux-based information systems, including analysis of system troubles and monitoring of information systems employing multiple operating systems. In addition, NEC plans to double the number of system engineers versed in Linux to 4,800 by the end of fiscal 2005. By also opening two Linux/open source software evaluation centers in mid-October and offering pre-evaluation of Linux-based systems, the firm hopes to promote their use of businesses and public institutions. Through these measures, NEC hopes to more than triple its sales from Linux-related businesses for corporate customers to 90 billion yen (US\$815 million) by 2007. The company's sales of Linux-related hardware, software, and systems development and maintenance services came slightly less than 30 billion yen (about US\$271 million) in 2003, capturing around 15% of the domestic market.
- **Systems developer Comture Corp. plans to acquire the copyrights to groupware from Sony Global Solutions Inc., a systems development subsidiary of Sony Corp., and will take over development and sales of products.** Comture will use its know-how in introducing various groupware products to improve the functions and increase sales of the software, which goes by the name of CNAP. The company will acquire the rights to four CNAP products, including one used to facilitate approval processes and another for centrally managing business system user information. The products can be used in combination with other offerings such as Lotus Notes/Domino groupware

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from IBM Corp. and Windows 2000 Server operating software from Microsoft Corp. Users of CNAP products numbered 860,000 at the end of December 2003. Comture's groupware-related annual sales currently total 1 billion yen (US\$9 million). In three years, the company aims to raise such sales to 3 billion yen (US\$27.1 million) a year.

Media, Entertainment and Gaming

- **Sony's PlayStation Portable, which goes on sale in Japan later this year and overseas next spring, boasts the superb image quality of its home-console counterpart.** There is, however, the big question of how much the handheld gaming machine will cost. The pricing question is crucial as competition heats up in the game machine market ahead of the holiday season, when video game hardware makers rake in as much as half of their annual profits. Sony is hoping to repeat what it achieved a decade ago with its original PlayStation when it rallied from behind to defeat the king of gaming, Sony's domestic rival Nintendo, known for its Super Mario and Pokemon games. Before PlayStation's debut, Nintendo dominated gaming with Family Computer (Famicom) machines, which went on sale in 1983. Today, nearly 74 million PlayStation 2 machines have been sold worldwide, making it the dominant system around the world, controlling 47 percent of the U.S. market and about 80 percent of the Japanese and European markets. Nintendo has sold more than 150 million Game Boy machines around the world so far. Nintendo said its handheld upgrade, Nintendo DS, a Game Boy with two screens, would sell for US\$149.99 in the United States and US\$135 in Japan.

Korea

Mobile/Wireless

- **The sign-up ban imposed on the country's three mobile-phone carriers ended with Telecom Co. completing its 40-day suspension, marking the resumption of heated competition in the telecom market.** But industry analysts believe the competition will be less intense than in the early months of the year with the government strengthening its monitoring to prevent illegal marketing activities. According to industry figures, from July to September, SK Telecom gained around 34,000 in customers during the 100-day suspension, excluding its time in the penalty box. The company lured 340,000 subscribers from KTF while losing 310,000 to rival carriers through number portability, which allows mobile-phone users to switch operators without changing numbers. Runner-up carrier KTF was hit the hardest, losing more than 260,000 customers overall and managing to gather just 196,000 SK Telecom subscribers. LG Telecom gained 230,000 customers from SK Telecom and KTF during the sign-up ban and lost none to number portability. Number portability was applied at different times to the carriers according to their market position and will not be applied to LG Telecom until January next year. The asymmetric application of regulations was a government effort to strengthen the company's market position.

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- **Long-distance and international telephone carrier Dacom Corp. launched a service that allows customers to send mobile-phone text messages overseas.** The service is available to all customers of the country's three mobile operators – SK Telecom Co., and KT Freetel Co. and LG Telecom Co. – and covers more than 160 countries including the United States, Japan, China and Britain. Mobile subscribers can use the service by simply dialing Dacom's 002 international access code on their handset and inserting the country code and phone number before writing the messages. Dacom will charge 150 won (US\$0.13) per text message regardless of the target country. Dacom, the long-distance and international telephony affiliate of LG Group, reported 521 billion won (US\$454 million) in revenue and 21 billion won (US\$18 million) in net income for the first half of this year.

