

INDUSTRY CANADA CONDUCTS A SECURE ONLINE AUCTION

Validation is a critical requirement for performing secure business-to-government e-transactions. By incorporating the ValiCert Enterprise VA[™] Suite into its Auction Management System, Industry Canada was able to securely complete one of the largest business-to-government e-commerce transactions ever conducted over the Internet.)

Industry Industrie Andrew J. Stephens Canada Canada Senior Policy Advisor, Industry Canada

SOLUTION OVERVIEW

Organization Industry Canada strategis.ic.gc.ca/engdoc/main.html

Industry

Government Telecommunications

Challenge

To enable a secure, real-time spectrum auction of radio frequencies for the entire country of Canada – via the Internet.

Solution

ValiCert Enterprise VA™ Suite www.valicert.com/html/eva.html

Entrust/PKI™ *www.entrust.com*

GNS FormLock™ Suite www.jawstech.com

Results

Industry Canada enables commercial entities and government agencies to conduct secure, reliable business-togovernment e-Transactions.

PLATFORMS

SunUltra, Solaris 2.6/2.7 Intel Pentium III, NT 4.0 Industry Canada is responsible for managing the radio frequency spectrum for the entire country of Canada. Access to this spectrum will allow companies to provide broadband services in all areas of Canada and accommodate the increasing demand for high-capacity local access infrastructure required for various telecommunications services. Applications using these services include cellular and PCS phones, mobile dispatch, wireless cable, wireless broadband access, satellite television, air and marine navigation.

An Auction Over the Internet

In October 1999, Industry Canada conducted its first spectrum auction over the Internet. The auction process allowed them to quickly and efficiently assign the largest number of radio licenses ever awarded in a single process: 260 licenses, associated with the 24 and 38 GHz frequencies earmarked for highcapacity telecommunications services, were awarded to 12 different companies. With bids exceeding \$170 million, the spectrum auction represents one of the largest business-togovernment electronic commerce transactions ever to take place over the Internet.

"We are using a web-based electronic auction that employs the latest encryption and digital signature technology. In doing so, Industry Canada is demonstrating its commitment and confidence towards electronic commerce applications", explains Industry Canada's Earl Hoeg, Manager of Wireless Networks.

ValiCert Ensures Trust

The nationwide, online spectrum auction was conducted securely using Auction Management Software (AMS) integrated with the latest in public key infrastructure (PKI) technologies.

Industry Canada used the GNS (now part of Jawz, Inc) FormLock software together with ValiCert offerings to ensure that the electronic

ValiCert Customer Case Study - Industry Canada

bid forms were verifiable and securely transmitted. To increase the speed, and enhance security of bid transactions, Industry Canada selected the ValiCert Enterprise VA (EVA) Suite to validate the credentials of all auction participants. The ValiCert EVA was selected due to its high-performance online certificate status protocol (OCSP) validation capabilities, as well as its ability to provide a secure audit trail for each of the bids.

"We formed a partnership with ValiCert because we consider them to be a leader in enabling trust and interoperability of digital certificate applications in the net economy. Plus, ValiCert clearly offers the best implementation of OCSP, allowing us to perform OCSP status checking between PKIs", said Tyson Macaulay, Chief Technology Officer of GNS.

The success of this high-frequency, broadband wireless spectrum auction has prompted Industry Canada to adopt ValiCert's validation products for a lower frequency PCS auction scheduled in early 2001.

Taking Validation to the Next Level

The successful use of the ValiCert Enterprise VA in this simultaneous multiple round auction suggests that the solution would be an effective means for assigning a variety of other rights. This may include oil and mineral rights, timber and grazing rights, and airport landing rights.

The ValiCert-enabled auction solution might also be used to accept tenders to provide services or products to the government or to dispose real estate assets.

Auction Management User's Workstation Software, Entrust PKI 1. Bidder requests bid page 2. Server accepts request for bid page **INTERNET** 4. Bidder fills in bids 3. Server sends bid page to Bidder 5. FormLock encrypts bids and 6. ValiCert EVA validates bid ID posts to server 7. Server decrypts bid 10. FormLock decrypts the 8. Bids and Digital Signature archived response from the server 9. Server sends encrypted response **GNS'** Auction Proxy GNS' FormLock ValiCert's EVA VALICERT. INC. © 2000 ValiCert, Inc. All rights reserved. ValiCert and the 339 N. BERNARDO AVENUE ValiCert logo are registered trademarks of ValiCert, Inc. MOUNTAIN VIEW, CA 94043 USA All other company and product names are trademarks or TEL: 1 650 567 5400 registered trademarks of their respective owners FAX: 1 650 254 2148 TOLL FREE IN US: 1 877 VALICERT Securing e-Transactions www.valicert.com Amsterdam Chicago Dallas Hong Kong Los Angeles London Mountain View New York Paris Toronto Tokyo Washington, De