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ICMA

The International Card Manufacturers Association (ICMA) homepage greets us with a Flash animation proclaiming it as "The Voice of the Plastic Card Industry" in a myriad of different languages. Content is superbly organised via an impressive drop down menu/navigation system but unfortunately there's not much to be found; everything you would expect to find is here - but not much else. Most of the pages are concerned with attracting new members (including online registration) and existing members are at least well catered for with full biographies and links. However, the highlight is an exhaustive card manufacturer directory which allows searching on areas as diverse as card thickness and application type.

www.icma.com

Navigation	■■■■■
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GlobalPlatform

This site lacks the professional looking sheen of the ICMA site but has the added advantage of acting as a portal for its widely used card standardisation programme. The latest specifications can all be downloaded from the site free of charge as zip files although you have to register on the site first. There is lots of supporting documentation and a good synopsis of the Global Platform compliance program. Existing members are well publicised and there is a secure 'Members Only' area, whilst membership application forms can also be downloaded. The site is rather bland but nevertheless serves as a highly informative Smart Card resource.

www.globalplatform.org

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EuroSmart

Like ICMA, EuroSmart boldly proclaims itself as "The Voice of the Smart Card Industry" and its website makes an equally bold attempt at establishing itself as an industry portal. The homepage details all the upcoming conferences and events that EuroSmart have been involved it (which seems to be all of them) plus reviews and pictures of events from the recent past. The big draw here, however, is the 'industry figures' section which includes data from the last three years and is searchable by geographical region and data. Elsewhere, membership profiles and company info are satisfactory, and there is also a highly detailed links section. An extremely useful bookmark for those in the Smart Card industry even if the site design leaves something to be desired.

www.eurosmart.com

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Pirates Hit Russian pay-TV

Russian TV company NTV Plus has revealed that it suffered losses of $300,000 at the hands of Smart Card pirates who hacked its pay-TV cards which were later sold at cut price rates.

The card is reported to have been hacked in the Russian city of Ivanovo and counterfeit cards sold in markets there and in Moscow, Vladimir, Kostroma and Nizhniy Novgorod.

The investigation is continuing and computer programmers have been charged with illegal access to computer databases, creation of harmful computer programmes and property damage.

The NTV Plus card, developed in France, was believed to be highly secure. However, computer programmers are said to have developed software enabling them to bypass the French security system and counterfeit the pay-TV cards.

Fighting pay-TV Piracy in Europe

NTV Plus is a member of AEPOC (European Association for the Protection of Encrypted Works and Services) a group of the leading players formed to lobby European governments to impose tougher legislation on broadcast piracy activities.

"Our common aim is to stop the loss of revenue and reputation that the hacking community inflicts on the broadcasting industry," said Davide Rossi, Secretary General of Brussels-based AEPOC which last month invited digital TV security specialists SCM Microsystems to join the consortium. Rossi said: "SCM's technical heritage will bring a new dimension to our discussions and efforts in stopping piracy activities."

"Broadcast piracy is becoming an increasingly serious problem which needs drastic action," said Robert Schneider, SCM's CEO. "We have long been focused on researching and developing anti-hacking technology. We are glad to be able to bring our knowledge and experience to this group and play a part in preventing illegal access to TV services."

Earlier this year, Modern Times Group MTG AB, the international media group, announced that its Viasat pay-TV broadcasting division had initiated a major technical programme of counter-measures to eliminate the use of illegal pirate Smart Cards to access its pay-TV channels in Scandinavia.

It implemented a technical change to the encryption of the Viasat Smart Cards successfully blocking a very high proportion of illegal cards. The group also said it had substantially increased the frequency with which it changes the encryption codes for its broadcasts, resulting in a dramatic reduction in the ability of pirate cardholders to view the channels.

Viasat is also considering launching the ultimate anti-piracy measure in the near future - the replacement of the entire existing pay-TV digital Smart Card stock thus rendering all existing pirate cards useless.

Viasat said it would continue to hunt down and prosecute the criminal manufacturers and distributors of pirate cards.

Websites
- www.scmmicro.com
- www.mtg.se

Lead Story

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OTI University Project

OTI (On Track Innovations) has announced that its subsidiary InterCard is to introduce a contactless multi-function Smart Card at Hanover Medical University in Germany, and also a cash register system for the University's catering facilities.

InterCard will issue ID cards with integrated payment, access control and time recording functions to around 7,500 employees and 3,500 students and equip the central cafeteria with a cash register system for cashless payments.

The company says that by spring 2003 the installation will enable students to register, pay tuition fees and update personal information independently.

UK Leisure Card Expands

The UK's Worldcard lifestyle reward Smart Card is to be rolled out to the West Midlands region following a successful launch in the North East of England.

The card is a multi-outlet reward card offered across a range of retailers, clubs, bars and leisure outlets. As well as being used as 'instant currency' the card also offers access to special offers, deals and exclusive competitions.

Worldcard CEO Tom Downes said: "Worldcard steers purchasing decisions because the rewards earned in outlet A + B can be spent in outlet C within minutes. That is a great incentive for the retailers and the cardholders. Retailers now do not need to find their own promotional partners, the card and the cardholder do it for them."

Schlumberger Invests in Magex

SchlumbergerSema has bought an undisclosed share in its UK Internet and mobile payment company Magex. The investment will enable Magex to market its payment services for the mobile market directly to SchlumbergerSema' financial and telecommunications customer base.

The relationship between the two companies stretches back for several years and has focused on developing person-to-person (P2P) and person-to-merchant (P2M) payments platform for use by banks and wireless operators.

Verified by Visa in Japan

Japanese credit card issuer Credit Saison has commissioned payment security specialist Cyota to rollout the Verified by Visa (3D Secure) Internet authentication technology to its 10 million Visa cardholders.

The deal is one of the first large scale commercial implementations of the Verified by Visa programme in Japan. Credit Saison will use the Japanese version of the software, which is to be supported by Cyota's Japanese partner, Intelligent Wave.

Infineon Leadership Award

Infineon Technologies has been awarded Frost & Sullivan's Market Engineering Leadership Award recognising the company's leadership in Smart Card development and marketing. Infineon's strategy and market position were cited as key factors in making the award.

"Infineon is a strong player and, despite a challenging year for the entire semiconductor sector, cannot be seen as having any major weaknesses. Infineon successfully focused on core competencies, system expertise, and cost leadership to not just stay ahead of its competition, but to increase its share of the market to more than 50 per cent in unit volume," said Anoop Ubhey, Smart Card Industry Analyst at Frost & Sullivan.

This constituted a lead of 24% over STMicroelectronics and more than 40% over Philips Semiconductors.

Smart Phone Cards in India

Indian telecom services operator TATA Teleservices has launched Smart pre-paid cards in the city of Visakhapatnam allowing customers to make unassisted calls from Tata TeleSmart booths.

The majority of the payphone booths are manned or assisted by an operator who has a direct interaction with the phone user.

Satellite Billing for UK Road Users

In an effort to relieve road congestion the UK government is proposing that cars should be fitted with a Smart Card and the registered owners charged according to their travel routes and distance covered.

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For a nationwide road-pricing scheme to work, each car would need to be monitored by "spy-in-the-sky" technology with satellite receivers installed inside the vehicles or computer chips in the number plates of cars. Motorists would be billed according to a sliding scale, with the highest rate for rush-hour journeys on trunk roads.

However, the scheme, which will replace vehicle excise duty for lorries within three years, provoked an angry response from opposition Members of Parliament who accused the government of "spying" on the UK's 24 million registered car owners.

ACG Launch Chip Internet Service

ACG has launched a new Internet platform called eXcessPortal.com which is to operate as a free service for purchasers of electronic components and targets brokers and OEMs (Original Equipment Manufacturers).

