PKI International Scan

———

November 30, 2003 °

PKI International Scan

International PKI Scan

Introduction

This report represents ongoing research conducted by the Government of Canada (GoC) PKI Secretariat to keep abreast of developments in secure electronic transactions and service delivery. The primary focus is on how federal governments are addressing the requirement to ensure a trusted environment to enable electronic delivery of services to the public. The document is compiled using information gathered from web sites, news reports, presentations from visiting delegations, and ongoing information exchanges with internal and external parties. Since most of the research has been compiled through secondary sources, the information in this document reflects how the profiled organizations present their situation, rather than a detailed and vetted analysis of actual progress. Also, due to the rapid pace of change in this area, new developments are happening all the time. The report should not be considered a final report, but rather an evolving source of compiled information for reference purposes.

Global/Multi-nation Activities

Towards an EU-US Cooperation on Biometric Standards[1]

According to US Homeland Security Secretary, Tom Ridge, the US and the European Union should cooperate and lead the world in establishing standards for the use of biometrics in travel documents. Ridge made these remarks subsequent to a meeting with German Interior Minister, Otto Schilly in Berlin on October 29, 2003. Specifically, Ridge suggested that global standards could be adopted if the US and the EU both agreed on ways to combine fingerprints and facial recognition in passports.

EU Directive on Privacy and Electronic Communications Enters into Force[2]

Directive 2002/58/EC of July 12, 2002 established EU standards and basic obligations for the protection of user privacy and personal data in electronic communications. EU Member States were to transpose this Directive into national law by October 31, 2003. The Directive guarantees the protection of confidentiality for all forms of private communications over public electronic networks, including phone calls, faxes, e-mail, SMS and MMS. Its impact on e-commerce activities includes prohibiting the sending of unsolicited commercial communications (spam). It also impacts the provision of e-government services as the protection of personal data is a major user concern when dealing with government in an online environment.

Network and Information Security Agency for the EU[34]

European telecommunications ministers announced the creation of the European Network and Information Security Agency (ENISA). ENISA will act as a knowledge centre on issues of network and information security. It represents the first systematic

---

[1] http://europea.eu.int/ISPO/ida/hsps/dsp_showDocuemnt.hsp?printerVersion=1&documentID=1719

[2] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocument.jsp?printerVersion=1&documentID=1722

[3] http://www.out-law.com/php/page.php?page_id=networkandinformat1069412787&area=news

[4] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocument.jsp?printerVersion=1&documentID=1828

cross-border co-operation and information exchange between the EU Member States. ENISA will begin operations in January 2004 and will initially be based in Brussels.

Council Endorses EU E-government Priorities[5]

Subsequent to its November 20, 2003 meeting, the Telecom Council of Ministers of the EU endorsed the EU e-government priorities for the coming years. Specifically, the Council invites the European Commission, Member States and Acceding Countries to: launch in 2004 pan-European e-government pilot projects; explore by the end of 2004, interoperable European solutions for citizens' and companies' electronic authentication; increase experience regarding common approaches to key elements of seamless pan-European e-government service provision. Member States are encouraged to identify remaining legal and regulatory barriers to e-government at the national level and start eliminating them. Similarly, the European Commission is invited to identify remaining legal, regulatory and organisational barriers to e-government at the European level and present solutions to overcome them.

Legal Barriers to E-business Consultation[6]

The European Commission's Enterprise Directorate-General has released the results of its online consultation with businesses regarding legal barriers to e-business in the EU. Replies from 651 enterprises were received with a majority confirming that the legal framework does not constitute a major barrier for doing business electronically. Only 30% indicated that they had experienced legal problems, in particular with the conclusion of contracts, but also with taxation, electronic signatures or the provision of information society services. A Commission Staff Working Paper, based on the data collected, will be published in March 2004.

The statistical results are available at: http://europa.eu.int/comm/enterprise/ict/policy/b2b-con2003/statgraph.pdf

---

[5] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocument.jsp?printerVersion=1&documentID=1830

[6] Baker & McKenzie E-law Alert, 2003-11-24 ; http://europa.eu.int/comm/enterprise/ict/policy/b2b-con2003/index.htm

Africa (Continent of)

No new item to report.