China

Internet

- **Google's recently launched news service in China does not display results from websites blocked by that country's authorities.** Dynamic Internet Technology, a research firm striving to defeat online censorship, conducted tests that found Google omits results from the government-banned sites if the search requests are made through computers connecting to the Internet in China. Steered by identical search request, computers with a United States connection retrieved results from the sites blocked by China. The Chinese government lashed out at Google two years ago when it temporarily blocked access to the company's main search engine before relenting under public pressure. Google acknowledges its Chinese language news service – introduced on a test basis two weeks ago – is leaving out results from government-banned sites, but the company believes the omissions jibe with its long-standing mission to make its search engine efficient and useful.
- **Chinese job recruitment services provider 51job Inc made a strong debut on the NASDAQ, opening at US\$22.05.** The Shanghai-based company, which operates a job-recruitment portal and magazines, had priced its shares at US\$14 each – above the high end of its offering range on strong demand, and against guidance of US\$11 to US\$13 when the offer was launched two weeks ago. The company sold 5.25 million American depositary receipts to tap US\$73 million, about 7.7 percent higher than the US\$57.75 million to US\$68 million it hoped to raise. Sources familiar with the offering said demand for the shares was 12 times the number offered. The proceeds will increase to US\$84.53 million if underwriter Morgan Stanley exercises a green-shoe option to ask 51job to issue an extra 787,500 American depositary receipts to cover over-allotments. The underwriter has 30 days to exercise the option.

Information Technology

- **The Ministry of Information Industry (MII) officially announced the establishment of nine State electronic information industry bases.** The base will feature large-scale electronic information industry, highly competitive in research and development, a clustering of competitive enterprises and a complete industrial chain and related services. These factors can be reflected in seven major areas such as sales revenue, industrial output, number of key enterprises and comprehensive ability in research and development. The bases are located in Beijing, Tianjin, Qingdao, Shanghai, Suzhou, Hangzhou, Shenzhen, coastal areas of Fuzhou and Xiamen, and the Pearl River Delta. Government figures showed that China's electronic information industry has progressed by leaps and bounds over the past two

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decades. The industry accomplished sales volume of 1.88 trillion yuan (US\$226.5 billion) last year, reaping industrial added value of 400 billion yuan (US\$48.2 billion), accounting for about 4 percent of the nation's gross domestic product (GDP).

Media, Entertainment and Gaming

- **China has set up an official body to promote “healthy” online computer games for young people to play in its popular Internet cafes, state media said.** The Professional Commission of Online Games would launch a national club for game-players and build a server of suitable games. The body would recommend “healthy games to juveniles as an effort to clean up young people’s online environment”, the report said. It would also rate online games according to their various levels of pornography, violence, horror, social morality and cultural implications. By 2003, China had 13.8 million on-line game players, with sales of related products and services amounting to 1.3 billion yuan (US\$157 million). More than 30 percent of China’s 87 million Internet users are believed to be students and 50 percent are under the age of 24.
- **Beijing authorities are using computer technology to keep tabs on advertisers who make illegal claims about their products, saving human monitors the task of scanning print, television and radio commercials.** The Beijing Industry and Commerce launched the mainland’s first computer-based advertising system, which will sort through 30,000 commercials aired and published in the capital each day. The system will monitor 26 television programs, 13 radio shows, three mobile telecommunication companies, and dozens of newspapers, magazines and Internet websites. Proponents maintain it will be able to differentiate advertising from editorial, all the time looking for ads that claim a product is the best or better than a rival’s offering. Using a database of illegal texts and pictures, the system is designed to spot the “illicit” messages and alert staff. The bureau said it detected more than 3,100 illegal advertisements last year.

Semiconductors

- **Rising inventories among overseas chip buyers pointed to softening demand in the second half of the year, according to CSMC technologies.** The Wuxi-based chipmaker said customers were highly sensitive to end-user demand, having been caught out during the industry downturn three years ago. 40 percent of CSMC sales came from overseas, up from 30 percent a year ago. Major sales were contributed by domestic customers, including Hangzhou Silan Microelectronics, its largest client. The company is looking to generate domestic growth, especially in the six-inch wafer segment, which accounted for about 75 percent of China’s total demand. Last month, the firm raised HK\$310.5 million (US\$39.8 million) from an initial public offering in Hong Kong. CSMC planned to diversify further into eight-inch wafers and was seeking to secure partners within six months, the company reported. During the second quarter, the firm saw the average selling price of its eight-inch wafers rise to US\$190 from US\$180 in the first quarter.