The service is geared towards the international chip market. It will cover warehouse stocks of all the ACG Technology Services subsidiaries around the world including ReCash customers, whose excess inventory of electronic components is marketed by ACG.

ACG claim that 200 new customers have already signed up to the scheme.

Gemplus Win F&S Award

Gemplus has been awarded Frost & Sullivan's Market Value Leadership Award for "exceptional performance" in the Smart Card market for the fourth time in five years.

The group praised Gemplus for mounting a strong comeback following the collapse of the SIM card market in 2001 and for its range of EMV migration tools aimed at the financial market.

"A change in market strategy allowed Gemplus to leverage its core capabilities and move away from being only a Smart Card manufacturer. The company further achieved and consolidated its market value leader position through much-needed internal restructuring and a more defined business market focus," said Anoop Ubhey, Industry Analyst at Frost & Sullivan.

According to Frost & Sullivan, the outlook for 2002 for the global Smart Card market is considerably brighter, and the total Smart Card market is forecast to grow from $1.76 billion in 2001 to $2.41 billion in 2004.

A very encouraging trend is the expanding application of Smart Cards in the financial sector against a backdrop of EMV migration and a growing interest in Smart Cards as an ID security application, especially post September 11. This will also help Smart Card providers develop new market opportunities.

A $0.99 Visa Smart Card

CPI Card Group and ST Microelectronics have joined forces to offer a $0.99 Visa Smart Card which it claims is the lowest price chip card on the market.

Bob Clarke, Corporate Vice President for CPI Card Group said: "Currently, the average cost of Smart Cards is about $3 - $5 each. The affordability of these new chip cards will allow customers an easier entry into the chip market and encourage them to examine the benefits and added security features associated with Smart Cards."

The offer is limited to Visa Members and the price does not include additional card services such as embossing and personalisation.

Proton World New Offices

Proton World moved to new offices last month:

✉ Kleine Kloosterstraat 23
   B- 1932 Zaventem, Belgium

Telephone and fax numbers remain the same:

☎ +32 2 724 51 11
📄 +32 2 724 50 60
💻 info@protonworld.com

For more information visit ...	
💻	
On Track Innovations	**ACG**
www.oti.co.il	www.acg.de
Worldcard	**Gemplus**
www.worldcard.co.uk	www.gemplus.com
SchlumbergerSema	**STMicroelectronic**
www.slb.com	www.st.com
Infinion	**Visa**
www.infineon.com	www.visa.com
Frost & Sullivan	**Protonworld**
www.frost.com	www.protonworld

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Smart Card for Junior Doctors

The UK government's Department of Health is extending its Smart Card ID scheme for junior doctors throughout England, allowing NHS human resource departments to speed up pre-employment checks as doctors move from post to post.

TSSI has been awarded an extension to its original contract which included the installation of over 150 Smart Card stations in 40 NHS trusts in London and the South East, and the supply of occupational health Smart Cards to all their doctors in training.

However, as the system progressed, demand for providing cross-regional information, as doctors move from trust to trust for training purposes, has resulted in the £0.5 million extension to the initial £2 million project.

This will create an NHS-wide database of doctors' occupational health information, hosted in a single national file server by mid-2002.

When the roll out is complete over 30,000 junior doctors will be registered on the system and will carry a Smart Card.

France Telecom Sells ST Stake

France Telecom is to off-load its remaining 2.7% stake in STMicroelectronics through a €500 million convertible bond offering as part of its ongoing strategy to reduce company debt. France Telecom said the bonds would be exchangeable into 26.42 million shares in ST from January 2, 2004.

Hypercom $13m Terminal Contract

Hypercom has won a $13 million contract for card payment terminals and value-added Web-based services from e-commerce provider Concord EFS.

The contract includes Hypercom's ICE 5700 terminal with integrated motorised check reader and value-added electronic signature and receipt capture, and its ICE-PAC on-screen/receipt advertising Web-based solution.

The ICE 5700 will serve as the platform for Concord's proprietary STAR Universal Terminal, which integrates credit, debit, electronic benefits transfer, check conversion and warranty services and IDLogix age verification.

US Treasury Employee Cards

Maximus has been awarded a $1.4 million contract by the US General Services Administration (GSA) for the supply of Electronic Treasury Enterprise Cards (E-TREC) to US Department of Treasury employees. About 9,000 employees are expected to be issued with the cards before the end of the year.

The E-TREC Smart Cards are designed to enable the Treasury to conduct business using one card for physical (contact and contactless) and logical access (computer/data access), biometrics, public key infrastructure (PKI), and single sign on.

The card will follow the current GSA interoperability standards enabling the Treasury to share information within participating bureaus.

"GSA's Common Access ID Contract and the interoperable standards that we have developed offer agencies the best Smart Card technology currently available in government and the private sector," said Sandra Bates, the GSA's Federal Technology Service Commissioner.

JCB Card 3 Million Milestone

Japan's largest credit card company, JCB, says it has issued more than three million of its branded EMV IC cards in Japan since December 2001. JCB predicts it will reach the 10 million mark by the end of March 2003, with Smart Card holders accounting for 20% of all JCB members.

Visa Certification for PPP

Perfect Plastic Printing Corporation, which through a strategic alliance with ORGA Card Systems offers a full range of Smart Visa products, has been certified to produce Visa Smart Card products in its St. Charles, Illinois facility. It can now offer Open Platform DES, PK and DI, Smart Entry and Smart Entry Pluse and TIBC 3.0.

Gemplus Chase Loan to Lassus

Gemplus is chasing founder, former Chairman and current Board member Dr Marc Lassus to ascertain when he plans to pay back a loan by one of its indirect subsidiaries in 2000 as part of a package to enable him to buy €72 million of Gemplus shares and options.

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However, as Gemplus shares have fallen over the last year Lassus is understood to be trying to renegotiate the terms of the loan.

In its second quarter 2002 results, Gemplus included a provision of €66.9 million to cover the risk of possible non-reimbursement of the loan.

"By taking this provision the company is obviously not indicating any forgiveness of the loan," Gemplus stated. "The company expects to be fully reimbursed by Dr Lassus."

A special committee has been formed to make recommendations to the Board by the end of this month.

3DES Specification Proposal

A consortium of ACI Worldwide, Diebold, Thales e-Security and VeriFone have published a draft security specification proposing the first global interoperable method for triple DES (3DES) session key management. The suppliers also announced their intention to implement the specification, once finalised, in their products and solutions.

3DES is a state-of-the-art key encryption algorithm that raises the level of fraud protection for PIN-based debit transactions initiated at ATMs and point-of-sale terminals.

While standards currently exist for 3DES master key management and 3DES DUKPT (Derived Unique Key Per Transaction), the consortium says there is a lack of standards for session key management and each vendor is required to develop proprietary implementations, placing an added interoperability burden on systems that must transport session keys.

The consortium intends to work with leading card associations, other vendors and industry standards organisations in the US and internationally to finalise and adopt the specification.

To obtain a copy and to submit comments, visit: www.aciworldwide.com/3des/

Smart Cards for Trucking Industry

Giesecke & Devrient (G&D) is supplying Smart Card technology for the implementation of the European Commission regulation requiring all new commercial vehicles to be fitted with a digital tachograph.

Starting in July 2004 digital tachographs, instead of the mechanical version, will be installed in the dashboards of all newly registered commercial vehicles to more easily and reliably monitor drivers' compliance with EU driving and rest time regulations.

Four different card types are being produced for the scheme and will be issued by agencies designated by each country's transport ministry, for example, vehicle registration offices or inspection stations.