Argentina

No new item to report.

Australia

Office of the Federal Privacy Commissioner Annual Report 2002-2003[7]

The Office of the Federal Privacy Commissioner of Australia has released its annual report for 2002-2003. It is available at:
http://www.privacy.gov.au/publications/03annrep.pdf

Register of Federal Personal Information Digests[8]

The Office of the Federal Privacy Commissioner of Australia has released the 2003 Federal Personal Information Digest. It contains such elements as the nature of the various types of records of personal information kept by federal government agencies and the purpose for which the records are kept. It is available at:
http://www.privacy.gov.au/government/digest/index.html

Australian Health Card[9]

Australian Health Minister, Tony Abbott, recently called for the use of a smartcard carrying an individual's medical history to provide better patient care in hospitals within the next five years. He envisages rolling out patient smartcards that allowed medical professionals access to medical records and health information would reduce unnecessary testing and adverse treatments. A national health information network, HealthConnect, is at the trial stage and should integrate patient records from hospitals, doctors' offices, nursing homes, medical laboratories and pharmacies. The database is to cost around $400M (AUS) to establish and cost $50M/year to operate.

New South Wales Privacy and Personal Information Protection Amendment Bill[10]

New South Wales' *Privacy and Personal Information Protection Amendment Bill* received second reading in the New South Wales Legislative Council. The Bill is intended to amend the *Privacy and Personal Information Protection Act 1998* to transfer the Privacy Commissioner's function under that Act to the Ombudsman. The Bill also amends other Acts and regulations to remove references to the Privacy Commissioner and to generally replace those references with references to the Ombudsman.

The draft Bill is available at:
http://www.lawlink.nsw.gov.au/pc.nsf/files/Privacy%20Amendment%20Bill.pdf/$FILE/Privacy%20Amendment%20Bill.pdf

---

[7] Baker & McKenzie E-law Alert, 2003-11-10

[8] Baker & McKenzie E-law Alert, 2003-11-10

[9] http://australianit.news.com.au/common/print/0,7208,7865385%5E15306%5E%5Enbv%5E,00.html

[10] Baker & McKenzie E-law Alert, 2003-11-24

Belgium

No new item to report.

Bermuda

No new item to report.

Brazil

No new item to report.

Bulgaria

E-signatures Check-up[11]

Bulgaria's law on electronic document and electronic signature came into effect in October 2001. Since then, two e-signature providers have been registered in Bulgaria. The Information Service Plc was registered in March 2003. The Ministry of Finance is the majority shareholder in the company and its product name is 'Stampit'. Bankservice is the other e-signature provider. Registered in September 2003, it is a joint venture between the Bulgarian National Bank and the commercial banking industry. Bankservice certificates are named 'B-Trust'. Information Services Plc tested its product during municipal elections held this past October. Election returns were processed and communicated in electronic form by using electronic signatures. Finally, in line with the law on electronic signature, the Bulgarian government is to develop a regulation which would prevent state administration bodies from refusing to introduce e-signatures. This regulation is expected January 1, 2004.

Canada

Alberta Prepares to Make Patient Record History[12]

The Province of Alberta will be implementing a $59M Electronic Health Record in spring 2004. The initiative will allow authenticated health-care providers to see and update health information such as a patient's allergies, prescriptions and lab test results online. Come spring 2004, Alberta's health regions, 1/3 of its doctors' offices and ½ of all pharmacies should be using the system. System developers worked closely with privacy and security experts in the ministry of Health as well as with Alberta's Privacy Commissioner. According to Barry Burk, general manager, health-care industry at IBM

---

[11] http://www.sofiaecho.com/art.php?id=8381&catid=23

[12] http://www.itbusiness.ca/index.asp?theaction=61&sid=53995

Canada, the system contains user identifications and user authentication functions, meaning that different people with different functions have different access to information.

