



Royal Bank of Canada

*Automated electronic
payment system is money
in the bank.*

The Challenge

Royal Bank of Canada is the largest provider of personal and business banking, corporate and investment banking, and wealth management in Canada. The bank has 58,000 employees who serve 10 million customers through 1,600 branches and offices in 35 countries.

Royal Bank was approached by several of its larger business clients, among them PanCanadian Petroleum Ltd., Talisman Energy, Inc., and the Novartis Group in Canada. These clients wanted to streamline their payables process and move from physical check production to Financial Electronic Data Interchange (FEDI). Royal Bank recognized it could increase the value of their services by providing a comprehensive FEDI solution and began to explore the possibility of providing a turnkey FEDI kit that would enable a faster, less expensive implementation of FEDI for its customers.

“We understood the complexity of the technology and the costs our clients would be willing to bear,” said Kevin Turko, Managing Director, Electronic Commerce Services for Royal Bank of Canada. “To be successful, we clearly needed an easier way to bring our customers into the electronic world. Our customers were looking for PC-based packages to run seamlessly from their site—a solution which would enable them to focus on their business priorities without being EDI gurus.”

Royal Bank designed a Financial EDI operating system and incorporated a state-of-the-art EDI mapping

Function: Message Authentication

Industry: Financial

Platform: PC

tool. A complementary strategy was developed to provide implementation, mapping, integration, training, and network access services on behalf of clients. To complete the service offering, a product needed to be selected to secure and protect transmitted FEDI payment requests. Security was of paramount importance to both Royal Bank and the bank's clients.

The Solution

After a careful evaluation of products, Royal Bank approached Prime Factors to discuss the use of Prime Factors PsypherX12™ (formerly called Descript/EDI+) as the security solution for Royal Bank's turnkey kit. “We approached Prime Factors because of the company's experience and because there was a great synergy with Royal Bank,” Turko said. “We found the product to be a better fit than competing products. Prime Factors is a very cooperative and innovative company and was very receptive to what we wanted to do.” Royal Bank agreed to license Prime Factors PsypherX12.

With security in place, Royal Bank melded all the components necessary for secure FEDI payments into one solution called the FEDI Control™ Kit. The FEDI Control Kit includes a Financial EDI operating system, message security, an EDI mapper and turnkey installation services.

“Our Electronic Commerce specialists prepare data maps for file translation and configure the operating system and security software programs to create customized FEDI payment solutions. We assist with the installation of the FEDI Control Kit components and perform the necessary testing. There's very little IT work involved for the customer,” Turko said.

The FEDI Control solution acts as a bridge between the bank and the accounts payable departments of its customers. When one of Royal Bank's customers

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Brian McArthur

Vice President, Cash Management
and Electronic Commerce,
Royal Bank of Canada

introduces an accounts payable file, the FEDI Control software acts as a task scheduler. As the file passes through, it adds any information that may be missing, such as vendor banking details. The customer has complete flexibility to specify how payments will be received by trading partners. In addition to FEDI payments, the customer may want to have the bank physically produce and send checks, fax remittance information directly to its vendors or reimburse employee expenses via electronic funds transfer (EFT).

Customized maps automatically translate the payment file into the 820 Payment Order/Remittance Advices. Prime Factors PsypherX12 secures the files by inserting Message Authentication Codes (MACs) using the X12.58 standard. The files are sent to Royal Bank

where the MACs are validated. The use of MACs verifies the identity of the message sender (a secret key known only to the sender and receiver is used to create a MAC) and checks that no characters were changed in the message during transit.

The FEDI Control Kit easily allows audit and revalidation instructions to be automatically inserted into the process. In the case of very large payments where an additional review is warranted, the customer can specify that payments exceeding a certain amount must be audited prior to payment.

The results from its current installations is a cost reduction for customers without an expensive or time-consuming learning curve. “The best part about our FEDI Control Kit is that the client can focus on how and when to electronically pay its vendors. By using our secure software solution and support services, customers are freed from the significant complexities of becoming EDI capable,” said Brian McArthur, Vice President, Cash Management and Electronic Commerce, Royal Bank of Canada. Noting that their customers have strengthened their relationships with the bank, he added, “They really see the benefit of allowing us to be their service provider with minimal work effort on their behalf.”

Royal Bank is marketing the solution nationwide. The bank feels it’s offering a unique value-added Electronic Commerce service helping customers to do business easier. “As far as we know, we are the only bank in Canada that is marketing a complete turnkey secure FEDI solution in this way,” Turko said. For Royal Bank, that’s an advantage it can bank on.



PRIME FACTORS, INC.
your key to data security

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