Mobile/Wireless

- **Nokia, the world’s biggest mobile phone maker said that it would deliver GSM network equipment worth US\$60 million to the provincial operator Jiangxi MCC in China.** Jiangxi MCC is a subsidiary of state-controlled China Mobile, the country’s largest mobile phone operator. According to the deal, Nokia will provide base stations and the core infrastructure equipment needed to expand the operator’s existing second –generation GSM (global system for mobile communication) network in the southern province of Jiangxi. Jiangxi is largely rural. It has 40 million inhabitants and is one of China’s

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smallest and poorest provinces. Nokia has already more than 4,300 employees, or nearly 10 percent of its global workforce, in China, which it has identified as its most important market in coming years.

Taiwan

Internet

After four years, GigaMedia has finally posted a profit. The NASDAQ-listed dotcom unveiled second-quarter net income of US\$560,000 on revenue of US\$24 million. It was a long time coming for GigaMedia whose shares soared to US\$88 during the dotcom bubble but now trade at US\$1.31. Back then, the business model was to provide high-speed Internet access over cable television networks. GigaMedia's cozy relationship with the Koos Group Cable TV monopoly – and its young Ivy League Management Team – was going to propel it into the burgeoning mainland market. But the China dreams never panned out, and its ISP business accounts for 23 percent of sales. Making up 68 percent of Gigamedia's revenue is what the management calls its “music distribution business”: two chains of music stores it acquired in 2002 for NT\$650 million (US19.1 million). The purchase of Rose Records and Tachung Records boosted revenues five-fold and at the same time helped the company spend some of its massive cash pile.

Hong Kong

Mobile/Wireless

- **Hutchison Whampoa, seeking to raise up to HK\$8.7 billion (US\$1.1 billion) from its Hutchison Telecommunications International (HTIL) spin-off, will also save more than HK\$400 million (US\$51.2 million) by shifting the initial public offering's underwriting fees on the listing vehicle.** HTIL's underwriters – led by Goldman Sachs – and other professionals involved in the transaction will collect HK\$420 million (US\$53.8 million) from the proceeds to cover listing expenses, which are normally borne by the parent company. In this case, however, HTIL will reimburse Hutchison for the fees. Hutchison will put aside its proceeds from the IPO and allow the subsidiary to draw on them if it needs to fund expansion. HTIL said the company was eyeing entry to other countries in Southeast Asia and the Middle East that offer high growth potential. HTIL will float 10 percent of the shares in the consolidated Indian company – the minimum allowed by Indian securities law. The IPO would be shared between domestic retail investors and global portfolio investors.
- **The arrival of a powerful new wireless communications technology known as WiMAX, after much hype, is getting closer.** Local operators who have been busily testing the technology can now look forward to a consultation paper from the Office of the Telecommunications Authority (Ofta) as early as November. WiMAX, standing for worldwide interoperability for microwave access, is touted as “Wi-fi on steroids”, with radio signals that can pass through buildings and travel kilometers rather than just meters. On its initial rollout next year, WiMAX will offer fixed wireless broadband connections, providing another route to connection. By 2006, a fully mobile service is promised as WiMAX chipsets are embedded in laptops, mobile phones and personal digital assistants. It is WiMAX's ability to offer broadband speed and mobile freedom that has some referring to the technology as the 3G killer. And it is in this second stage of development that true disruptions will begin as fixed and mobile operators – as well as technologies – collide. The impact could be severe in a telecoms market as congested as Hong

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Kong, with six 2G operators, four 3g licenses and five fixed-line carriers for just seven million customers.

Telecommunications

- **The telecommunications regulator has ordered small fixed-line carrier Wharf T&T to detail its network access within two weeks or face a fine.** The Office of the Telecommunications Authority (Ofta) made the order after Wharf T&T refused to provide it with a list of buildings connected to its network. Three other small carriers – Hutchison Global Communications New, New World Telecommunications and Hong Kong Broadband Network – submitted network details to Ofta. The regulator needs to identify which buildings have at least two self-built networks, including that of dominant carrier PCCW, in order to start a gradual rollback of the mandatory Type II interconnection policy. Under a policy announced by Ofta in July, any buildings that had at least two self-built networks could gradually phase out the mandatory Type II policy in three years, meaning PCCW would no longer be obligated to lease its last-mile capacity to rivals.