StatsCan Putting 2006 Census Online[13]

The 2006 Census will be available online for Canadians, via the Government of Canada's Secure Channel initiative, for the first time since the census exercise began in 1871. The online census will benefit from encryption technology to ensure census data collected remains anonymous without users having to go through a lengthy registration process. The product being developed is designed to be reusable for licensing applications or for a variety of other applications.

Doctors Develop Tools to Evaluate Online Health Data[14]

Dr. Gunther Eysenbac, senior scientist with the University of Toronto's Centre for Global eHealth Innovation, has announced that within the next five years, patients will be able to access their medical records online in addition to receiving personalized diagnostic information. The online database of medial records would be heavily encrypted with some form of digital signature to ensure patient confidentiality and would be accessed via a secure hospital network. The diagnostic information would be available using a software solution or toolbar that automatically consults a few databases that tell the user what trusted medical societies and organisations think about the site and whether it is endorsed.

E-voting in Ontario[15, 16, 17]

Approximately 100,000 voters in the counties of Prescott-Russell and Stormont, Dundas and Glengarry were registered to vote online in the Ontario municipal elections held November 10, 2003. CanVote Inc. developed a system using 128-bit encryption allowing voters having received a voter identification number and password to vote online or by touch-tone telephone. The town of Markham also took part in an online voting pilot using technology from Omaha-based Election Systems & Software. 12,000 of Markham's 150,000 registered voters pre-registered to cast their ballots electronically.

Chile

No new item to report.

---

[13] http://www.itbusiness.ca/index.asp?theaction=61&1id=1&sid=54005

[14] http://www.itbusiness.ca/index.asp?theaction=61&sid=54179

[15] http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/1068490935522_63900135///?hub=SciTech

[16] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocument.jsp?printerVersion=1&documentID=1800

[17] http://www.itbusiness.ca/index.asp?theaction+61&sid=54072

China

Hong Kong – Secure E-business Inspires E-option Confidence[18]

Alan Wong Chi-kong, Hong Kong's Director of IT Services opened the Information Security Summit 2003 where he shared Hong Kong's progress in facilitating e-business. Hong Kong has enacted the *Electronic Transactions Ordinance* providing a legal framework for IT infrastructure. PKI and a voluntary certification authority recognition scheme serve as the architectural framework for secure e-commerce. Additionally, Hong Kong has established the Hong Kong Computer Emergency Response Team Co-ordination Centre to enhance its information security incident response capability. Finally, the multi-application smart identity card has facilitated the private sector, and public sector delivery of electronic services in a more secure and cost-effective manner.

Denmark

No new item to report.

Finland

No new item to report.

France

No new item to report.

Germany

Bank Tests New Identification System[19]

A German bank has begun testing a new biometric identification system, previously tested by the University of Regensburg and the Technical University of Munich. This system identifies a person according to their typing behaviour and writing rhythm. The system should protect individuals from identity theft since the typing behaviour will not be the same when constrained.

Hungary

No new item to report.

---

[18] Baker & McKenzie E-law Alert, 2003-11-24; http://www.info.ogv.hk/gia/general/200311/17/1117205.htm

[19] Baker & McKenzie E-law Alert, 2003-11-24; http://www.heise.de/newsticker/result.xhtml?url=/newsticker/data/cp-16.11.03-003/default.shtml&words=Tipp%20Identifizierung

India

E-Governance Projects Slip on Security[20]

Addressing the 7th national e-Government Conference on *Formulating State's e-Gov Strategy*, Rajiv Chalwa, Secretary responsible for e-Governance for the Government of Karnataka made the following remarks. Chalwa called for a formal strategy identifying the issues surrounding monitoring, sanctioning and prioritising of e-Governance projects. He also advocated implementing a security policy for e-Governance projects and called for using PKI for state governments' communications and business transactions.

Ireland

No new item to report.

Israel

No new item to report.

Italy

Internal Government Communications to Become Fully Electronic by 2006[21]

Lucio Stanca, Minister for Innovation and Technologies, has announced that all communications within and between Italian public administrations will take place exclusively electronically by 2006. In his announcement, Stanca stated that standard, regulations and solutions for the use of email in the public sector, notably digital signatures are already widespread. Certified electronic mail is presently used for transmitting preparatory documents for Cabinet meetings.

