

**Public Key Infrastructure - Scan
Canada & Provinces**

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PKI International Scan

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International PKI Scan

Introduction

This report represents ongoing research conducted by the Government of Canada (GoC) 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.

Canada

Lessons Learned – Seven Steps To Success With EHR Systems¹ (e-Services)

Provinces across Canada are pursuing the electronic health records (EHRs) strategies and rollout plans. In a recent report from Canada Health Infoway it is described a short-term goal of covering 50 per cent of the population with an electronic health records system by 2009. Besides Canada, the United Kingdom, France, Italy and Singapore, are well advanced with initiatives to build national EHR systems and other health care IT tools, while in the United States, EHRs have been endorsed as a critical component of solutions aimed at enhancing care, and reducing costs. However, despite the opportunities, the effective use of IT in health care, has proved challenging. Some reports suggest that the success rate for clinical IT projects in actually achieving their stated objectives may be less than 50 per cent.

No. 1 With a But² (e-Government)

Canada is No. 1, but in a new game, with new rules. Accenture's annual survey has ranked Canada first in each of the past four years. Those reviews, however, were conducted against a benchmark restricted to e-government, just one component of a fully functioning, citizen-centred administration. Therefore, in an attempt to shift the focus to the customer, or citizen, the standard became electronic service delivery. But, most governments now have a broader service delivery agenda, and numbers of countries are broadening their customer service agenda in ways that will position them for future leadership. Governments are putting the foundations in place for multi-channel, inter-connected government and they are starting to adopt many leading-edge customer service capabilities. Than e-Government: Maturing, but is it delivering?

Debit on Web Coming; A Banking First in Online Shopping³ (e-Commerce)

Canada's major banks are readying a service, called Interac Online, that will make possible for Internet consumers to purchase goods and services by transferring money directly out of their online bank accounts during the course of a transaction. Thus, at a web retailer's virtual checkout counter, customers simply click on an "Interac Online" option and are directed to their existing online banking account, where they'll be asked to log in to the bank's secure site. After confirming

¹ <http://www.itworldcanada.com/Pages/Docbase/ViewArticle.aspx?ID=idqml-a66da64c-ad85-43cd-b45d-296257f2c2b3&title=Lessons%20learned> CIOB News 2005-05-05

² <http://www.itworldcanada.com/Pages/Docbase/ViewArticle.aspx?ID=idqml-f62aa0de-b15e-4aa1-bd3f-1674813656eb&Portal=051898fe-f75a-4b31-85ec-ef8a392a39b&title=No.%201%20with%20a%20but>

³ CIOB News 2005-05-06

details and finally approving the transaction, customers are sent back to the web retailer's site where the product purchase is acknowledged as complete. The retailer collects no personal information from the customer during the process, meaning less risk of privacy leaks or abuses. The Royal Bank of Canada is expected to be the first bank to offer the service, likely toward the end of May 2005.

Passport Canada Launches the Passport On-Line Initiative⁴ (e-Services)

Passport Canada is now offering Canadians the ability to fill out their passport application form online, however, they still have to show up in person to present their application. Passport Canada says the use of this interactive passport application should help to reduce the number of omissions and errors frequently seen by Passport Canada examiners. Thus, by decreasing the number of errors, the government hopes Passport On-Line (POL) will reduce the waiting time when submitting an application, for both the applicant and government. In this respect, Doreen Steidle, Chief Executive Officer of Passport Canada said, "we believe that this initiative responds to Canadians' desire to have access to key government services on-line, while using secure channels that ensure their personal data and privacy are protected".

Canadians Reluctant to Buy Online - But We're World Leaders in Web Banking⁵ (e-Commerce)

Canadians might not like to spend money online compared with the rest of the world, but they do appear to enjoy taking a regular digital peek at the cash piling up in their bank accounts. When it comes to online banking, Canadians are the global leaders - with 56 per cent of Internet users in this country engaging in that activity in 2004, according to a recent Ipsos-Insight survey. That compares with an average of 50 per cent worldwide. At the same time, Canadians are significantly behind everyone else when it comes to buying goods and services on the Internet. Just 57 per cent of Web users in Canada report having bought something, compared with 70 per cent of people worldwide and a remarkable 82 per cent in the United States. Ipsos-Insight researcher Neil Modi, who broke out the Canadian figures, said he was unable to offer an explanation of the difference. However, previous internal Canadian surveys have shown that they're still not confident about the security of online purchases.