The most significant in terms of volume are the driver cards. With some 500,000 new commercial vehicles being registered every year, several million of these Smart Cards will be needed across Europe over a period of five years.

The driver card resembles the European driving license and is produced to ID card standards. It incorporates a photograph and the driver's personal details, which are recorded on the chip.

Drivers use their personalised cards to authenticate themselves to the tachograph before starting the journey and the card remains in the tachograph's card reader throughout the trip. A sensor in the engine compartment transmits the registered data to the tachograph unit in the truck cockpit and driving times, distances, speeds and rest times are all recorded.

Control cards will be issued to authorised individuals to access the data using a portable computer that can be connected to the tachograph, for example, during a police road check or on the trucking company's premises.

Workshop cards will be issued to authorised workshops for use in checking and calibrating the tachograph units, which have to be inspected at regular intervals. Company cards will be used to read out, transfer or print data stored in the tachograph's memory.

News in Brief

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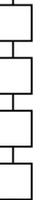
UK 3G Plans on Track

Hutchison Whampoa has confirmed that its 3G mobile network in the UK is to launch as planned in October despite criticisms that early customers could suffer months of "dropped" calls due to technical limitations. A report in the Sunday Times newspaper in the UK, said problems will arise when 3G mobile phones need to handle calls through roaming service arrangements under second-generation (2G) networks.

Managing Director Canning Fok responded by saying that everything was in place for the launch and that dropped calls would not be a "critical problem". However, Fok said the company may not try to expand coverage to the entire UK because it may not be cost effective, in view of the sparse population in some regions.

According to Fok, the October launch will cover at least 50% of the population and 5,000 to 10,000 UK customers will be initially signed up. Hutchison is aiming to cover 80% of the population by the end of 2003.

Vodafone has also emphasised that its 3G plans are on track and are not delayed. Vodafone intends to open the majority of its 3G networks for service towards the end of this year and will begin closed user group trials to test its 3G services. Following this trial phase Vodafone will then begin to market 3G based services in 2003, when Vodafone expects appropriate levels of dual mode (GPRS/3G) handsets.

Pre-Paid Roaming

Bluefish Technologies has launched PrivaCom's SIM Controlled Calling (SCC) targeted at the pre-paid roaming market.

With SCC, a roaming customer will key in a desired number and make a call. Instead of the call being processed in the normal way, the application on the SIM cuts in and triggers the home network's switch. The switch will initiate a call back to the subscriber's mobile phone. The customer accepts the call in the normal way and home switch sets up the call.

GSM Services for Masai Mara

Safaricom, a Vodafone affiliated company and one of Africa's leading mobile telephony providers, has contracted with interWAVE Communications to bring GSM services to Masai Mara National Reserve in Kenya.

The GSM technology, installed at four sites within the reserve, will offer roaming services to foreign visitors as well as providing communications for the local workforce.

Nokia Austrian GSM Contract

Nokia is to carry out further expansion of Austrian mobile operator ONE's GSM 1800 network over a two-year contract period.

Thai Mobile Network

Total Access Communication (TAC) and Nokia have signed a $200 million agreement for the supply of GSM/GPRS/EDGE mobile systems for the expansion of the DTAC brand mobile network in Thailand.

AT&T Expands Roaming

AT&T Wireless has announced it has expanded international roaming to 41 GSM carriers in 35 countries and the US.

New Mobile Payments Solution

Mobileway and Arcot Systems have teamed to offer a mobile payment solution for financial institutions wishing to offer authenticated payment as a mobile service.

The new solution combines Arcot TransFort authentication solution and the Mobile Transaction Tracker from Mobileway which allow issuing banks to verify a cardholder's identity through the use of a password entered on the mobile phone.

The combined offering can be utilised in support of the MasterCard UCAF and SPA initiatives and Verified by Visa for authenticated payments, and will enable cardholders to validate purchases from any GSM phone.

Facial Recognition First in US

A facial recognition system, claimed to be the first of its kind in the US to network image databases between several participating cities, is being installed by Viisage Technology for a collaborative of Massachusetts Police Departments.

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In the $1 million contract, Viisage will implement its FaceExplorer facial recognition solution to help local police departments during investigative and booking processes and allow law enforcement to share information in real time.

The system is designed to help law enforcement officials track and identify known terrorists and drug dealers as well as monitor gang activity.

The contract was awarded by the New Bedford Massachusetts Police Department which represents a collaborative of US police departments in Auburn, Brockton, Fall River, Fitchburg, Littleton and New Bedford.

Viisage Vice President Mike Mazzu said: "Because criminals are becoming increasingly mobile, this will be a powerful tool for tracking and arresting career criminals. This system will remove the criminal's anonymity and ability to hide under aliases."

Datacard and Imagis Team

Datacard has signed a authorised reseller agreement with biometric company Imagis Technologies, and will integrate Imagis' facial recognition systems and offer them as a value-added feature in its portfolio of secure identity solutions.

"There is strong market demand for identity solutions that allow corporations, governments and other security-minded organisations to verify that people are who they claim to be," said Martin Kearsley, Senior Vice President of Datacard's solutions division.

FingerTec Launch New Reader

FingerTec has launched a new biometric reader in Malaysia which it says is the first locally-made biometric reader to support Smart Cards.

FingerTec Worldwide Sdn Bhd's Executive Director Lee Fook Lin said that combining biometrics and Smart Cards in one authentication machine can help ease database congestion as the card will hold the fingerprint template allowing quicker verification.

The FingerTec package is priced between RM4,000 - RM5,000 ($1050 - $1315) per unit, which consists of separate biometrics and Smart Card readers. The Smart Card reader itself costs RM1,000 ($265) and is offered to current FingerTec biometrics users. The product will be launched in October.

Award for Access Control System

Bioscrypt and HID Corporation's new joint access control product, the V-Smart iCLASS reader, was selected as 'Best of Show' at the recent BiometriTech Expo and Conference in New York. The two-in-one reader solution combines Bioscrypt's fingerprint matching technology with support for HID's iCLASS contactless Smart Cards.

Hypercom New Business Group

Hypercom has formed a new business group, Secure Systems & Transactions (SST), aimed at focusing on areas outside its core payments markets. The group will integrate Hypercom's biometrics, secure identification, age verification, and transaction security products and systems.

Fingerprint Access Control

TechWise Consulting has launched a new fingerprint-based access control solution licensed from Hungary's Guardware Systems. The system uses a fingerprint sensor to allow access. If confronted with an intruder who holds the user at knife or gunpoint a different finger can be used to activate the discreet distress signal. Guardware Account Manager Thomas Sondergaard said the system also employs a biometric sensor to detect whether a live or dead finger is used.

Identix Restructures

Identix has unveiled a new business structure following its merger with biometrics firm Visionics. The new organisation now has four business groups, each focused on specific markets and customers - federal, state/local government, commercial and international.

In Search of the Global Standard

by Matt Ablott

Steve Brown

Smart Cards Now talks to Global Platform Chairman Steve Brown

The Smart Card industry, like the IT industry as a whole, has long been hindered by a lack of non-proprietary standards and interoperability difficulties. GlobalPlatform was launched in October 1999 with a firm mission to produce a set of multi application Smart Card standards that could be used by everybody across every sector.

GlobalPlatform's original specifications derived from the Visa specification and its first job was to manage this transformation. This eventually led to the launch of the GlobalPlatform card specification, which is currently in version number 2.1 and claims to have been downloaded over 10,000 times from the organisation's website.

According to its current chairman, BT Ignite's Steve Brown, GlobalPlatform is well on its way to becoming the multi-application Smart Card standard from a technology point of view. "Companies now tend to think that if they can get to that 'front door' called GlobalPlatform and work with our specification interfaces, then they can choose the exact flavour of platform - Java, Microsoft and potentially MULTOS, that they want. At the base level the standard will be the same so it is able to be used and managed ubiquitously," he says.

