



Gemalto .NET Solutions

Advanced smart card technology for the enterprise

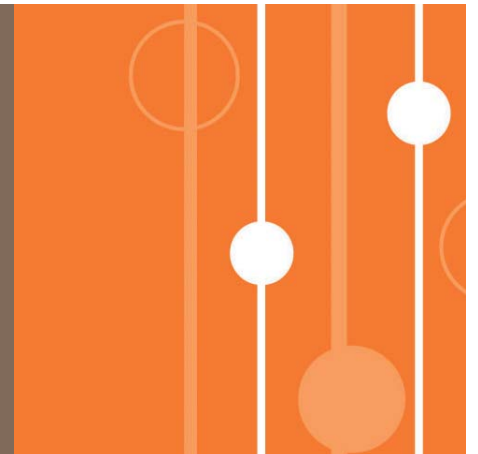
FINANCIAL SERVICES & RETAIL

ENTERPRISE >PRODUCT

INTERNET CONTENT PROVIDERS

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TELECOMMUNICATIONS



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

The Gemalto .NET smart card 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 Protiva two-factor authentication, full cryptographic capabilities and support for on-card applications and services seamlessly within the Windows® environment.

By extending the Microsoft .NET programming model to the smart card, this innovative Gemalto product offers businesses and application developers a rich feature set including managed memory, strong security, and language independence.

Support for Gemalto's .NET smart cards is integrated into Windows Vista, making smart cards easy to deploy and seamless to use without requiring any additional software or middleware. The same support is also available by download from the Microsoft Download Center for 2000, XP and Server 2003. Microsoft Identity Lifecycle Manager (ILM), an identity management solution that helps lower the costs associated with digital certificates and smart cards, also supports the Gemalto .NET card.

Many uses for the card are available in Microsoft Windows and Vista, like using them as a second factor to secure access to desktops or networks (strong authentication). They can also hold digital certificates to confirm identities and sign or encrypt email and documents. Many other companies also now support these uses of smart cards in popular applications, like the Adobe Acrobat Reader.

- Strong, two-factor authentication; aligned with Microsoft's Crypto Next Generation architecture; plug-in available in Windows updates or natively in Windows Vista™
- Rich development environment; plug-in for Visual Studio® .NET
- 32-bit architecture, field-updatable OS; adherence to industry standards
- Support for future technologies such as Microsoft's InfoCard

The combination of the .NET model and the smart card means that the card performs well as a peer computing device, maintains consistent, strong security with applications both on- and off-card, and leads the way to better integrated smart-card applications and services. For all these reasons and more, the Gemalto .NET smart card has been chosen as Microsoft's worldwide corporate badge for logical and physical access.

Protiva is a strong authentication platform that incorporates the strengths of Gemalto's smart card technology. It consists of a family of smart-card based user authentication devices, a browser plug-in, an authentication and customer care server and a self-service user care portal. Protiva has a lower total cost of ownership relative to alternative solutions and provides true anti-phishing security with a variety of convenient form factors. Organizations can deploy Protiva for secure user authentication and implement more comprehensive identity protection and network security solutions, including the smart card-based security features in Microsoft's Windows and .NET platforms, without being forced to abandon infrastructure investments or change end-user devices.

> SECURITY

Secure implementation plugged into Microsoft's cryptographic architecture. The .NET smart card is enabled through Microsoft's Base Smart Card Cryptographic Service Provider (CSP). This not only ensures security through strong authentication, but also supports easier, more cost-effective deployments by exploiting the CSP architecture. Gemalto's Card Module is available in the latest Windows updates, and is natively supported in Windows Vista.

> SOFTWARE DEVELOPMENT

Application development/integration with Visual Studio .NET. Visual Studio .NET enhancements pave the way for integrating smart cards into solutions that are based on web services. A Software Development Kit (SDK) plug-in to Visual Studio .NET is available for quick and easy access to the rich development environments of both Visual Studio .NET and the .NET Smart Card Framework SDK.

> BUSINESS SOLUTION FOR TODAY AND TOMORROW

Unified communications between smart card and host. Consistent, reliable communication is enabled through the .NET Remoting communication mechanism. This feature supports standard protocols such as XML, SOAP, and HTTP, as well as traditional 7816-4 protocol APDU commands.

INTEGRATING GEMALTO .NET SOLUTIONS IN MICROSOFT IDA ENVIRONMENTS

