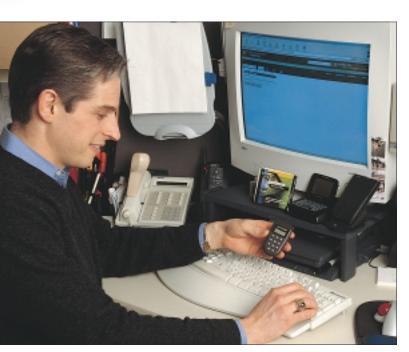
ABN AMRO

Case Study

Bank provides leading-edge cash management applications using strong authentication to enhance security for high-value online transactions



John Scully, product manager at ABN AMRO Services Co., Inc., uses the Digipass 300 with the CashPro® Web site.

BN AMRO Bank is one of the world's largest banks with total assets of \$505 billion and more than 3,500 locations in over 70 countries and territories. ABN AMRO is widely recognized as a leading provider of innovative cash management products for corporate treasurers and other commercial customers. With the introduction of its proprietary CashPro® Web suite of services (www.cashproweb.com), ABN AMRO ushered in a new era of convenience by making it possible for U.S. customers to perform a variety of treasury management activities online - without installing special software or hardware. But the Web-based technology also put the spotlight on security, creating the need for a strong authentication solution to ensure that its customers' high-value transactions were secure.



Objective

To enhance the security of highvalue cash management transactions conducted over the Internet by the bank's commercial customers in the U.S.

Challenge

Implement a security solution that would allow corporate treasurers to use a suite of Internet-based cash management applications with full confidence – but at the same time, minimize the impact on the customers' existing systems and routines.

The Solution

ABN AMRO incorporated the VASCO Digipass family of authentication tokens into its security schema. The bank provides an individually programmed Digipass Pro 300 token to every customer who signs up to use its CashPro® Web suite of applications. The security token is used to provide up to three different levels of authentication — without requiring the installation of any software or hardware on the customer's systems.

Security With No Hidden Costs



First Vice President Milton Santiago and Andrea Larson, product manager, discuss the increased security measures for CashPro® Web at ABN AMRO Services Company, Inc.

When ABN AMRO compared different strategies for securing its customers' high-value transactions over the Web: First, the solution had to provide a high level of security – even supporting increased levels of security for different types of transactions. Second, the solution had to have a very low "nuisance" factor for customers. It had to give corporate treasurers and other commercial customers a feeling of confidence, without creating a new set of hassles or management challenges.

That's what led ABN AMRO to the VASCO Digipass family of security devices. It was the one security solution that met all of the bank's system design goals. Now, when customers sign up to use the CashPro® Web suite of cash management applications, they receive an individually programmed Digipass Pro 300 authentication device. Each time they

release a financial transaction for processing, they're asked to provide a password (generated by the Digipass) that proves they are who they say they are.

"It's an attractive solution for a couple of reasons," says Milton Santiago, Jr., First Vice President of Electronic Banking Products at ABN AMRO. "With the Digipass, we can vary the level of authentication required, based on the type of transaction being conducted. Our tokens are programmed to provide up to three possible challenge scenarios. They can generate a one-time password, or a two-factor challenge-response password. They can also provide a digital signature, giving us a way to uniquely verify a particular transaction."

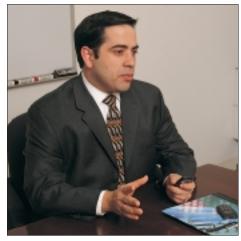
Along with strong authentication, the Digipass solution also delivers on the low-nuisance requirement: "There are other ways to secure transactions, of course," Santiago notes. "But they can have hidden costs. We didn't want to have to install software on the customer's machine, for example, or attach smartcard readers or other devices to their systems. Why? Because we knew those types of solutions would create a whole new set of challenges for us. We'd have to worry about software upgrades, system conflicts, device maintenance, and so on. In contrast, the VASCO solution provides a very low total cost-of-ownership."

No Compromises

→ hanks in part to the convenience and flexibility of the Digipass security solution, ABN AMRO's customers have embraced the CashPro® Web suite of cash management applications, according to Santiago. "Over 3,000 customers are now using these applications on a daily basis - to initiate Automated Clearing House transactions, wire transfers, foreign exchange transactions, and so on," he notes. Virtually all of those customers have found that the Digipass solution is easy to use, he says. "We have not had any security compromises with the VASCO token in place."

Just as important, Santiago says, is the seamless way in which the

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Digipass technology has been integrated into the bank's existing systems. "VASCO told us this solution could exist in any environment, and we said, 'Prove it.' And they did. We bought the Digipass Controller, a software development kit, and integrated its four software routines in our system. Within a very short period of time, we were able to test that the VASCO technology would function as intended within our existing system. It didn't take weeks of effort to fix bugs. Any problems we encountered with the installation were minor, and they were resolved in a matter of hours."

How It Works

The Digipass device works in combination with software on the bank's system to generate a code that ensures authentication when the customer releases a financial transaction for processing. The customer must possess the device, and know a PIN code, before the bank's security system will generate an access code. Three different levels of authentication are supported, for different types of transactions: A one-time password, a challenge-response password, or a digital signature.

Results

More than 3,000 commercial customers have signed up to use AMRO's ABN suite CashPro® Web applications since they were introduced in 1998. In addition to contributing to the bank's growth, the innovative suite of cash management products has helped ABN AMRO gain recognition from such organizations as the Treasury Management Association and Association of Financial Professionals for its leadership in technology and customer service.

ABN AMRO Bank



Actual Size

*In February 2001, ABN announced that it had reached EAB to Citibank, N.A. The deal mid 2001.

Netherlands-based ABN AMRO Bank N.V., is one of the world's largest banks with total assets of \$505 billion and more than 3,500 locations in over 70 countries and territories.

ABN AMRO's activities are grouped into three strategic business units: Wholesale Clients, which provides integrated corporate and investment banking services to corporate, financial institutions and public sector clients worldwide; Consumer & Commercial Clients, which focuses on retail and small to medium-size clients in a number of core markets; and Private Clients & Asset Management, which focuses on private banking and fund management clients globally.

In North America, ABN AMRO is headquartered in Chicago and has \$183 billion in assets and more than 19,000 employees with banking offices serving wholesale clients in 13 cities in the U.S., Canada and Mexico. ABN AMRO's North American subsidiaries include LaSalle Bank in Chicago; ABN AMRO Asset Management (USA) LLC (a subsidiary of LaSalle Bank); Allegheny Asset Management; ABN AMRO Incorporated; Standard Federal Bank Michigan; Michigan National Bank; and EAB in New York.*

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Website

www.abnamro.com www.cashproweb.com

For regional offices or to learn more about us, visit our web site at www.vasco.com



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