Brown cites MasterCard, who joined the GlobalPlatform project last year, as an example of how the global specification standard could be applied: "They have joined GlobalPlatform to help evolve the standards and consider how the GlobalPlatform 'front door' would help standardise the use of Smart Cards which have been deployed on the various platform technologies such as JavaCard and MULTOS."

Technology standardisation may act as the core aim of the organisation, but Brown is also adamant that the specifications must also be viable from a business and marketing point of view. This means that rather than simply focusing on the technology, GlobalPlatform also claims to look at how the technology can support these business and market aims. "We have a rule," says Brown, "if there isn't a business need for it then we won't do it. I've been involved with companies and industry bodies before that have spent a lot of money on technically elegant solutions that nobody will implement."

GlobalPlatform is funded by its membership scheme. A full membership, which allows the member to run for office and participate in and chair all committees, costs $25,000 plus an initiation fee of $50,000 and typically includes the big players such as Visa, MasterCard, American Express and JCB.

The next level of membership is the 'participating' member ($20,000) which is targeted at organisations that have an interest in only one of the disciplines as it is restricted to join only one of the group committees.

Below this is the 'observer' member, which costs $10,000 ("Allowing companies to stick their toe in the water and determine what GlobalPlatform is all about," says Brown) and finally a $5000 membership restricted to government departments (eg: the US Department of Defense) and not-for-profit organisations.

The board itself is made of eleven directors who are elected by the membership. A board seat lasts for two years and the board is split into two staggered terms of office (a group of five and a group of six) to ensure continuity by preventing all the board being replaced at the same time.

In March this year GlobalPlatform invited its membership to contribute ideas, business requirements and IP that should be considered for inculsion in the next version of its specification standard. According to Brown, a whole new working group had to be set up to just to sift through all the IP and new business requirements due to the high level of response.

Industry Insight

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"Most contributions come from existing members, previous members or from people who are thinking of joining - but there were no restrictions," says Brown. However, he estimates that a typical window for a new piece of specification to be introduced is 18-24 months. "Anyone who makes the implementation needs to know that a new update isn't going to be released in 3 months time," he says.

With the fundamental specifications in place, GlobalPlatform conducted a strategic review of the organisation last year to develop its future strategy. According to Brown one of the next steps for GlobalPlatform will see it improving its geographical reach with the organisation recently conducting seminars in Japan and Canada. Other advancements include efforts to break across the traditional boundaries in order to focus on the commercial marketplaces such as health, retail, government and transit, and a move to secure more strategic partnerships and relationships. "It is important that we recognise that there are experts in other parts of the industry who have complimentary skills," says Brown.
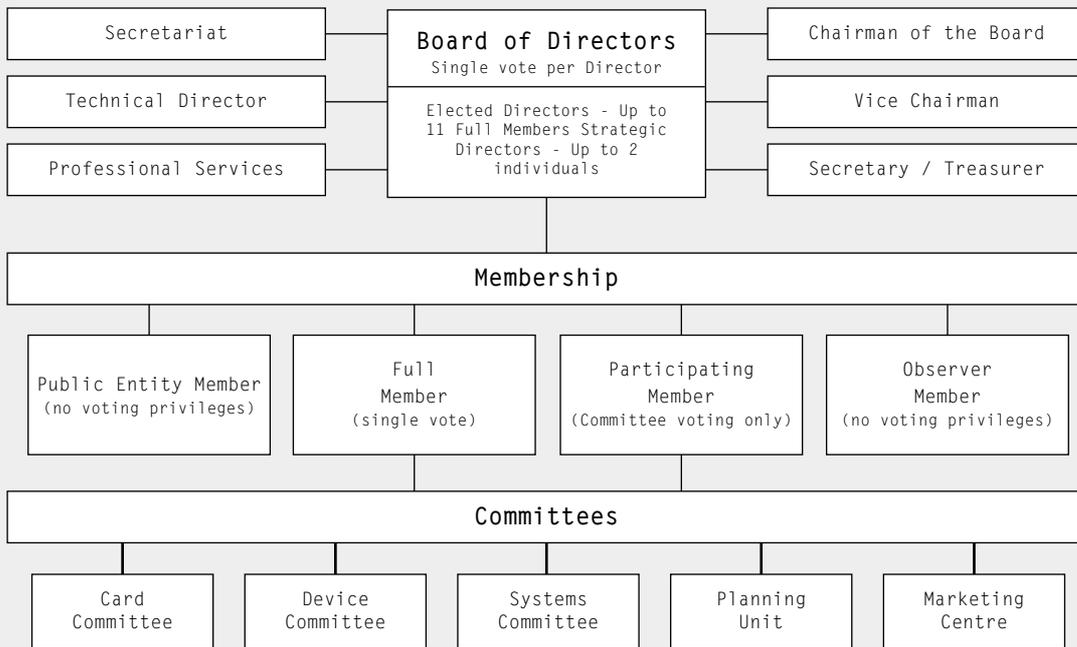

Figure 1
Global Platform's Organisational Structure

ACI Worldwide	Gemplus	Nmda	STMicroelectronics
ActivCard	Giesecke & Devrient	Nordea	Sun Microsystems
Aspects Software	Hitachi	NTT	Thales e-Security
Bell ID	ICC Solutions	Oberthur Card Systems	Toshiba
BT Ignite	Infineon	ORGA	TSYS (Total System Services)
CardBase Technologies	Ingenico	Proton World	Trusted Logic
Cards etc	JCB Cards	Schlumberger	
Citigroup	KeyCorp	Sermepa	TTA (Telecommunication Technology Association)
Cryptomathic	MasterCard	Setec	
DataCard	Mobile Mind	Shera	Visa
First Data	NEC	Sonera SmartTrust	Visanet (Brazil)

Figure 2
GlobalPlatform Principal Membership

Website
💻 www.globalplatform.org

Qianflex Wins Chinese Approval

SchlumbergerSema has announced the launch of its new Qianflex Smart Card, which has been certified by the Ministry of Labour and Social Security (MOLSS) in China for use as social security card in the country.

According to the company, the Qianflex Smart Card is among the 'selected few' to receive certification from the MOLSS, having passed all the requirements under the MOLSS Certification Program

"It's great to import Smart Card technology into our social security system. We are confident that by doing so, it will help to enhance speedy information flow to enable our smooth transition to a higher level of modernisation for the current system," said MOLSS officials in a statement.

This launch also marks the transition of the card from a single banking application to a card with multi-application capabilities.

Sentry PR's Cross Platform Support

Australia's Sentry Project Management (SentryPR) has announced that its existing Smart Card e-signature application, ProtectID, has been launched on the Multos and JavaCard platforms.

The company claim that the solution simplifies card personalisation and the rest of the card lifecycle, which translates to lower card costs, lower system integration costs and lower card management costs. Typical applications for the solution include payment applications, e-signature authentication and loyalty schemes.

"We know the difficulties issuers are having with the number of different system components. That's why we aimed for a common interface so that your PC or other system software does not care if the card is a Java Card or a MULTOS card," said Dr Brian McKeon, Managing Director of Sentry PR.

Myanmar e-Passport Rolls Out

The Myanmar electronic passport system has been officially unveiled this week by the government's e-national task force.

The system was developed by Iris corporation and

5000 of the passports are to be issued this week to Myanmar diplomats, officials and selected members of the business community as part of a pilot programme.

The passport is a similar system to the one used in Malaysia but features an additional fingerprint identification system. The Myanmar version took ten seconds to be verified at automatic gates installed in the departure terminal at Myanmar's Yangon International Airport in recent tests.