Apps Under Attack⁶ (Cryptography / Authentication / PKI)

According to the most recent Symantec Internet Security Threat Report, approximately half of the vulnerabilities disclosed in the last six months of 2004 affected web applications. Attacks on web applications go right through traditional perimeter defences such as firewalls, because the firewall is configured to allow web traffic to pass through to the web server. Even more worrisome, these attacks can also go through sophisticated security infrastructures. It might seem surprising, but Secure Channel – a key component of the federal Government On-Line (GOL) program – does not protect against these types of attacks. Fortunately, there are new security solutions – such as intrusion prevention – but the responsibility for this now moves to the operational group that owns the application servers. The battle is by no means lost, it just indicates that it is time to investigate and deploy newer security solutions.

Study Finds Shift In Spending Priorities⁷ (e-Government)

A study, titled "Predictions on the Canadian Government Sector in 2005" derived from a survey conducted by IDC Canada, and held on September 2004, reveals that electronic service delivery was cited as a pressing policy issue for only 25 per cent of respondents, as compared to 42 per

⁴ http://www.digitalhomecanada.com/index.php?option=com_content&task=view&id=362&Itemid=51 CIOB News 2005-05-10

⁵ <http://www.canadait.com/cfm/index.cfm?it=902&id=20115&Se=2&Sv=&Lo=2> CIOB News 2005-05-10

⁶ <http://www.itworldcanada.com/Pages/Docbase/ViewArticle.aspx?id=idgml-2941c23e-7327-4a67> (Thanks to Alfred Yu)

⁷ <http://www.itbusiness.ca/index.asp?theaction=61&iid=1&sid=58821&adBanner=eGovernment>

cent in 2003. Massimiliano Claps, senior research analyst with IDC Canada, said, "it's still their first priority, but I would say they were more preoccupied with it one year ago and they're taking it one step further." Reacting to that, acting federal CIO Helen McDonald agrees, saying, "with Government Online we're in our final year. Therefore I think a lot of the services or all that were identified as good candidates for electronic service delivery are up, at least to some extent, and I think we're just trying to deepen the functionality over this year, so I would suspect that's part of it."

Security Forum Launched To Help Protect Canada's Online Infrastructure⁸ (e-Government/Authentication)

Canadian leaders in industry, academia and government have joined forces to launch a national security forum that will provide innovation and leadership in network and information security across Canada. To this end, the Mathematics of Information Technology and Complex Systems (MITACS), and the Forum for Information Security Innovation in Canada (FISIC) aim to become a focal point for future research initiatives in the area of information security. The partners stress that by continuing to advance collaborative relationships, fund, and develop leading-edge research projects, and accelerate the commercialization of innovative solutions, the group will build a solid base of Canadian security expertise that will ultimately assist government in protecting the country's online infrastructure.

Canadian Service Delivery Success A Model for Others⁹ (e-Government / e-Services)

According to the Citizens First 4 update presented on May 16, 2005 at the Lac Carling Congress in Saint-Sauveur, Quebec, the Canadian model for government service delivery is three to five years ahead of those in the United States (US) and United Kingdom (UK). Citizens First 4 is the latest in a series of research initiatives designed to provide public sector managers with direct input from Canadian citizens on their experience with service delivery, and their priorities for improvement. Using this research over the past seven years, governments across Canada have been able to focus service improvement on things that make a difference for citizens. Canada has also led the world in improving the quality of their services in a measurable way, according to data published by Citizens First.