Japan

No new item to report.

Kazakhstan

No new item to report.

Korea

---

[20] Baker & McKenzie E-law Alert, 2003-11-24;
http://www.thehindubusinessline.com/2003/11/17stories/2003111701650200.htm

[21] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocument.jsp?printerVersion=1&documentID=1831

Seoul Takes a Bow[22]

The Republic of Korea has presented its e-government achievements for 2003 in a document published by the National Computerization Agency. Targets achieved include an e-procurement system that has seen upwards of 130,000 transactions; the creation of an online Home Tax System; a National Finance Information System designed to manage the budget and general finances of central government departments; and the introduction of electronic signature technology.

Malaysia

No new item to report.

Mexico

No new item to report.

Netherlands (the)

No new item to report.

New Zealand

No new item to report.

Norway

No new item to report.

Pakistan

No new item to report.

Poland

No new item to report.

Russia

No new item to report.

Singapore

---

[22]
http://www.kablenet.com/kd.nsf/Frontpage/06459F4B6729422E80256DEB00619001?OpenDocument

No new item to report.

Slovak Republic

No new item to report.

Slovenia (Republic of)

No new item to report.

Spain

E-voting Systems Successfully Test in Catalan Elections[23]

Despite low voter turnout, three voting pilots tests were deemed a success during the November 16, 2003 elections to the Parliament of Catalonia. Voters living abroad were provided with a user ID and password in order to vote via an online service provided by Scytl, a Spanish university cryptography research laboratory spin-off. Other tests included e-voting through touch-screen machines and an electronic counting system. That said, the Catalan Parliament would have to pass a new election law in order for electronic voting to have legal value.

Sweden

No new item to report.

Switzerland

No new item to report.

Thailand

No new item to report.

United Kingdom

Privacy And Data-Sharing: Survey Of Public Awareness And Perceptions[24]

This report contains the findings from a study carried out by the MORI Social Research Institute exploring awareness of and attitudes towards the sharing of personal information by public sector organisations. This research was conducted for the Department for Constitutional Affairs (formerly the Lord Chancellor's Department) and was assisted by the Consumers Association, Liberty and the Office of the Information Commissioner in steering the research. The study explored the public's awareness and level of information around what personal information is held about them by public service organisations and

---

[23] http://europa.eu.int/ISP/ida/jsps/dsp_showDocuemnt.jsp?pritnerVersion=1&documentID-1806

[24] CIOB News, 2003-11-06

explored public opinion and concerns around how this information is held and used. The report is available at: http://www.lcd.gov.uk/majrep/rights/mori-survey.pdf

Draft ID Card Bill Slips into Queen's Speech[25]

It is anticipated that a draft bill to introduce ID cards in the UK will be included in the Queen's speech later this month. That said, it appears to be unlikely that smart ID cards will be brought in before the next general election.

Key ID Cards Decision Delayed[26, 27]

The BBC reports that Cabinet has agreed in principle to plans for a national identity card scheme, but a decision on making the scheme compulsory has been postponed until later this decade. Cabinet has also agreed to include a draft bill as an initial step towards the introduction of an ID card system in the legislative program for 2004. Proposals for a draft bill should address issues such as legal authority to create a national database containing each citizen's address, photograph and biometric information. Proposals should also establish measures preventing abusive use of such data.

UK Biometric ID Cards to be Phased in Over the Coming Years[28, 29]

UK Home Secretary, David Blunkett, unveiled in Parliaments his proposals for the introduction of a smart ID card. The first phase of the project will consist in issuing all new passports and driver's licences containing biometric technology to authenticate identity through fingerprint, iris and face recognition. The ID card will also include: basic personal details and a unique number; and a secure encrypted chip containing the holder's personal details in electronic format. Information collected will be stored on a new national identity database. The scheme will be voluntary initially, but it is intended that most of the population will have a smart ID card by 2013. At that point, the Government will have to decide whether to make it compulsory. Pilots developing iris and fingerprint scans could begin as early as December 2003.