RNG Gaming Smart Chip License

Smart Chip Technologies (SCTN) has announced that US Smart Card gambling specialists RNG Gaming has agreed to license and pay advance royalties to use SCTN's loyalty patent and end-to-end loyalty system.

RNG Gaming will integrate Smart Chip Technologies' e-llegiance and LoyaltyCentral loyalty system with its gaming software and back-end tracking system to provide Smart Card driven wireless terminals for in-room and off-site online gaming in casinos, resorts, aeroplanes, and other venues.

Under the terms of the licensing agreements, RNG Gaming will own an exclusive world-wide license and sublicensing rights for gaming and has agreed to pay SCTN a minimum of $1.5m in the first two years, with anticipated SCTN revenues of at least $9m by year five.

Health ID Alliance

ORGA and Precise Biometrics have formed an alliance which will see ORGA integrate Precise Biometrics' BioMatch fingerprint software into its Micardo Smart Card family.

According to the companies, the deal has been formed to meet the increased demand for fingerprint authentication in the Health & ID markets, where privacy combined with secure identification of the cardholder has become critical.

The main purpose of the agreement is to provide customers within these segments a Smart Card solution with the built-in option of fingerprint authentication, which aims to provide the user with greater security and convenience.

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Siemens Telecoms Scaled Down

Siemens are to scale down two of its key telecom equipment units according to a report by Reuters last week. An employee body at the company hinted that 4,700 jobs may be lost as a consequence.

The business units effected are ICN (fixed line equipment) and ICM (mobile handsets and network equipment). Both units lost money in the third quarter, hurt by capital expenditure cuts by telecom operators. Analysts have stated that company operating margin targets of 8-11% for the business units in 2004 are unlikely to be achieved.

"The company has signalled it wants to reduce the number of jobs at ICN by about 4,000 by the end of September 2003, bringing to about 33,700 the number employed at ICN," Ralf Heckmann, the head of Siemens' works council told Reuters.

Siemens refused to rule out further restructuring measures if the operating environment weakened. Since last year the company has axed 32,400 jobs cuts - roughly 7% of its workforce.

ActivCard's Record Revenue

Identity management specialists ActivCard has announced its financial results for its second quarter 2002 (ended June 30).

Highlights of the quarter included record company revenue of $9.6m, an increase of 18% over the $8.2m recorded in the previous quarter and a year-over-year increase of 13% from the same period last year. ActivCard's ongoing work with the US Department of Defense (DoD) was cited as a key factor in the increased revenue.

However, net loss for the quarter increased to $4.7m ($0.11 per diluted share), compared to a net loss of $2.7m ($0.07 per diluted share) in same period 2001.

Chip Revenue Improvements

German chip maker Infineon posted revenues of €1.4 billion - up 1% from the previous quarter and up 10% from the same period a year ago.

Net loss amounted to €76 million, a sequential improvement from a loss of €108 million in the previous quarter and from a loss of €371 million year-on-year.

"Infineon continued to improve its business performance and gained market share in an ongoing difficult market environment. We made further progress in cost reductions and increased revenues as well as improving our earnings in communications and automotive electronics despite continuous strong pricing pressure and adverse market conditions for memory products," said CEO Dr Ulrich Schumacher.

Semiconductor manufacturer STMicroelectronics reported net revenues for the second quarter of $1,531.1 million representing a 13% sequential increase from the $1,355.2 million in the first quarter and was just below the $1,587.2 million of last year's second quarter.

Pasquale Pistorio, President and CEO, said that this was driven by higher unit volume, as pricing for most product families remained under pressure."

AFC Demand Benefits Cubic

Cubic Corp. reported a 34% increase in earnings for the third quarter of fiscal 2002 and a 16% increase in sales from the same period last year.

For the first three quarters of fiscal year 2002, net income was $19.3 million, up 29% from last year. In the same period, sales were $410.6 million compared to sales of $370.4 million for fiscal 2001, an increase of 11%.

The transportation segment sales increase in the current year was due to higher work volume on contracts in the US and Canada as well as in the UK, where installation of London Transport's Prestige contract is nearly completed and Smart Cards were being phased in. Cubic said it as benefitting from the need among cities for upgraded, high-tech automatic fare collection hardware and software systems for public transit.

For more information visit ...

Siemens
www.siemens.com
ActivCard
www.activcard.com
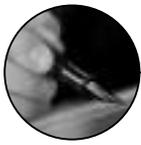**Infinion**
www.infineon.com
STMicroelectronics
www.st.com
Cubic Corp
www.cubic.com

Wireless Networks: The Next Web? Or WAP?

by Benjamin Johnson, Microexpert Ltd

Benjamin Johnson

The latest hot topic in the data networking arena is 'wireless'. Anybody who is anybody wants to be seen to be using and developing wireless data networks. Whether it is British Telecom announcing a UK-wide series of wireless 'hot-spots' or the average SME wanting to allow laptop and PDA users to wander the office without being tethered by cables. Wireless offers a number of benefits to both the end-user and the company implementing the network. For the user the benefits are speed of access (compared to alternative technologies such as GRPS), flexibility (not having to work in one specific location) and the always-on nature of the technology (i.e. the user can walk from their desk to the conference room whilst maintaining their connections). For the company implementing the network the benefits are cost (the cost of the roll out of a wireless network is much lower than that of a fixed wired network), the ability to 'move' the network (for example if the company moves offices) and the fact that their employees can work anywhere whilst in range.

As is often the case with these emerging and 'hot' technologies, in the rush to come to market security has been a token afterthought. The implementation of the encryption scheme used with the most prevalent of the wireless technologies (802.11b) has been shown to be fundamentally flawed.

First of all let me explain why security is of such importance when using wireless networks - it is actually very obvious. When using a normal wired network an intruder or cracker would need to either penetrate the physical building security or find a method of remotely accessing the network - such as a modem pool or an unsecured Internet connection. With a wireless network the network spreads beyond the perimeter of the building or possibly even the campus - to the office next door, the car-park, or even to the coffee shop at the end of the street. The cracker can take his time and capture data at his leisure.

To protect from people trying to capture your data, access your private information - or even just use your Internet connection, some sort of proven authentication and encryption layer is needed. What this essentially boils down to is running a Virtual Private Network (VPN) over the wireless connection - from each client to a central server. There are many technologies and protocols which could be used for this (Microsoft's L2TP or PPTP for example) but the best method would be to use IPsec - this offers an encrypted TCP/IP stack running over a standard IP capable network connection, is cross-platform capable and provides extensible authentication. However, going to all of these lengths to secure the network and then using simple usernames and passwords to authenticate users, is like installing an alarm system and then leaving the front door open. There are various alternative methods of authentication, most of which are two-factor. It is possible for example to integrate the SecureID one-time-password system with IPsec. Other options are the Aladdin eTokens (which are ideal for use as a certificate store) or Smart Cards themselves.

At Microexpert we specialise in using Checkpoint Firewall-1 in conjunction with the Aladdin eTokens to provide an easy to use and very secure solution to the wireless security conundrum. The bonus of using this system is that it also provides a very stable and secure firewall for your business as well as a remote access VPN for the road-warriors within your company.

