



Swedish Police Streamline Information Security with FoxT Smart Cards

Vehicle registration data, DNA, social security numbers, criminal justice information, Schengen and other European Union or international police and judicial information services, countless registers, log files, and fingerprint databases – all are crucial pieces of data. FoxT Extended Smart Cards helped the Swedish National Police improve security, usability and efficiency across all databases.

CASE STUDY

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Lars Bågnert, security expert and head of PKI administration, Swedish National Police Board

“It’s not primarily about security – it’s about usability. The best way to protect your system is to ensure that the intuitive way to conduct your business is also the correct and secure way. And if you make life difficult for your users, you make life difficult for your support staff “. These are observations made by Lars Bågnert, security expert and head of PKI administration at the Swedish National Police Board (“Rikspolisstyrelsen”, RPS). And he should know - with a staff of only five people, RPS maintains strong centralized authentication and access control for 24,000 users (2,000 of which are mobile) to services used by some 25 national and international government agencies.

The Challenge

A friendly officer on the beat may still be an idealized image of the police at work, but a more realistic image of modern policing is the database expert cross-referencing data from countless sources to piece together a puzzle that will help solve the case. The difficulty of ensuring information privacy, confidentiality, and availability is exponentially proportional to the number of systems, access locations (police cars, headquarters, remote offices, external agencies), users, roles per user, and corresponding authorization rules – an information security strategy is a challenge for a modern police force.

In 2002, RPS launched a project to modernize the existing infrastructure. At this time, employees were still each issued multiple smart cards and access controls were enforced by multiple systems without centralized administration. A lost, forgotten, or locked card set in motion a labor-intensive process at the RPS Support Center — a process that was repeated an average of 3,000 times a year. This downtime was unacceptable for the national law enforcement agency.

The Goal

To meet the challenge, RPS needed to find a way to establish or improve:

- Secure identification of users using one centralized system for authentication.
- Centralized access controls to ensure authorized users get the information they need while being blocked from data that is none of their business.
- Secure single sign-on capabilities for applications based on strong authentication.
- Encryption of data in transit to protect it from unauthorized access.
- Forensic audit capabilities.
- Failover capability to handle the unexpected, such as when an officer forgets his ID card.



About FoxT

FoxT protects corporate assets with an enterprise access management solution that centrally enforces granular access entitlements, in real-time, across operating systems and business applications on any networked device. The ability to proactively administer, authenticate, authorize, and audit access across diverse platforms, down to the file and device level, enables organizations to greatly reduce compliance and audit costs, streamline IT security administration, and protect corporate value by mitigating the risk of insider fraud. Headquartered in Mountain View, California, FoxT serves Global 1000 customers in 32 countries. For more information - www.foxt.com or email sales@foxt.com.

Securing Access to Workstations and Applications

When the project ended in 2005, three cards per user had been reduced to one and authorizations were centrally enforced. During the transition period, RPS required flexible support for mixed environments, which FoxT was able to provide. To achieve strong centralized authentication and access control, encryption of data in transit, and centralized audit capabilities, RPS uses FoxT ApplicationControl, which in addition to these features provides users with secure single sign-on to applications. Furthermore, mobile units used in police vehicles are provided with the same service levels when they go from offline to online mode.

Smart Use of Smart Cards with FoxT Workstation Control

Extended Smart Cards, a part of FoxT ApplicationControl, uses the smart card as a locking device for a virtual card, where the user's certificates, private keys, and other credentials are centrally stored and managed by FoxT ApplicationControl. By separating the PKI used for authentication from the internal working PKI which provides users with roaming credentials, this innovative technique relegates the smart card to an easily replaceable piece of plastic.

This approach offers two benefits. First, the limited storage space on the smart card is no longer an issue because credentials are stored in the virtual card. The second benefit relates to certificate management. If users lose their smart cards, they can still access their roaming credentials on their virtual cards using a replacement smart card. It is simply a matter of unlinking the lost smart card from the virtual card and assigning a replacement card to lock the virtual card – a procedure that RPS has optimized in a cost-efficient and simplistic yet secure process which reduces downtimes to an amazing minimum.

Strategically Planned Procedures Provide Structure

The RPS team analyzed how to implement Extended Smart Card technology based on RPS practices. Security and usability were key factors—ensuring that a replacement card can be issued remotely and fast yet secured with dual controls; making the process work in large, big-city police stations as well as remote ones manned by only two officers. The result was procedures tailored for usage of FoxT's Extended Smart Cards. The team then crafted an intuitive web interface that facilitates replacement and unlocking of cards.

Evidence of Success

RPS's innovative use of Extended Smart Cards proves the advantages of this technique.

- The system rests comfortably on the foundation of existing processes. ID issuance, once an IT function, has finally come home to its rightful place in the Human Resources.
- The system is fully aligned with Swedish regulations for police officer identification.
- A user gets a replacement card in less than 3 minutes, instead of hours or days.
- Users get speedy card unlocking that keeps the unlocking code a well-guarded secret.
- Secure single-sign on to multiple data sources makes police work more efficient and secure.

Lars Bågnert sums it all up: "Combining access to computers and buildings on one single ID card provides RPS with improved security, usability, and efficiency."