NCR Cashes In with Security from Certicom

For NCR embedding the Security Builder® toolkit was not optional – it was a necessity.

"When dealing with monetary transactions, security is always a necessity. In fact, our customers demand it as part of our products. We wouldn't think of launching without it."
– Brenda Bowman, Senior Product Manager, Payment Solutions

Money has always been at the root of NCR's business – in more ways than one. NCR helped payment and capture technology evolve from the invention of the cash register to its newly released Electronic Cheque Presentment with Image Exchange (ECPIX) solution.

ECPIX enables financial institutions on the road to truncation by providing the solution to move transactions electronically through the payment process. Paper cheques are imaged and the transaction details captured electronically as early in the process as possible providing an electronic version to move through the payment stream. This electronic version helps banks to minimize costs and slow ups previously associated with paper, increasing efficiencies, value and return on investment for their payment stream. The real

benefit of Electronic Cheque Presentment only occurs once the paper stops moving through the process and is replaced by the movement of the electronic document – ECPIX supports this.

NCR recognized that cheques would remain a payment instrument even though the landscape was shifting to new and varied forms, like debit, credit card and money orders," says Brenda Bowman, NCR's Senior Product Manager, Payment Solutions. "Once we came to that conclusion, it made sense to develop a product that provided our customers with cost-efficient, value-added services to electronify paper-based payment processes that would increase operational efficiencies."

THE CHALLENGE: the need for embedded security

Having dealt with the financial market for many years, NCR knew that security needed to be a core component of its new product. "When dealing with monetary transactions, security is always a necessity," says Bowman. "In fact, our customers demand it as part of our products. We wouldn't think of launching without it."

Ray Higgins, NCR's Business Consultant for Payment Solutions agrees, "Dealing with finance data outside the four walls of the bank requires a certain comfort level that can only be achieved through security. This means you need authentication, authorization, encryption, digital signatures and non-repudiation for your transactions. In other words, you need to know that the people you are dealing with are in actuality those individuals, that your data has not been compromised and that you are ensuring privacy for your customers. This is especially true in the move to images as the legal replacement for paper and microfilm – the security assuring the image has not been tampered is not just a value add – it is essential."

For NCR, building a homegrown security solution was not an option. They wanted a proven solution from a respected security company that would provide scalability, was standards compliant, would support hardware security modules and would integrate easily into their product structure. Such a solution would have to run on Elliptic Curve Cryptography (ECC), providing the level of security that NCR needed without impacting the performance of their product.

NCR was also looking for a company that could provide a support organization that would educate their development and product management teams on security and would be around to support them for the long run.

REQUIREMENTS

• **complete, proven, standards-based security solution**

• **easy integration for accelerated time-to-market**

• **strong performance and scalability**

• **strong support organization**

• **uses Elliptic Curve Cryptography (ECC)**

securing the wireless world

THE SOLUTION: Security Builder Crypto developer toolkit

After looking at a few solutions on the market, NCR chose the Security Builder Crypto™ (formerly Security Builder) developer toolkit. "Certicom had the better solution all around," say Higgins. "Its price tag was more favorable and we received personal service from our sales rep and professional services team."

During initial discussions, Certicom spent time with the NCR team to not only ensure they knew the basics of security but understood the
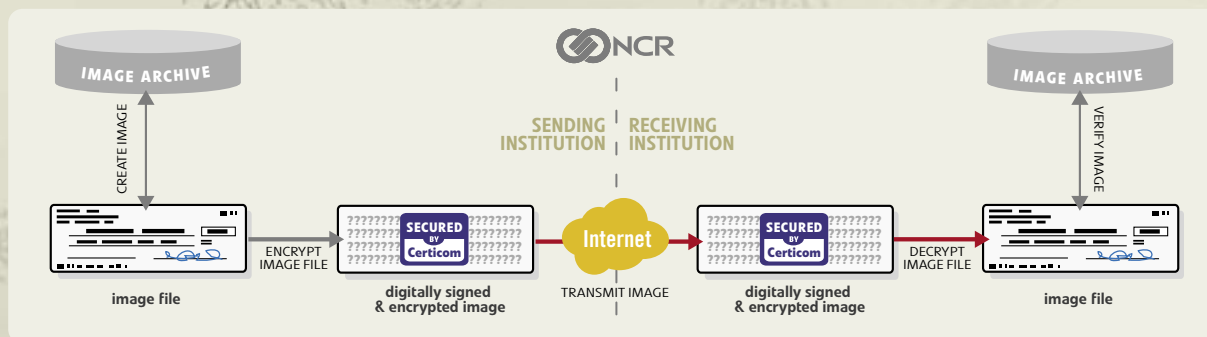
technology and business points as well. These initial discussions combined with a consistent code base and plug-and-play integration greatly reduced NCR's development time on the security phase of their product. "The first prototype took less than a day to get up and running," says Higgins. "The Security Builder toolkit was definitely easy to use and had a simple API."

NCR also liked the solution because it was powered by highly efficient and optimized ECC. The use of ECC in the Security Builder Crypto toolkit provided NCR with greater security per bit than conventional public-key technologies while using minimal processing power and storage requirements. This meant that its ECPIX solution was not drained all of its resources.

The Security Builder Crypto toolkit also gave NCR's ECPIX solution the security edge its customers were demanding by providing standards-based, interoperable, scalable and end-to-end security.

KEY BENEFITS

- **standards-based, interoperable, end-to-end security**
- **plug-and-play integration for faster time-to-market**
- **consistent code base**
- **powered by Elliptic Curve Cryptography (ECC)**
- **strong professional services team**

NCR's Electronic Cheque Presentment Solution Secured by Certicom

THE RESULTS: embedded security

Partnering with Certicom meant NCR could meet its needs and deadline for its new product. Due to fast integration and a dedicated support organization, the company was able to successfully go to market in October 2002 with its ECPIX solution complete with Certicom security.

A proven standards-based solution, Security Builder also eliminated the risk factor in embedding security, something Bowman and Higgins were glad they didn't have to worry about. "Our customers know that when we integrate security into our products they are getting safe and reliable payment systems," says Bowman.

Bowman and Higgins were also able to respond to their customer's security needs in a timely manner. "We couldn't have launched this product with out it," says Higgins.

RESULTS

- **fast time-to-market with embedded security**
- **eliminate the risk factor in adding security**
- **respond to security needs of customers – quickly**
- **competitive advantage**

About Certicom

Certicom is a leading provider of wireless security solutions, enabling developers, governments and enterprises to add strong security to their devices, networks and applications. Designed for constrained devices, Certicom's patented technologies are unsurpassed in delivering the strongest cryptography with the smallest impact on performance and usability.

About NCR

NCR Corporation (NYSE: NCR) is a leading global technology company helping businesses build stronger relationships with their customers. NCR's ATMs, retail systems, Teradata® data warehouses and IT services provide Relationship TechnologyTM solutions that maximize the value of customer interactions. Based in Dayton, Ohio, NCR (www.ncr.com) employs approximately 29,500 people worldwide.