Contact

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Events Diary

September

4 - 5   SmartLabels 2002, Churchill College, Cambridge, UK

IDTechEx
Website: www.idtechex.com

9 - 10   Retail EPOS & Cards - Moving Towards EMV,
The Hatton, London, UK

Andrew Gibbons
SMi Conferences
Tel: +44 (0) 20 7827 6156
Email: agibbons@smi-online.co.uk
Website: www.smi-online.co.uk/retailepos.asp

16 - 18   e-Safety Congress and Exhibition, Lyon, France

Mobility Events & Services BV
Strijkviertel 56
PO Box 168
NL-3454
ZK De Meern
The Netherlands
Tel: +31 (0) 30 666 73 88
Website: www.lyon2002.itscongress.org

17 - 18   Carriers World Europe, Royal Garden Hotel, London, UK

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Decentralised Smart Card Data Storage

by Jorg Huser. CEO/Founder, Micro Survivor, Inc.

Jorg Huser

September 11th forced many companies to re-think their storage strategies, increasing business requirements for continuity, performance, and capacity. To realise the benefits of greater resource utilisation and data accessibility, organisations must rethink their strategy to manage and protect sensitive & valuable data.

Emerging and Secure Smart Card technology that has the potential to substitute DVD, CD, Hard Disk Drives and other storage media. This would enable to protect information in transit, in use, in storage and allow for super-distribution models. This technology allows for storing information in a decentralised way with a lot lower risk factors and is based on the proven principle "divide and conquer".

There is a variety of promising emerging technologies available - like cellular database technology, to combine different sources of data, peer-to-peer networks to connect all the above and thin client/server models for distributed implementation, which would allow for implementation of so called pervasive computing systems with decentralised data storage & protection. At least in the data world we should avoid World Trade Centers and emerging information technologies enable us to reorganise the data on higher and distributed levels. The US banking system is based on only three central data centres and an attack could have a devastating impact on the US economy. Let's make the world a better place and more ethical by increasing both security and privacy of sensitive data in transit, in use and in storage. The highest risk appears if too much sensitive data is concentrated on one point - fortunately, today's emerging technologies allow for decentralised systems in a scalable way.

In addition to that, Smart Cards are marketing instruments and in combination with a secure container (large data storage) for digital goods can evolve to a moving digital marketplace in the physical world. Finally, we have a pervasive computing system that has system inherent rules that can be controlled by human beings with alien intelligence. The alien intelligence helps to maintain the system and gives the user incentives to use it. Human beings are not capable of overseeing millions of cards, billions of transactions and data without "Alien Intelligence".

"Alien Intelligence" refers to a growing family of techniques used today that enable computers to recognise patterns that humans cannot recognise, "learn" behaviour that humans cannot learn, explore data too vast for human exploration, "breed" programs that humans cannot write, assemble logical reasoning too complex for humans, evolve "brain mechanisms" that humans cannot design, and exhibit emergent properties that humans cannot anticipate. These things happen at electronic speed.

Finally, we have reached a meta-level of control/influence for chaotic systems and the task is to find the strange attractors supporting profitable and ethical outcome in a complex world. There is a huge potential for new technologies and business models.

Let's go for it!

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opinion • Events Diary

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More Than Just a Flash in Japan?

by Andrew Kay, Principal Researcher, Smart Card Project Team, Sharp Labs Europe Ltd

Andrew Kay

The One Megabyte Smart Card from Sharp is a first-of-its-kind product, allowing ROM-free development, large and numerous applications to co-exist on a single device, shorter time to market and the possibility of field upgrades. The card has already found an application in the Japanese eGovernment's IT Cities project, but many card issuers and application writers in Europe are still uncertain whether Flash memory can meet their needs. This article aims to show that Flash is as usable as EEPROM, as well as faster and denser.

Flash Characteristics

Flash memory is a kind of non-volatile memory which works on similar principles to EEP-ROM, but with only one transistor per cell rather than two. The transistor in each cell has an isolated 'floating' gate which may either hold a charge, thus allowing current through the transistor channel (logic 0); or else hold no charge, thus preventing current flow (logic 1). A fairly complex controller is required to manage the memory at the lowest level, and for this reason Flash memories become more economical (in area) as they grow in capacity. The smaller physical area per cell makes Flash difficult to probe, and it may be more secure than EEPROM for this reason.
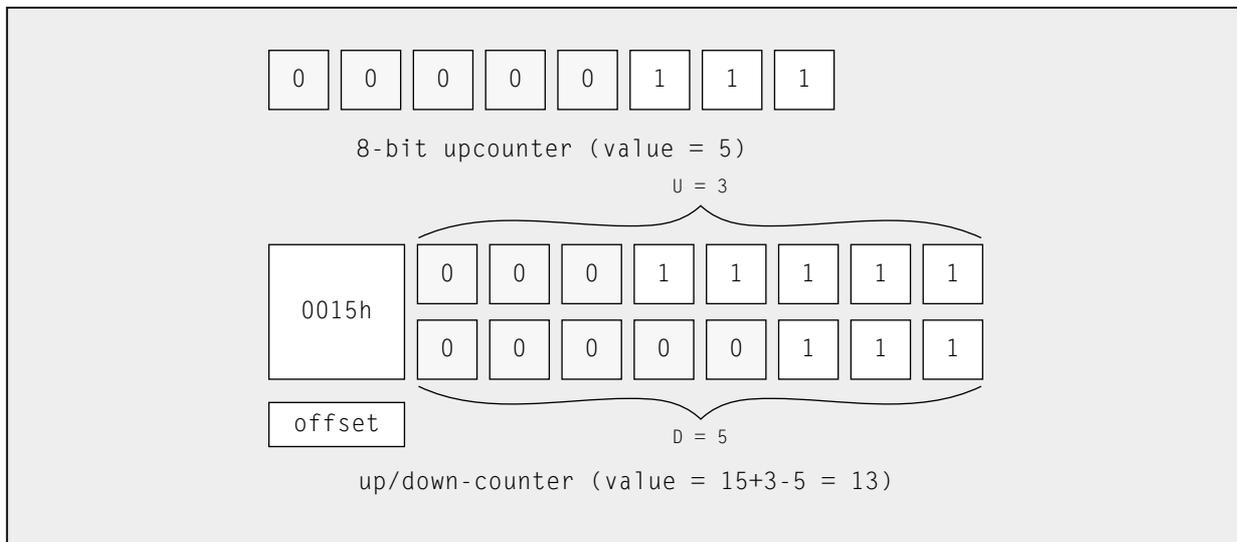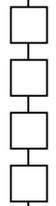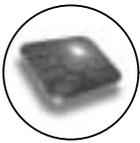

Figure 1

As with EEPROM, Flash memory comes in NAND and NOR flavours: NOR type, which permits random access to any data with no loss of performance. NOR type Flash memory is suitable for storing both executable code and persistent data. By contrast, NAND type Flash must be read sequentially, and is most useful in streaming applications. A 16 bit word read takes under 100ns on our card, a little faster than a typical EEPROM.

Flash memory writes (logic 1 to logic 0) are much faster than EEPROM writes. Our card supports a 10us write (16 bit words), whereas EEPROM typically requires 5-10ms per write.

The Sharp Smart Card memory has an endurance of at least 100,000 write cycles, and data retention of at least 10 years, making it suitable for both long term storage (such as O/S) and for frequently changing data.

The interesting aspect of Flash memory (from a programmer's view) is that the 'erase' transition back from logic 0 to logic 1 may be performed only on a page of memory at a time, so that the whole area returns to the '1' state. The area/complexity trade-off means that on our Smart Card there are 15 pages of 64KBytes each (plus 8 pages of 8KBytes), and an erase takes almost a second. It turns out that this apparently unreasonable feature can be programmed around with a few simple data structures, and even used to advantage.