UK ID Card Plans May Raise Political and Legal Issues in Scotland, Wales and Ireland[30]

While the UK government intends to issue biometric ID cards to UK citizens, Scotland's First Minister, Jack McConnell, told the Scottish Parliament that compulsory identity cards would not be required for access to services controlled by his devolved administration such as education and health. A similar situation could occur in Wales and Northern Ireland, which could result in a dysfunctional application of the card scheme. The UK's Home Office has declared that it will discuss these issues with the Irish government and the Northern Irish parties and they should also be addressed in draft ID legislation.

---

[25] http://www.theregister.co.uk/content/55/33742.html

[26] http://news.bbc.co.uk/go/pr/fr/-/1/hi/uk_politics/3245643.stm

[27] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocument.jsp?pirnterVersion=1&documentID=1768

[28] http://www.kablenet.com/kd.nsf/Frontpage/245AABE97E9167AA80256DDB0044BD36?OpenDocument

[29] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocuemnt.jsp?pirnterVersion=1&documentID=1783

[30] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocuemnt.jsp?pritnerVersion=1&documentID=1807

ID & Queen's Speech[31]

The UK Government's plan to develop a national ID card was confirmed in the Queen's speech to Parliament on November 26, 2003. The speech stated that the Government would "take forward work on an incremental approach to a national identity cards scheme and will publish a draft bill in the new year." The draft bill should address key issues surrounding data sharing and measures for a national ID database.

United States

Digital Signature Trust Wins HHS Contract[32]

Digital Signature Trust, a subsidiary of Identrus, LLC, has been awarded a contract worth $4.54M from the Department of Health and Human Services (HHS) for the initial implementation and deployment of an enterprise PKI project. This is the first broad-scale use of Access Certificates for Electronic Services (ACES) credential for federal employees. This will allow for secure government-to-government transactions in addition to government- to-business transactions between HHS employees and contractors. Certification will be issued to federal employees as of February 2004.

Jury Still Out on E-Voting[33]

The Federal Computer Week article examines US legislation that could add voter-verified paper ballots to controversial touch-screen electronic voting machines but that is stalled in a House committee, despite 61 cosponsors. Called the *Voter Confidence and Increased Accessibility Act of 2003*, and introduced by Representative Rush Hold (Democrat, New Jersey) in May, the bill would require that direct recording electronic machines print out a paper record of each vote so the voter can make sure it is correct. The printed ballot would be stored at the polling place and used if a manual recount or an audit of the results was required. The article also examines the State of Maryland's recent experience in e-voting contracting.

Republican Trio Signs On to Voter Verification Bill[34]

The *Voter Confidence and Increased Accessibility Act of 2003* has three new republican co-sponsors. The bill calls for all voting machines to produce a paper record by 2004 so that voters can verify the accuracy of their votes. The ballots would be kept it a recount or audit was required. The State of California has also announced that all touch screen machines must produce a paper record by 2006. After July 1, 2004, California counties will not longer be allowed to purchase machines that do not generate the paper record.

US To Test a Smart ID Card for Seamen[35]

The US Maritime Administration, part of the US Department of Transportation will soon begin testing a smart card - the Mariner Administrative Card - that will identify mariners as they board and leave ships. Tests will begin in Washington DC, Jacksonville, Florida

---

[31] http://www.kablenet.com/kd.nsf/printview/18C22C11B701A1D980256DEB0036E8D6?OpenDocument

[32] http://www.identrus.com/company/press_releases/release_031103.html

[33] http://www.fcw.com/fcw/articles/2003/1110/pol-evote-11-10-03.asp

[34] http://www.fcw.com/fcw/articles/20031124/web-evote-11-25-03.asp

[35] http://www.cardtechnology.com/cgi-bin/readstory.pl?story=20031126CTDN523.xml

and San Diego, California. The smart card will contain a digitised facial image and fingerprints in addition to demographic data and information about the mariner's qualifications. The mariner credential should be interoperable with the Transportation Worker Identification Credential, which will be issued to upwards of 15 million US Transportation workers.

