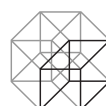




Home Banking Leaves Home

More than one million customers in Danish savings banks now have the possibility to do secure banking from Web browsers anywhere in the world. The new Internet banking solution from the Savings Banks Data Center (SDC) is based on Cryptomathic's net-centric digital signatures.



Home Banking Leaves Home

Savings Banks Data Centre

The Savings Banks Data Centre (SDC) provides IT and related services to Danish banks. The IT services range from development to hosting. SDC was established in 1963 as a data processing centre for the Danish savings banks; today it services 80 banks with 506 branch offices and 1.1 million customers.

Imagine a Café Bank

Imagine that you are at work, attending a course in Paris, abroad on holiday, or stuck in an airport due to heavy snowfall. And imagine that you forgot to pay a bill, just received a hot tip for the stock market, need to check the status of a banking transaction, or just want to kill time in a productive way. So, what do you do? Your home PC is out of reach; but that is not a problem. You just go to the nearest computer with Internet access and start home banking. With SDC's Café Bank based on Cryptomathic's net-centric digital signatures, it is as easy as that.

Easy for the User

To use Café Bank the travelling home bank user only needs a mobile phone and a computer with Internet access. The user accesses the bank's Web site as usual. To log on she enters her password as usual, and a few seconds later she receives an SMS with a Café id-code. She enters the id-code and is now able to use the banking application as usual.

Still Secure

For paying bills, moving money between accounts, etc. in Home Bank — SDC's traditional home banking solution — a digital signature is required. To apply a digital signature to a transaction, the user needs a signature key. This key is stored on her home PC, but a copy is kept on a central server. When travelling, she uses the Café id-code to identify herself and access the key stored centrally.

Strøkskurser	Kategori	Statistik	Valuta	Beholdning	Balgskurs	Kabskurs	Seneste	For	30%	45%
6% STAT 2004	DKK	110,50	110,78	110,60	5,08	3,47	1,64			
6% STAT ST LÅN 2003	DKK	104,20	104,30	104,21	4,18	2,93	0,74			
7% STAT ST LÅN 2003	DKK	108,99	109,19	109,00	5,12	3,55	2,14			
7% STAT ST LÅN 2004	DKK	105,59	105,79	105,64	4,78	3,31	1,73			
4% STAT 2011	DKK	104,27	104,47	104,25	5,42	3,78	2,79			
6% STAT ST LÅN 2009	DKK	103,97	104,17	103,94	5,35	3,73	2,72			
6% STAT ST LÅN 2003	DKK	101,36	101,66	101,40	5,78	2,66	1,18			
5% CAUSK STAT 2013	DKK	95,91	96,11	96,01	5,47	3,85	3,16			
5% STAT ST 2008	DKK	100,16	100,36	100,22	4,92	3,44	2,68			
5% STAT STOD 2003	DKK	100,82	100,92	100,84	4,95	3,12	2,23			
4% CAUSK STAT ST LÅN	DKK	93,65	93,85	93,73	5,17	3,65	3,30			

Jacob Hertz, SDC chief security architect, says:

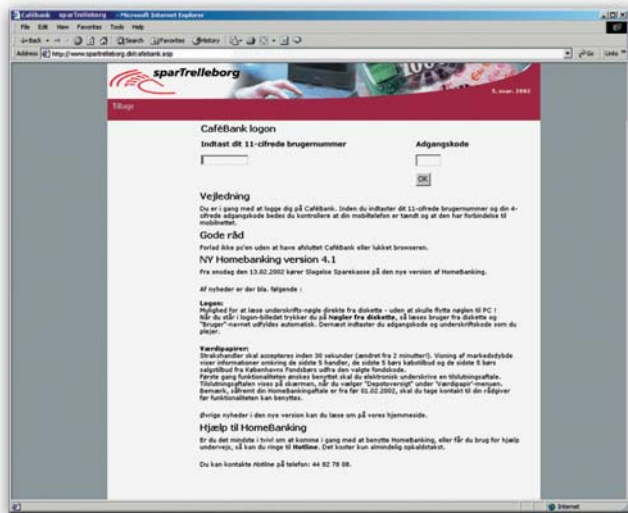
"Our original home banking solution (Home Bank) is extremely popular, and we wanted to make it even more user-friendly and truly mobile. It has always been technically possible to do mobile home banking, but only by relaxing security. This was never an option to our customers, nor to us. SDC's home banking concept is one of the most secure solutions in the market, and we did not compromise our high security to obtain mobility, far from it!

Café Bank started as a supplement to the traditional Home Bank; but we expect that more and more customers will use Café Bank only. The reason for this is the increasingly popular always-on Internet connections like ADSL. An online PC is exposed to attacks from outside, and so is a key stored on the PC. The security state of the PC at home may be doubtful, but our central server is absolutely secure."



Jacob Hertz, SDC:

With SDC's Café Bank we are now able to offer our customers a home banking solution which is not only secure and user-friendly but also fully mobile."