You can think of a Flash memory page as a notched stick. It's easy to add new notches at any time, but to remove notches you have to plane the whole surface (or get a new stick!).
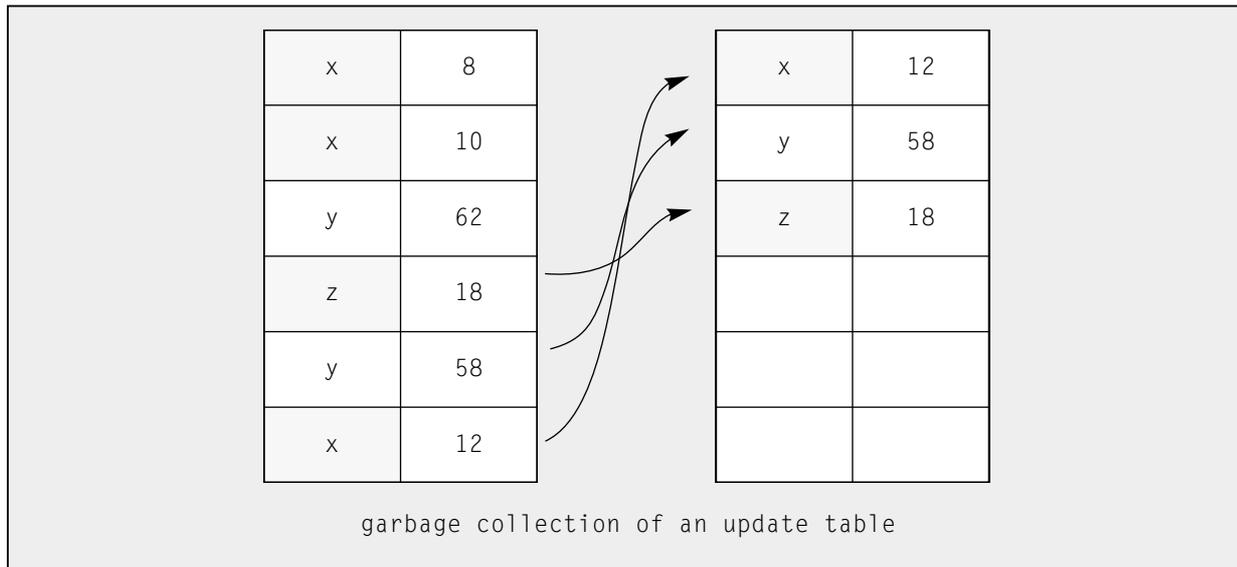
x	8		x	12
x	10		y	58
y	62		z	18
z	18			
y	58			
x	12			

garbage collection of an update table

Figure 2

Billions of Updates

Since page erase takes time, and since each erase cycle gradually wears out the memory, we need to use data storage methods that don't require frequent erases. Our strategy will be 'use the whole page before you erase it'. This means that we will fill up a page gradually with new data, at which point some previous data becomes superseded. When the page is full and ready for erasure we copy just the current data to a fresh page, and then erase the old one. This process is a kind of 'garbage collection', and to perform it we have to keep a blank page available at all times. This has the added advantage that we can cycle through the pages, making sure that we balance the amount of wear each receives. Further, because there could be thousands of updates before a 64K page is erased, the endurance life of the megabyte card can easily be extended into the billions of updates range -- enough for a transaction every second over ten years, which could be relevant for a data-logging security module.

A simple example of the kind of data structure we have in mind is a counter (see *figure 1,* opposite left). Suppose we want an up-counter which can run from 0 up to 64 (but not down again). We reserve 8 bytes (= 64 bits) of storage for the up-counter, which is initially all 1 bits (and means a count of 0). To add one we simply set one of the 1s to 0. The value of the up-counter at any time is just the number of 0s set. This counter can count up, but not down, so to make an up-down counter we take a pair of up-counters, U and D, and a signed offset S (as a normal binary value). Initially S=0, U=0 and D=0. To add one we increment U, and to subtract one we increment D: the value of the counter is S+U-D. When U or D is full we have to allocate a new region of memory (S',U',D'). By taking the new offset to be the current count (S'=S+U-D) we can begin again with U'=0 and D'=0. When garbage collection occurs we just keep the most recent value.

Another example is the data log (see *figure 2*, above), which may be used for recording updates to a number of different variables. We can use two words per update record, the first holding the variable name and the second holding its value. To change a variable we append a new record with the new value; and when memory is full the garbage collector copies just the latest value of each variable to a new Flash page, before erasing the old page. This scheme can be optimised for speed by using linked lists to accelerate the searches - there are many possibilities.

Conclusions

Using Flash memory requires a slightly different approach to that of EEPROM, but the benefits are significant: better performance and greater capacity. To prove this, Sharp is currently building a Java-like interpreter for its Smart Card which uses Flash efficiently using data structures similar in spirit to those mentioned here. We are also constructing a library which will make Flash management simpler for general users.

Smart Card News On Line: Round-Up

Smart Card Group's *Smart Card News On Line* service is emailed to subscribers every working day, reporting on industry events as they happen. This service is available FREE to *Smart Cards Now* subscribers (£100 per year for non-subscribers). For further details and to sign up please contact Amanda Pearce - amanda.pearce@smartcard.co.uk; tel: +44 1273 515651 (further contact details are available on page 03). Here's a selection of the headlines we covered in July:

Corporate

☐ Infineon Shipped 2 Billion Chip Card Modules
☐ Telstra Confirms Purchase of CSL
☐ MasterCard Complete Europay Merger
☐ Prism Issues Second Profit Warning
☐ Toshiba Plans Wireless Office
☐ ACG Still On Track
☐ Authentos Fight For Survival
☐ Iris Set To Expand Operations
☐ ARM Break Into China
☐ ID Data Rocked By Losses
☐ Authentos Confident Over Negotiations
☐ Western Union Give First Data A Boost
☐ NETS Select SchlumbergerSema Smart Cards
☐ Drexler Report Strong Quarterly Figures
☐ Gemplus Win Analyst Smart Card Award
☐ Schlumberger Announce Second Quarter Results
☐ ID Data Win Post Office Contract
☐ ERG Fight Back Over Card etc. Allegations
☐ Nokia Cut Earnings Forecast
☐ iRV Snap Up Scarab Systems
☐ Infineon Announce Third Quarter Results
☐ First Data Acquire Payment Subsidiary
☐ Telsim Resolve Debt Dispute With Siemens
☐ ARM Buoyed By Licence Growth
☐ SCM Announce Second Quarter Results
☐ Muhlbauer Holding Turnover Drops 28%
☐ Gemplus Chase Former Chairman Over Loan
☐ Gemplus Find The Road To Recovery
☐ First Data Acquire Majority Stake In OMNIPAY
☐ Cubic Report Strong Quarter
☐ Identix Announce Company Restructuring

Government

☐ US DoD to Test Four Biometrics
☐ UK Take Next Step On ID Card
☐ Philippines Behind Asia On Smart Cards
☐ SchlumbergerSema Launch eGovernment Smart Card
☐ Thales Acquire UK Government Foothold
☐ Datakey Expand Canadian Government Contract
☐ Mexico Moves To Smart Tax Payment System
☐ Viisage Win $1m US Police Contract

Banking

☐ ORGA Deliver Multos Cards To Taiwan Bank
☐ Dione First To Achieve New EMV Standard

☐ DaimlerChrysler Selects G&D Smart Cards
☐ UK Banks Overlook Mobile Investment
☐ APAC Urged To Make Smart Card Transition
☐ Aconite Launch New EMV Convergence Family
☐ NCR Win Chinese ATM Contract
☐ ANZ Launch Smart Card Reward Scheme
☐ BancNet Set For Smart Card Launch
☐ Credit Saison Roll Out Verified by Visa
☐ CPI And ST To Offer $0.99 Smart Card
☐ New EMV Card Launched In Asia Pacific
☐ euroConex To Offer JCB Card