Venezuela

No new item to report.

Viet Nam

No new item to report.

Miscellaneous

Czech Republic (the) – New Act on Information Society Services[36]

IT Minister Vladimir Mlynar has presented draft *Act on Information Society Services*. It is designed to implement the EU's E-Commerce Directive (Directive 2000/31EC). The draft Act covers various issues regarding the provision of services by electronic means including protection against unsolicited email (spam), e-contracting and the liability of service intermediaries for third party content (hosting, mere conduit, caching). However, the Act does not introduce the so-called "country of origin rule" (Article 3 of the E-Commerce Directive) and also does not specifically deal with liability for providers of hyperlinks.

Greece – Biometric Checks Illegal in Greece, Says Data Protection Authority[37]

The Hellenic Data Protection Authority announced on November 10, 2003 that extensive identity checks using biometric indicators such as fingerprint and iris scans contravene Greek data privacy laws. As a result, Athens International Airport is prohibited from verifying and recording passengers' fingerprints and irises, an element of a 5-month pilot security program that was supposed to begin prior to the end of November. The Authority's decision also means that new legislation will need to be passed before biometrics can be used on a wide scale for identity checks and border control in Greece.

South Africa (Republic of) – Electronic Tax Returns and Electronic Signature Regulations[38]

Regulations related to the submission of tax returns in electronic form and electronic signatures have been published in the Government Gazette. The regulations stipulate that electronic signatures must be attached to the tax returns and the electronic payment of taxes in order to be accepted by the South African Revenue Service. An electronic signature, in this case consists of the tax payer or tax practitioner's user ID and the date and time that the return was received on the e-filing website.

Brill, Choicepoint and Partners to Launch Verified ID Card[39]

Entrepreneur Steven Brill and partners including TransCore and ChoicePoint, have formed a company (Verified Identity Card, Inc. – V-ID) that will offer a private, voluntary, biometrically secure identification card providing access to a fast line at entrance to airports, office building, train stations, and arenas in the US. TransCore is a US leader in transportation integration specialising in electronic toll collection. ChoicePoint is a leading provider of identification and credential verification services. Prospective cardholders will undergo a process to verify their identity and then have their thumbprints scanned and stored. The cardholder will be able to present the card where a scanning device will match the card to the thumbprint. Pilots are slated to being in the first half of 2004. Furthermore, V-ID has stated that it will not collect, keep, or disseminate any information related to how or where its cardholders travel.

---

[36] Baker & McKenzie E-law Alert, 2003-11-03
[37] http://europa.eu.int/ISPO/ida/jsps/dsp_showDocument.jsp?pirnterVersion=1&documentID=1775

[38] Baker & McKenzie E-law Alert, 2003-11-17, http://www.gov.za/gazette/regulation/2003/25557.pdf
[39]
http://www.choicepoint.net/choicepoint/news.nsf/0/9FA8546AB3F3C2BE85256DC8004F529E?OpenDocument

Thought of the Day – Give PKI A Chance[40]

Simon Morres of Zentelligence argues that despite doubts about the viability of PKI technology, PKI merits a second look. The full article is available at: http://www.cw360.com/articles/article.asp?liArticleID=125921&liArticleTypeID=20&liCategoryID=1&liChannelID=13&liFlavourID=1&sSearch=&nPage=1

Aussies Do It Right: E-Voting[41]

With the current debate in the US over electronic voting, this article contrasts the American experience with a recent electronic voting experiment in Australia. The October 2001 state election in the Australian Capital Territory featured electronic voting with a system built by Software Improvements. According to Software Improvement's Matt Quinn, voting terminals were linked to a server in each polling place through a secure local-area network, so if the data had been changed in transit, the identifier would have changed too, signaling that something had gone wrong. The server wrote two copies of the votes onto separate discs that were digitally signed and delivered independently to a central counting place. The digital signature is a 128-bit unique identifier generated for the voting data.