Q&A: Helen McDonald, CIO, Government of Canada¹⁰ (e-Government)

Helen McDonald, the Canadian CIO gives eGov monitor her views and insight into programmes and policies that have made Canada the leader in e-Government globally. She said, that three activities have been central to Canada's leadership in citizen-centred service delivery. The first is the use of citizen and client feedback to drive improvements to government services through an extensive program of public opinion research and focus testing insisting on a whole-of-government approach. The second is the creation of integrated, client-focused Web sites and portals. Finally, the Service Improvement Initiative (SII), which sunset in March 2005, and was designed to improve the quality of public sector service delivery by achieving a significant, measurable and sustainable improvement in client satisfaction with key services provided to the public.

Task Force Calls for Tough New Anti-Spam Laws¹¹ (e-Commerce)

Legislation that would create stiff criminal penalties for spammers and give consumers and businesses the right to sue for damages is essential if Canada is to play its part in the war on spam, a 10-member task force recommended. Spam represented roughly 80 per cent of global email traffic at the end of 2004, according to anti-spam software provider MessageLabs, while

⁸ <http://www.siliconvalleynorth.com/home/newsfijFjvcDDi20050511.html>

⁹ <http://www.canadait.com/cfm/index.cfm?it=902&id=20153&Se=2&Sv=&Lo=> CIOB News 2005-05-18

¹⁰ <http://www.egovmonitor.com/node/1033> CIOB News 2005-05-25

¹¹ CIOB News 2005-05-18

messages are often designed to lure unwitting consumers into online scams, undermining public confidence in electronic commerce. "We need to rid the Internet of the scourge of spam if Canada is going to be able to reap the full benefit of a strong e-economy," said Industry Minister David Emerson, in a statement. Michael Geist, an Internet law professor at the University of Ottawa and a task force member, said legislation alone is not going to solve the problem, but it's an important part of the mix.

Phish and Chips: A Tale of Canadian Banking¹² (e-Commerce / Smart Cards)

Canada's banks are moving towards implementing smart cards instead of magnetic stripe-based cards, with the first transaction planned for early in 2007. They're making this move in an effort to reduce the amount of fraud associated with skimming, and PIN-theft. Meanwhile, in the United Kingdom (UK), where they are already moving toward chip-and-PIN cards, fraud is on the rise. The March 8th issue of The Guardian newspaper reported "Bank and credit card fraud rose 20 per cent last year, costing British banks £505m, with part of the increase due to the introduction of new chip and PIN cards." The problem with enhanced security technology is it frequently gives people a misplaced sense of security. In the UK case, during the roll-out of chip cards, approximately 100,000 cards were being mailed out to existing cardholders every day. Villains simply stole the cards out of the mail. Foolishly, the cards had been pre-activated, so they were ready for use. This simple mistake cost the British banks £73 million last year.

Provinces

Alberta: SuperNet Nearing Completion¹³ (e-Services)

More than 98 per cent of Alberta's communities are ready to handle Internet service provider traffic through Alberta SuperNet. This milestone will benefit rural communities in particular, and local businesses and residents within these communities. Thus, local service providers can now buy bandwidth on the Alberta SuperNet and offer high-speed commercial services, including Internet access, to rural retail customers. Construction of the remaining eight Extended Area Network communities is ongoing, with each specific construction need being addressed jointly with the community to ensure that service is available as quickly as possible. The milestone is the first of three announced in a new completion plan in February. The next steps are connecting the majority of the schools, libraries, health, and government facilities by the end of June.

Alberta: Alberta Health Images To Go All Digital¹⁴ (e-Services)

Speaking at the Canada e-Health 2005 conference, Linda Miller, director of information management at the Alberta Health and Wellness, said that Alberta is the first province in Canada to develop a province-wide digital imagery plan. Officials expect their health imagery to be filmless by 2008 as part of an ongoing electronic health record strategy to move the province's 5,800 doctors from paper to electronic systems. Alberta Health and Wellness officials plan to digitize almost all diagnostic imagery, including X-rays and scans from magnetic resonance imagery (MRI) systems. The exception will be mammography scans, which present greater technical challenges.