ID & Authentication

☐ Virginia Beach Adopts Facial Recognition Technology
☐ VASCO Increase Corporate Network Business
☐ IBM Sign Up Partners For Israeli ID Contract
☐ FingerTec Launch Biometric Smart Card Reader
☐ Access Control System Wins Expo Award
☐ Datacard To Integrate Imagis Biometrics
☐ TechWise Launch New Biometric Solutions
☐ SAP And HP In ID Verification Alliance

Telecoms

☐ Gemplus Enable First Brazilian GSM Network
☐ Indian Mobile Use On The Up
☐ SchlumbergerSema Form CDMA Roaming Alliance
☐ Nokia Launch MMS Service In Singapore
☐ Lebanon Looks To End GSM Row
☐ Incard Join SIMalliance
☐ US Wireless Merger On The Cards
☐ Ericsson Win GSM Contract In Nicaragua
☐ Nokia And TAC Deliver Thai Mobile Network
☐ ACG Launch Chip Internet Service
☐ UK Snap Up New SIM Card Patent
☐ Rainbow Token Debuts On PocketPC
☐ SchlumbergerSema Claim Stake In Mobile Partner
☐ New Mobile Payments Solution
☐ Nokia Expand Austrian GSM Network
☐ Hutchison UK 3G Plans Stay On Track
☐ France Telecom Sell Off ST Stake
☐ Tata Launch Smart Phone Cards In India

Technical

☐ Utimaco Suite Integrates Datakey Smart Cards
☐ Tel-Tron Selects Atmel MicroTransmitter

☐ QualTeq To License Card Technology To Plastag
☐ eEurope Calls For Smart Card Interoperability
☐ ST Launch World's First USB-Certified Smart Card Chips
☐ M-Systems Launch SuperMAP cores
☐ New 3DES Spec In The Pipeline
☐ SHHIC Licenses ARM Core for Smart Cards

Retail

☐ FNMT-RCM Launch Smart Loyalty Card
☐ UK Loyalty Scheme Receives Funding Windfall
☐ Visa And SKT Team Up For Mobile Payments
☐ Catuity Win VeriFone Innovation Award
☐ Hypercom Launch Net Based Payment Solution
☐ SAGEM Secure French e-Purse Certification

Transport

☐ ASK Expand French Transport Network
☐ Cubic Extend Washington Transit Scheme
☐ Iris Deliver Smart Passport In Myanmar
☐ Satellite Billing For UK Road Users

Healthcare

☐ FNMT-RCM Launch Employee Health Card
☐ Spain Develop Cardiac Smart Card

Leisure

☐ Pace Knocked By BSkyB Contract
☐ NRT To Resell @pos In Gaming Markets
☐ FreeStar Deliver Payment Solution To Casino
☐ SCM Join Pay TV Piracy Consortium
☐ Korean Digital TV Set For Take Off
☐ UK Leisure Card Breaks New Ground

Misc

☐ EDS Delivers Millionth Advanced Smart Card
☐ Saudi University Selects Bell ID Campus Card
☐ Gemplus Develop 'See Through' Card
☐ American Child Chipped
☐ OTI Launch Contactless Solution At University
☐ ADS Develop GPS Chip For Children

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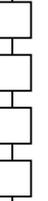
On the Road to Recovery?

Gemplus and Schlumberger Results See Cause For Hope

A number of major players in the Smart Card industry have announced increased sales and smaller losses in their second quarter reports. In the continuing difficult market environment the figures indicate that they are finally making their first steps on the road to recovery, but all are cautious about their return to profitability.

Gemplus second quarter figures, which were released at the beginning of August, saw revenue finally make begin to improve up rising 19% from the previous quarter to €209.8m. Gross profit also leaped 34% to €48.4m.

However the Smart Card market leader was also forced to make a €66.9m ($65.6m) non-cash charge against a loan made to its founder and former chairman Marc Lassus, which meant that losses for the second quarter more than doubled.

Interim CEO Ronald Mackintosh said: "These results show good progress towards our immediate goal of restoring Gemplus to profitability. We are reasonably confident that we shall achieve this in the fourth quarter of this year."

The Gemplus used the publication of the results to announce that Mackintosh was stepping down as interim CEO - a position he held since the high profile departure of Antonio Perez in December 2001. The Board said it would announce Mackintosh's successor by 14th August though this date has since passed and the company has still yet to announce his replacement.

Elsewhere, Schlumberger reported operating revenue of $3.4bn and net income of $196m for the second quarter. SchlumbergerSema, the company division which includes its Smart Card operations, achieved revenues of $853 million for the quarter - a 2% sequential increase, which it said reflected "stronger mobile communication cards activity and a higher level of IT services in the UK", among other things. Compared to last year revenue fell 3%.

The company said that volume product Smart Card successes included selection by MasterCard as a key Smart Card supplier to support its EMV migration and the delivery of the millionth FIPs-certified Smart Card for the US Department of Defense Common Card Access program.

Standby for Action!

On Saturday 13th July members of ORGA completed climbs of mountain peaks Ben Nevis in Scotland, Scarfell in the Lake District and Snowdon in North Wales in little over 24 hours. The team consisted of Nigel Charlton, Andy Gill, Carola Wenderborn, Tim Cronin, Mark Cronin, (pictured right) and driver Nicki Wright and Toby the dog. Together they raised £2,000 for charity Action Research, and also received a medal for their achievement.

Websites

- www.orga.com
- www.actionresearch.org.uk

EMV Migration Leads the Wave to Global Smartcard Rollout - Fraud Moves Elsewhere

Waqar Qureshi, Vice President, Visa International EU.

EMV migration, initiated by Visa EU over three years ago and showing very positive signs of meeting its critical mass targets, has created a huge confidence factor in the rest of the world, with new programs being announced almost on a daily basis. Even the US has launched multi-application programs incorporating payment, loyalty and Internet banking. In Asia whole countries are now confident enough to move to nation wide programs such as the Hong Kong ID card, the Taiwan healthcare card and finally the China National ID card has also been launched. The three years of leadership shown by Visa EU and its members is seen as a positive pull to other parts of the economy to move to EMV based platforms.

Now that the majority of EU banks have started upgrading cards, terminals and back office systems to meet the deadline of 1 Jan 2005 (otherwise they become liable for fraud committed on their magnetic stripe cards and terminals) a huge demand for the infrastructure is providing business opportunities to the vendor community. More importantly cross regional arrangements to safeguard against the liability shift are being negotiated to stop the fraud bubble from moving into unprotected areas.

Signs of fraud reduction in locations with chip cards and chip accepting terminals is beginning to come to the surface and reinforces the need for the investments made by the leading banks in the EU. The end of 2005 will herald a significant reduction in card fraud and banks, consumers and merchants will all benefit from this providing the framework for the next generation of multi-application cards and systems.

By 2005 the majority of the different regions around the world will have implemented some sort of Smartcard program taking the lead from EU followed by Asia Pacific, Central Europe, Latin America, Canada and finally the US as the fraud bubble moves from region to region. Once the majority of cards and terminals will have been chipped, 'card holder present' fraud will have reduced significantly bringing Visa, MasterCard/Europay, American Express and JCB onto a global EMV platform.

During this change over, the consumer will feel minor changes to their payment experience as cards will be dipped rather than being swiped and PIN will be used to validate payments rather than signature, with virtually no additional time overhead. Consumer research shows that the migration from magnetic to chip is seen as a positive move to protect them in the case of lost or stolen cards and feel that chip offers far more security than magnetic. This change of behaviour will be global and will pave the way for additional services to be offered at the point of sale including selection of Debit, Credit, Points/Coupon redemption and yet to be discovered new applications. •