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# SafesITe Smart Cards

Smart corporate ID cards to protect your business

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# Gemalto SafesTe smart card offering enables enterprises to generate a better return on their security investment as one corporate ID card can be used to address multiple employee needs.

**Digital credentials, company identification, building access, e-purse and more can all be combined in one convenient and user-friendly smart card.**

## > Executive summary

Gemalto SafesTe smart card offering enables enterprises to generate a better return on their security investment as one corporate ID card can be used to address multiple employee needs.

Digital credentials, company identification, building access, e-purse and more can all be combined in one convenient and user-friendly smart card.

## > New corporate challenges

Today's corporations are facing new challenges in terms of external and internal threats to expose vulnerable and business sensitive information.

May it be company data that is stored and communicated via internal networks, or documents protected in closed physical environments. Rapid advancements in Information Technology have made it easier for unauthorized entities to gain access to such undisclosed information. Now more than ever there is a call to escalate internal security systems and procedures, both in digital and physical enterprise environments.

Gemalto's SafesTe smart card range delivers all the functionalities required for a strong, comprehensive corporate security solution, that goes beyond today's traditional ID badge systems.



**SafesTe Classic Client enhances network security and employee productivity by enabling the use of personal identity credentials securely stored in SafesTe smart cards.**

## > Multi-application platforms

Built around .NET framework, Java Card, ISO (including contactless) and PKI (Public Key Infrastructure) standards, SafesTe delivers open platforms for corporations that wish to securely host a variety of company specific applications on one portable smart card.

Based on Gemalto' Java Card platform, SafesTe Classic TPC (Trusted PKI Card) smart cards are available with memory sizes ranging from 32 to 128Kb. Some applets are pre-loaded on ROM allowing users to access the whole memory for storage of data and future applets.

The Gemalto .NET smart card is natively supported in Windows Vista and works as a seamless companion to the Microsoft .NET environment and service-oriented architectures. It runs a streamlined version of the .NET Framework to provide customizable two-factor authentication, full cryptographic capabilities and support for on-card applications and services seamlessly within the Windows® environment. Now, organizations can easily leverage Gemalto's advanced smart card technology to secure their networks from end to end while dramatically reducing implementation costs and complexity.

## > High-level security

The SafesTe smart card range is fully PKI-enabled with fast onboard crypto-processors, including advanced software routines. Its ability to store private keys and certificates makes possible 2-factor user-authentication (something you have and something you know), thus by far exceeding the low-end security received through standard username/password solutions. The cards can be used in secure B2B services for web based signing of documents and transactions, for logical access control (PC & network access) and many other applications.

## > Flexible & cost-efficient

SafesTe TOP (Trusted Open Platform) ensures secure applet download, enabling several applets to reside safely in the same card. Thus, corporations can add new applications or upgrade existing ones, dynamically adapting functionalities to its employees even after the card has been issued. This post-issuance functionality makes smart ID cards a cost-efficient investment for the future, as it eliminates the need to re-issue new cards when data and/or applications need to be updated. Of course the .NET smart card relying on the .NET framework (intended to make it easier to develop computer applications and to reduce the vulnerability of applications and computers to security threats) offers similar possibilities with unrivalled easy of development, fast execution of assemblies (.NET applications) and a file system "à la Windows".

The native support of .NET smart card in Windows Vista (also supported through Microsoft Download of Minidriver for 2000, XP and Server 2003) ensures seamless deployment of .NET smart card projects across all the enterprises organization.

## > Merge physical & logical access

Besides traditional magnetic stripe or other legacy physical access control technologies, SafesTe smart cards have the ability to combine contact and contactless technologies, such as Mifare and DESFire, enabling the same card to be used for access both to physical locations and logical information assets.

Security between the existing contact and contactless application can be ensured by physical separation of the chips with two separated chips (in case of hybrid smart cards) providing easiest legacy integration. Dual interface smart cards also exist (the same chip communicating between contact and contactless applications, hence an enterprise may use a SafesTe combination card, or can potentially leverage its existing badge system by adding a Gemalto contact chip for logical access.

## > Corporate e-purse

The flexible storage capacity of SafesTe smart cards make them the ideal tool for e-purse applications, allowing employees to make purchases from a stored value account in the company cafeteria, vending machines etc.

## > Diverse applet offering for the SafesTe TOP smart cards

- The PKI-based digital signature applet features are based on ISO 7816-4, -8 and -9 standards, and the file structure and data organization are according to PKCS#15 v1.1 specification. It provides enhanced cryptographic operations and digital certificate management.
- The data management applet enables data and e-purse management, and creates an opportunity for corporations to offer their employees a portfolio of services on a flexible, personalized service delivery platform. It also allows easy upgrade of applications in order to implement contactless or public key technology.

## > Application development for .NET smart cards

Applications using Gemalto .NET smart card technology are developed, debugged, tested and loaded using a set of tools integrated within Visual Studio .NET. All this functionality is achieved without ever having to leave the IDE. Enhancements to Visual Studio .NET pave the way for easy integration of smart card applications into other .NET based technologies such as Smart Clients, ASP.NET Web Services, etc.

The following applications are loaded by default into the .NET smart cards:

- Microsoft Mini Driver Assembly onboard for PKI and cryptographic related operations,
- OTP (One Time Password) assembly onboard for strong authentication with the Protiva SA Server.

SafesTe TOP and .NET smart cards are components of SafesTe, Gemalto's corporate & B2B security solution, and are fully integrated with SafesTe software and readers.

For more information contact your local Gemalto sales office at:  
<http://www.gemalto.com/php/contactus.php>