VeriSign Unveils Flash New Site Seal[42]

VeriSign has unveiled a redesign of its Trust Mark seal symbol. The new Trust Mark includes a Flash-based animated design. By clicking on the new VeriSign Trust Mark, consumers can verify a business's legal name, determine the validity period for the SSL certificate, and view their place of incorporated. This information can now be validated in real time. The new seal is now available to VeriSign's existing US PKI customers and will be available to others prior to December 25, 2003.

S/MIME Vulnerability Requires Vendor-Specific Patches[43]

The UK's National Infrastructure Security Co-ordination Centre has put out a vulnerability advisory concerning the S/MIME (Secure Multipurpose Internet Mail Extensions) protocol, which is used for digital signatures and encrypted email. Of concern is that the secure portion of an email attached is encoded with ASN.1 (Abstract Syntax Notation One). A remote attacker could use an exceptional ASN.1 element that the S/MIME implementation might be unable to handle. This could cause a denial-of-service. The vulnerability advisory is available at: http://www.uniras.gov.uk/vuls/2003/006489/smime.htm

---

[40]http://www.cw360.com/articles/article.asp?liArticleID=125921&liArticleTypeID=20&liCategoryID=1&liChannelID=13&liFlavourID=1&sSearch=&nPage=1

[41] http://www.wired.com/news/print/0,1294,61045,00.html

[42] http://www.theregister.co.uk/content/5/33779.html

[43] Security Wire Digest, Vol.5, No.84, 2003-11-06

Start-up Makes Quantum Leap into Cryptography[44, 45]

New York City-based Magiq Technologies has announced that it is now selling Navajo Secure Gateway, a product that uses a combination of quantum cryptography and traditional cryptography to provide a virtual private network (VPN) running over fiber-optic cable that is intended to be completely secure against all eavesdroppers. Units range in price from $50,000 to $100,000. Quantum cryptography is said to address a weakness in current public key cryptography by using laws of quantum physics that say that it is impossible to eavesdrop on a transmission without immediately alerting the system to the eavesdropping.

Trusted Space: Layered Security[46]

Federal Computer Week examines Trusted Space in relation to SAFsolution. While Trusted Space has most of the same functionality as SAFsolution, there are a few important differences. While both are used in the heath care field, their system architectures are quite different. SAFsolution extends and integrates with Active Directory, while Trusted Space uses a separate database server to store biometric template data used for authentication purposes. The full review is available at: http://www.fcw.com/fcw/articles/2003/1103/tec-bio3-11-03-03.asp

U.S. Postal Service Now Offers Electronic Postmark[47]

The US Postal Service is offering the United States Postal Service Electronic Postmark Office Extension software, built into Microsoft Office 2003 using AuthentiDate technology. It intends to extend signature validation to electronic documents to make them legally binding. The software allows users to digitally sign Word documents, locking and protecting them from tampering, altering and potential fraud.

SSL Networking Heats Up[48]

Cisco Systems has become the latest company to offer a virtual private network (VPN) product based on secure sockets layer (SSL) encryption on its 3000 series of network concentrators. These hardware devices serve as a single access point into corporate networks and give telecommuters and branch offices a secure connection to internal networks.

The Role of Identity Management in Information Security[49]

The authors argue that defining accurately what identity management and information security are for an enterprise and its IT organization is a very useful base from which to plan approaches to both identity management and information security while ensuring the efficient use of IT resources. The article explores drivers for identity management, principles of information security, and planning principles for identity management and information security.

---

[44] http://zdnet.com/com/2102-1105-51-3373.html

[45] Security Wire Digest, Vol.5, No.86, 2003-11-13

[46] http://www.fcw.com/fcw/articles/2003/1103/tec-bio3-11-03-03.asp

[47] Security Wire Digest, Vol.5, No.86, 2003-11-13

[48] http://zdnet.com.com/2102-1105-5105276.html

[49] http://techupdate.zdnet.com/techupdate/stories/main/Identity_Management_Information_Security_Part_1.html?tag=tu.scblog.6673