

we protect identities.

SECURE PROCESSES FOR REMOTE SMART CARD PROVISIONING

HOW AN INTERNATIONAL BANK BASED IN THE DACH REGION MODERNIZED ITS IDENTITY AND ACCESS MANAGEMENT SYSTEM, GAINING BOTH SECURITY AND EASE OF USE

In the course of migrating from Windows 7 to Windows 10, a renowned financial institution based in the DACH region took the opportunity to modernize its smart-card-based authentication solution. At the time of migration, the bank was already operating a multi-purpose smart card system for its employees worldwide for around ten years. The modernization was intended to address a number of shortcomings of the long-established system, thus improving both security and ease of use.

THE REQUIREMENTS

With a multi-purpose smart card system already in place, and a project manager with a high level of knowledge in the area of multi-factor authentication and smart cards, the requirements for the modernization were detailed and comprehensive.

The modernization required, e.g.:

- ☞ Strict enforcement of roles
- ☞ 4-eyes principle in the card-issuing process
- ☞ Greater flexibility for certificates-to-cards-to-users-assignments
- ☞ Multiple certificates for different Windows accounts must coexist on a single smart card

- ☞ Certain users (admins) must be able to hold multiple cards in their name for their various roles
- ☞ Mini-driver concept for smooth client rollout on the Windows 10 side
- ☞ High logon performance (low latency)

In addition to meeting these technical requirements, the bank also needed a flexible, reliable, and agile implementation partner with broad expertise in electronic identities.

THE SOLUTION

CRYPTAS was able to meet all of the above requirements. Thus, the bank chose CRYPTAS to perform the modernization of its identity and access management system. The solution offered by CRYPTAS was built upon the following main components:

- ☞ CRYPTAS smart card (employee badges)
- ☞ CRYPTAS virtual smart card
- ☞ Intercede myID Credential Management System
- ☞ CRYPTAS self-service portal and client
- ☞ Microsoft Active Directory Certificate Services (pre-existing at the customer)

As the heart of the solution, a set of processes was defined and implemented which enables secure card issuing and activation via 100% remote control. Users get a pre-personalized smart card that is sent to their location, no matter where they are in the world.

The card can be activated with the CRYPTAS self-service client at the pre-logout stage, and with a one-time password that the user receives through a separate channel. The card can then be used immediately for authentication and other purposes.

In addition, different processes had to be developed for the migration of the existing personnel and the onboarding of new employees. In both cases, a strict 4-eyes principle was introduced. This ensures that no one within the production and delivery chain can activate the card without authorization and impersonate the end-user in any way.

THE RESULTS

The solution designed by CRYPTAS with the new, custom-branded smart cards was initially introduced for employees only. However, thanks to the solution's remote card issuing process and its flexible credential management capabilities, the bank soon decided to expand the deployment. Now, external contractors who need access to the bank's systems and facilities are also included. This tripled the user base compared to the original rollout.

As a result, the bank now operates an identity and access management solution that meets the highest security standards - certificate-based, two-factor authentication included.

The modernized solution now allows for passwordless authentication. This is a great improvement for both security and ease of use.

In addition, the migration from the existing smart card system to the new system was a manageable task that did not overburden the IT help desk. This was possible mainly thanks to the high level of end-user self-service mechanisms embedded in the issuing and recovery processes of the solution.

Find out more about CRYPTAS and MyID

<https://www.cryptas.com/>

<https://www.intercede.com/>