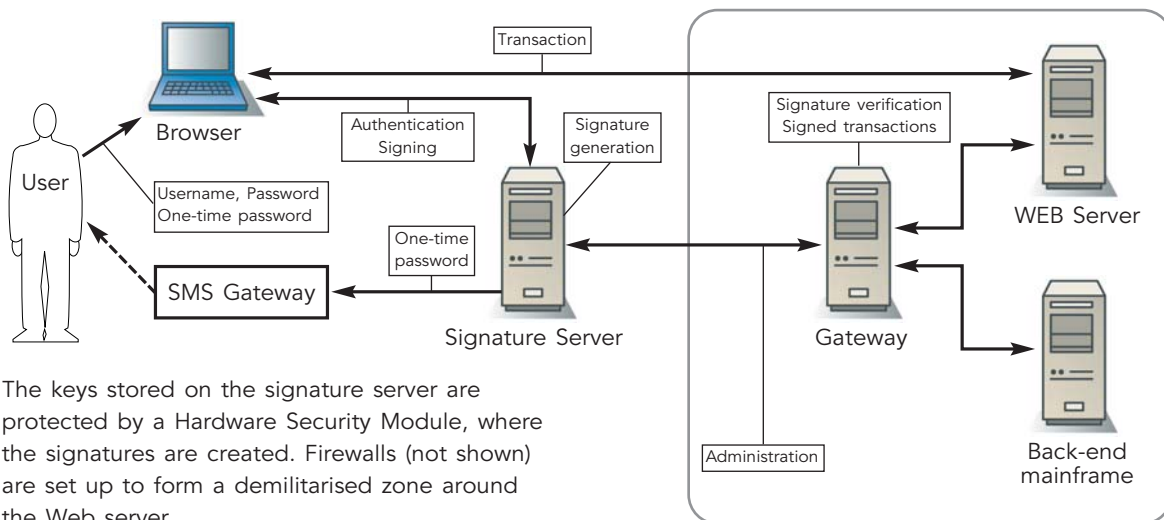


Solution Overview

The signature server delivered by Cryptomathic makes the unique combination of mobility and security in Café Bank possible. The banking part of the solution is similar to any other Internet bank. The security part, however, is different because the central security operation – generation of digital signatures – has been moved from the client to a central server.

To access Café Bank and perform transactions, the users have to authenticate themselves towards the signature server. Thus, this server delivers both strong access control to the application and digital signatures on the transactions.

In Café Bank, the signature server provides strong two-factor authentication using a static password and a one-time password: the Café id-code sent to the user's mobile phone via SMS.



The keys stored on the signature server are protected by a Hardware Security Module, where the signatures are created. Firewalls (not shown) are set up to form a demilitarised zone around the Web server.

Solving the Key Store Problem

In any solution involving digital signatures, it is essential to choose the right store for the user's signature key.

Software key stores remain the most common choice. While they are quite easy to deploy, they offer only limited security and no mobility at all. Hardware key stores, like chip cards, offer higher security and even promise some degree of mobility. However, smart card readers are not yet included in standard PCs.

Cryptomathic's signature server combines the best of the two worlds. With no software to install on the client side, deployment is not an issue. For the signature key, the server offers optimum protection and physical security, while the user enjoys full mobility.

Mobility Expected to Boom

Still more customers are expected to switch to mobile home banking for reasons of convenience as well as security. Furthermore, SDC can now provide these users with mobile, general-purpose digital signatures, which can be used for anything from secure authentication to signing e-mails and Web forms.

Nordic

Cryptomathic A/S (HQ)
Jægergårdsgade 118
DK-8000 Aarhus C
Denmark
Tel. +45 8676 2288
Fax +45 8620 2975

Cryptomathic A/S
Christians Brygge 28
DK-1559 Copenhagen V
Denmark
Tel. +45 8676 2288
Fax +45 3333 9756

Benelux

Cryptomathic NV
Interleuvenlaan 62 / box 19
B-3001 Leuven
Belgium
Tel. +32 (0) 16 394 822
Fax +32 (0) 16 394 821

Germany

Visitor Address:
Cryptomathic GmbH
Rosenheimer Str. 116
GB91
D-81669 Munich
Germany
Tel. +49 (89) 234-20931
Fax +49 (89) 234-20932

Postal Address:
Cryptomathic GmbH
Balanstr. 73
PO Box 800 949
D-81609 Munich
Germany

UK/Ireland

Cryptomathic Ltd
329 Cambridge Science Park
Milton Road
Cambridge CB4 0WG
United Kingdom
Tel. +44 (0) 1223 225350
Fax +44 (0) 1223 225351



About Cryptomathic

With almost 20 years of experience, Cryptomathic is one of the world's leading providers of e-Security. We can assist you in securing your business by providing best-of-breed e-Security software products and services as well as consultancy and education.

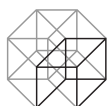
Our range of software products covers e-Security tools for professional application development, trust products as well as card personalization.

Cryptomathic's world-class experts offer e-Security consultancy at strategic level, for solution architecture, and integration.

We offer a complete modular education program, where you can learn what you need to know about e-Security – both on a general and product specific level.

We serve our customers through our head office in Denmark and our European subsidiaries. For more information, please visit our web site:

www.cryptomathic.com



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