

DNB NOR, NORWAY'S LARGEST FINANCIAL SERVICES GROUP, IMPLEMENTED VASCO'S DIGIPASS TO SECURE THE BANKID SCHEME.

BankID delivers a public key infrastructure (PKI) solution enabling members from the Norwegian public to identify themselves and sign digital documents from authorities, companies and other organizations on the Internet. The BankID scheme works with nearly all Norwegian banks and banking groups, amongst others DnB NOR. It is an open national standard for all citizens with an online-bank, for all enterprises and public offices and is based on PKI technology. To meet BankID's security requirements, DnB NOR implemented VASCO's patented DIGIPASS technology with One-Time Passwords.

BANKID: A NORWEGIAN NATIONAL ELECTRONIC ID INFRASTRUCTURE

BankID is an electronic ID infrastructure offering a secure and cost-effective Internet security solution for identification and electronic signatures. It enables Norwegian citizens to identify themselves and digitally sign documents from authorities, companies and other organizations on the Internet by using the BankID electronic identification and signature system. The solution is used in Internet Banking applications, e-commerce, e-government and public & private services. BankID's services are based on qualified certificates.

Banks within the Norwegian financial community were looking at new ways to expand their role as a trusted business partner to the Internet. The challenge was to design a security standard bringing multiple users on multiple platforms together. Public Key Infrastructure was seen as the best option to fulfil the requirements of confidentiality and non-repudiation allowing authentication to safeguard the integrity of information. The banks established an organ COI (BankID Common operational infrastructure) in 2001 provided by BBS (The Norwegian Banks' Payments and Clearing Centre) to ensure efficient cooperation for developing and maintaining a national PKI infrastructure. They made mutual agreements concerning standards and quality levels and chose for the Bank ID scheme because it is a cost efficient solution where costs are spread on a large number of banks. Although collaborating about the infrastructure, the banks compete in the marketplace with BankID, both in the retail- and corporate market segment.

BankID went live in 2004 and on-line banks were the first users to use

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Geir Øiestad - Head of Internet Banking at DnB NOR

BankID for identification and signatures. At present 1.5 million users have signed up for BankID with their online bank. The final aim is to reach all e-banking users in Norway, which amounts to approximately 2,5 million

DnB NOR wants to issue all its online users with a BanklD by the end of 2009. Another aim is to significantly increase the number of merchants from today's number of 260. For

2008 it's expected that more than 150 million identification- and signature transactions will be processed by BankID.

STRONG 2-FACTOR AUTHENTICATION ENABLING INNOVATIVE PKI DESIGN

BankID requires no smartcard infrastructure, smartcard readers or any proprietary software on the end-users' PC. The DnB NOR customers' private key is stored in a central electronic vault and it's safeguarded by their DIGIPASS and static password. This design provides a high level of user friendliness; reduces costs significantly and maintains the required level of security. In 2006 the BankID scheme won the EEMA Excellence Award for its design.

Banks and merchants are provided with a BankID Server which executes all cryptographic functions. End users communicate with merchant and BankID infrastructure by an applet which is downloaded every time the end users want to perform an identification and/or signing process. The bank's customer gets issued with a personal certificate whereas the merchant or public office receives a merchant certificate from his bank. The Bank ID scheme validates all certificates issued by the customers' and the merchant's bank. This then allows customers and merchants to conduct their business in a secure way through authentication and signatures. The customer's identity is guaranteed by the member bank, issuing the BankID. The BankID scheme provides strong authentication and secure digital credentials for end-users to safeguard their sensitive and confidential information. It also provides a greater security as users' credentials are validated in real-time, giving fraudsters virtual no chance to intercept vital

A SIMPLE, USER-FRIENDLY, EFFICIENT AND COST REDUCING SOLUTION

information.

The benefits of the national electronic ID infrastructure are obvious. Customers can sign virtually all types of contracts online, but BankID is not only used for ordering services and products. It can (and will be) used for stock market transactions, loans & credits and insurance services. "Signing online contracts with BankID provides significant cost reductions and will also increase customer satisfaction", says Geir Øiestad, Head of Internet Banking at DnB Nor.

"We have received a lot of positive feedback from our customers



experiencing the safe and simple use of BanklD throughout merchants on the Internet requiring only one password and one DIGIPASS."

CHOOSING VASCO STRONG AUTHENTICATION

DnB NOR worked with different One-Time Passwords for their retail customers. To simplify the handling process and to reduce costs in the long term, the bank was on the lookout for one single authentication method which would meet all the demands from the BankID scheme, and at the same time provide user-friendliness and low costs.

"We inventoried all of our different authentication products and evaluated them in terms of cost, security, user friendliness, administration and support", says Geir Øiestad.

The study revealed that DIGIPASS GO 3 received the highest scores. In the end, the DIGIPASS GO 3 solution represented the best economy based on a 3 year life time cycle.

The customer user test showed that clients were also delighted about GO3. The bank didn't want to burden their customers with a long and complex logon procedure; therefore DIGIPASS GO 3 was the ideal solution. The DIGIPASS authentication software is incorporated into the portable DIGIPASS GO 3. With a touch of a button, customers can generate a unique dynamic password granting them access to the bank's online applications. "We decided to use DIGIPASS GO 3 for all our retail customers and DIGIPASS 250 for our corporate clients. Because we now distribute one single authentication method, our administration and support was also simplified and we could offer a transparent service", says Geir Øiestad. "Experience so far learns us that customers are very positive about the device, that it's very user friendly and mobile."

One small disadvantage DnB NOR noticed, is that some customers hold their DIGIPASS upside down. Because of the large quantities distributed by DnB NOR, flexibility and availability of stock, the bank chose to work with a standardized version of the DIGIPASS instead of a customized casing. The

lack of a text or company logo sometimes confuses the customers how to hold the device.

Customer satisfaction increased, administrative handling and cost decreased and DnB NOR's support services find it easier to train their employees now they chose one single authentication method.

Reactions on DIGIPASS GO 3 are positive and very few DIGIPASS devices experienced technical problems.

Objective

DnB NOR needed to implement a security solution for BanklD that would meet all of BanklD's security requirements. Previously, the company worked with different types of systems and security devices for their retail customers. Some customers even had several different devices.

Challenge

DnB NOR wanted to implement one single authentication method to simplify handling which would lead to more satisfied customers and would also reduce costs in the long term. A better and clearer logon process would also reduce calls to the bank's call centre.

Solution

DnB NOR found in VASCO's DIGIPASS GO 3 the security solution to suit theirs and their customers' needs. DIGIPASS GO 3 is a simple and user-friendly authentication device, offering a high security level compliant with BankID's security standards.

About DnB NOR

DnB NOR is Norway's largest financial services group offering banking services, life & pension insurances, a financial distribution network and acts as Norway's largest real estate broker. The DnB NOR Group houses Norway's largest Internet banks, dnbnor.no and postbanken.no, with a combined customer base of over 1,4 million users

Overall DnB NOR has more than 2,3 million retail customers and 198 000 corporate customers. The Group employs 13.455 full time employees and is represented in more than 200 locations in Norway.

About VASCO

VASCO designs, develops, markets and supports patented DIGIPASS®, DIGIPASS PLUS®, VACMAN®, IDENTIKEY® and aXs GUARD® authentication products for the financial world, remote access, e-business and e-commerce. With tens of millions of products sold, VASCO has established itself as the world leader in Strong User Authentication for e-Banking and Enterprise Security for blue-chip corporations and governments worldwide.

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