Information Technology

- **The Hong Kong government should work with mainland counterparts to help local information technology players in bidding contracts in developing markets, the Internet Professionals Association (iProA) said.** The industry body said countries such as Romania, South Africa, Brazil, Ecuador and Azerbaijan were interested in working with Hong Kong companies to build their information infrastructure. These countries are enthusiastic to adopt to Hong Kong-developed smart identity cards, MTR and airport management, as well as electronic purchasing systems, iProA said. Research house Aberdeen Group said developing countries spent US\$13.8 billion to US\$41.4 billion on IT last year. .

Software

- **Langham Hotel International has given the boot to Linux and rolled out the welcome mat for Microsoft.** The Hong Kong-based hotels and apartments group, owned by Great Eagle Holdings, recently made the switch from open-source software Red Hat Version 7 to Microsoft Exchange Server 2003 and Windows Server 2003 in a sweeping technology revamp. The overhaul would seem to fly in the face of the growing popularity of Linux and other open-source systems in corporate networks. Group executives said continued use of Linux platform would have hamstrung efforts to bolster security, expand coverage and implement a unified messaging system across Langham properties worldwide.

Singapore/Malaysia/Philippines/Indonesia

Hardware

- **An increase in printing efficiency coupled with a decline in end-user prices is fuelling a boom in printer sales, especially among SMEs worldwide s well as in the Asia-Pacific region.** Even in Singapore, more SMEs are replacing their older models with the new MFPs (multi-function printers) that combine printing, faxing, copying, scanning and e-mailing. For the 12-month period till June 2004, SMEs worldwide spent a whopping US\$42 billion on printing-related solutions – including printers, inks, toners, print heads, network access cards and other peripherals, according to a report by New York-based Access Markets International (AMI) Partners, Inc. As for Singapore, more SMEs are opting

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to buy MFPs and color laser printers as replacements for their ageing inkjet printers. According to research house IDC Corp, all companies in Singapore (including SMEs and other enterprises) are putting their money on MFP inkjet and laser printers – instead of on single-function printers. IDC said that for about 150,000 MFP inkjets worth US\$25.3 million will be sold in Singapore this year – compared with 111,000 worth US\$20.4 million last year.

Mobile/Wireless

- Given the scope for profitable growth within Malaysia itself, particularly in data services, the country's top mobile telco Maxis is in no rush to expand quickly into the region. Maxis said that they are not in a rush, unlike British Telecom or even SingTel that are trying to establish regional footprints. Maxis, which began operations in 1995, is Malaysia's largest mobile telephone company by subscriber share. Its 5.12 million subscribers gave it about 40 percent of Malaysia's 12.38 million mobile subscriber base as of June this year. Maxis, together with French smartcard maker Axalto, launched Axalto's largest-capacity SIM card for the Malaysian market. The SIM card, with 256 kilobytes of memory, allows Maxis subscribers to store up to 1,000 phonebook entries and 1,000 text messages, and offers a more convenient way to manage multiple passwords and identities for applications from Maxis. Going forward, Maxis will rely on non-traditional sources to boost its share of data revenues in ARPU (average revenue per user, a key operational measure of the revenue impact of mobile services. Compared to Singapore (with mobile penetration of over 80 percent), Malaysia's overall mobile penetration was 49.52 percent as of end-June, giving players like Maxis some headroom to grow both raw subscribers and the ARPU per subscriber.

United States/Canada

Internet

- Internet powerhouse Yahoo has given its popular website a facelift to highlight some of the features that the company has been improving during the past year. The retooling affects "MyYahoo" – a channel that enables the site's registered users to customize their own package of favorite features. The most visible changes include the addition of a "music" button across the top of the home page and the removal of a button that directed traffic to the company's help wanted site, HotJobs. Yahoo has been upgrading its music features in response to growing market demand. Earlier this month, Yahoo agreed to buy online Jukebox provider Musicmatch for US\$160 million in cash. Yahoo's redesign also includes a new search tab for the site's web directory and a regularly updated feature that will report on which topics are generating the most research requests. The company has been heavily promoting the power of its online search engine since it ended a licensing agreement with rival Google earlier this year and began relying on its own in-house technology.
- A row over intellectual property claims from Microsoft has dealt a fatal blow to an ambitious effort by Internet engineers to create a technical standard for curbing junk e-mail. The failure to reach consensus on the Microsoft-championed proposal known as Sender ID throws back to the free market a process many consider urgent in view of the increasing onslaught of spam. Sender ID's effectiveness and compatibility with existing mail systems were already in question before members of the Internet Engineering Task Force, a team which works by consensus on Internet standards, dissolved a working group on Sender ID after seeing that agreement could not be achieved anytime soon. Some experts say the decision could speed up work on a different spam-control technology from Yahoo, one