Northwest Territories: CampingNWT Website Launched¹⁵ (e-Commerce)

For the first time in the Northwest Territories (NWT,) a service has been offered in the website, www.campingnwt.ca, that allows users to reserve a campsite more than seven days and up to nine months in advance. Until now, campers had no way to check vacancies or reserve a site in

¹² <http://www.itbusiness.ca/index.asp?theaction=61&lid=1&sid=58766>

¹³ <http://www.gov.ab.ca/home/index.cfm?page=1178> CIOB News 2005-05-05

¹⁴ <http://www.fcw.com/article88755-05-02-05-Web> CIOB News 05-05-02

¹⁵ <http://www.gov.nt.ca/thisweek/news/index.html> CIOB News 2005-05-24

advance. It is expected that all NWT Territorial campgrounds reservation will be on the website by 2006 camping season. A secure page will take the user's information and VISA number to make the booking, reserving them a campsite for when they arrive. They can also cancel or make changes to an existing reservation. There will be a \$10 fee to make an advanced reservation with this system.

Ontario: The Challenge of Integration - Taking an Enterprise-Wide Approach¹⁶ (e-Commerce / e-Government)

Ontario is developing a government-wide multi-channel service delivery strategy that will greatly improve service quality and information sharing for public servants and government suppliers and business partners. By harmonizing business practices and adopting a shared services model, benefits for government and institutions include economies of scale, preferred pricing and reduced operating costs.

Ontario: Reinforcing Your Security Blanket¹⁷ (Online Transactions)

The IT systems are often prime targets for viruses and hackers, and the Ontario government alone repels 1.6 million "hack" attempts on its computer system per month. That's one attempt about every 1.6 seconds. In 2003 and 2004, the province of Ontario's Corporate Security Branch reported that 30 percent of attacks came through e-mails and downloads and 37 percent just from being connected to the Internet. The lag time from vulnerability to attack has fallen drastically from 27 months back in 2001 (Bugbear) to 18 days in 2004 (Sasser). How do we protect ourselves?

Québec: Création du Centre de Services Partagés du Québec¹⁸ (Interoperability / e-Government)

L'Assemblée Nationale du Québec a ratifié le projet de loi no 85, créant le Centre de services partagés du Québec. À ce propos, le ministre Pierre Reid a déclaré, «le Centre de services partagés du Québec favorisera le partage d'expertise entre les ministères et les organismes gouvernementaux et le développement de centres d'excellence et de compétence internes au gouvernement en matière de services administratifs. De ce fait, il contribuera à éliminer les doublons de certaines tâches administratives et permettra de dégager des marges financières permettant de bonifier l'offre de services directs à la population ».

Québec : Bilan du Gouvernement en Ligne¹⁹ (e-Government)

Le ministre délégué au Gouvernement en ligne, M. Henri-François Gauthier, en rendant public le bilan des réalisations des ministères et des organismes du gouvernement du Québec pour l'exercice 2004-2005, affirme que, quelque 70 initiatives ont été complétées au cours dudit exercice. En effet, le portail gouvernemental de services (www.gouv.qc.ca) regroupe une quarantaine de grappes de services définies en fonction des besoins des citoyens, des entreprises et de clientèles spécifiques, en plus d'offrir aux citoyens un cheminement assisté leur permettant de trouver l'information recherchée parmi les 250 ministères et organismes gouvernementaux.

¹⁶ <http://siteresources.worldbank.org/INTEDEVELOPMENT/Resources/559323-1114798035525/1055531-1114798256329/1055556-1114798392668/Georgeff.pdf> CIOB News 2005-05-12

¹⁷ <http://www.itworldcanada.com/Pages/Docbase/ViewArticle.aspx?ID=idqml-89465a6a-06c6-401c-8849-5cb273d2194f&Portal=051898fe-f75a-4b31-85ec> CIOB News 2005-05-27

¹⁸ <http://communiqués.gouv.qc.ca/gouvqc/communiqués/GPQF/Mai2005/11/c7955.html> CIOB News 2005-05-12

¹⁹ <http://communiqués.gouv.qc.ca/gouvqc/communiqués/GPQF/Mai2005/26/c3959.html> CIOB News 2005-05-30