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seen as stronger but more difficult to implement. The Microsoft and Yahoo proposals, along with one being tested by American Online, aim tackle e-mail spoofing – the practice of sending messages that pretend to be from someone else. The technology would not eliminate spam, but it could help identify and block common spam technique.

Software

- **US software maker Veritas Software, one of the world's biggest software firms, said it planned to hire more engineers in India to create a research and technology hub.** The firm has grown its India operations to 900 engineers, but is looking to do more. Last year, Veritas Software India's new product development center in the western city of Pune contributed to most of the new patents filed by the California-based firm. With revenues of US\$1.75 billion in 2003, Veritas is a market leader in data protection, computer storage and management products.

Mobile/Wireless

- **Cingular Wireless is selling its messaging technology unit to institutional investor Cerberus Capital Management for an undisclosed sum.** The deal includes network and IT systems, customer service operations and a majority of subscribers. The Cingular Interactive subsidiary provides wireless corporate e-mail and messaging through its Mobitex packet data service. The Mobitex network supports approximately 25 percent of all Blackberry users worldwide. The unit also sells applications enabling field force automation, telemetry and remote transaction processing. Cingular will continue to offer Mobitex service under a deal with the Cingular Interactive unit. Cingular is based in New Jersey and its managers are expected to remain following the sale.
- **Nokia has extended its outsourcing contract with Hewlett-Packard for five years.** Under the deal, HP will continue to manage IT infrastructure and operations for Nokia's network and for its messaging and groupware systems. HP said Nokia would move to a service-based model under the new agreement, which is valued at about US\$100 million annually. This will help Nokia cut costs, as the handset maker will be billed based on actual service consumption, according to HP. As part of the push for its Adaptive Enterprise strategy, HP has signed a string of outsourcing deals to manage other companies' IT infrastructures. Rivals IBM and Electronic Data Systems have also been luring companies into similar service deals.

Semiconductors

- **High-tech startup Azul Systems Inc. has included Japan in its planned marketing of servers that use its newly developed multicore processor, which boasts an industry-high 24 processor circuitry cores per chip.** Azul plans to launch three server models containing 384, 192 and 96 processor cores during the first half of 2005. Sumitomo Corp. is one company through which sales in Japan are expected to be conducted. The new chip measures around 4cm square and contains 24 separate cores. The core usually takes up around 20% of the surface area of a chip, with the remainder used for memory. But in Azul's new chip, the 24 cores take up more than 50% of the space. Other leading chipmakers are also developing multicore chips, but these devices contain only 2-16 cores. Azul will have the chips made by chip foundry Taiwan Semiconductor Manufacturing Co. The servers will host up to 16 of these chips, and Azul has already prototyped a server with 384 cores. The advantage of the server is that it allows corporations to expand their information systems more cost-effectively.

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Europe

Software

- **Microsoft Corp's five-year legal battle in Europe moves into a public courtroom for the first time as the US software giant tries to get the European Union's landmark antitrust ruling against it lifted.** The European Commission found Microsoft guilty in March of abusing its dominant position with the Windows operating system, which runs some 90 percent of computers worldwide. It fined the company a record 487 million euros (US\$616.9 million) and ordered it to hand over some software code to rivals in the server market. The commission also ordered the company to offer a version of Windows without its digital media software, Media Player, to allow rivals a better shot at landing on consumer's desktops. That strikes at the heart of Microsoft's strategy to continuously incorporating new features into the operating system to stay on top and expand its business.

Semiconductors

- **Dutch electronics giant Royal Philips Electronics said it had lowered its outlook for semiconductor sales in the third quarter.** This was widely expected by analysts. Whereas Philips previously forecast 3 to 4 percent sequential growth in dollars, the group now expects chip sales to come in flat versus the previous quarter. The outlook excludes mobile display systems, which also form part of Philips' semiconductor division. Philips also reported that demand for "connected consumer" applications – those enable consumers to access and share content easily – was expected to exceed general demand for semiconductors.

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