Digital Signature Solutions

Digital signing with Adobe® Acrobat® & Adobe LiveCycle® ES2, and SafeNet eToken & Hardware Security Modules

SOLUTION BRIEF

For advanced levels of security, digitally sign documents using hardware smart card token-based two-factor authentication to ensure non-repudiation

Why use Digital Signatures?

- Easy to use - Digitally sign and seal electronic documents with ease
- Expedite Business Processes - Replace handwritten signatures and paperwork, and reduce the approval process time for multiple authorizing signatures
- Paperless office - Reduce costs associated with traditional paper-based processes (i.e., paper, printing, ink, faxing, postage, and processing time)
- Legal compliance - Electronic records digitally signed by Adobe improve compliance posture

A Standard Digital Signature Solution for Adobe and SafeNet users

As organizations move from paper toward digital business process and initiatives, Adobe and SafeNet offer a secure, portable simple to use solution that streamlines business process and reduces time and costs associated with traditional paper-based document signing. Together with Adobe, SafeNet users can digitally sign documents, files, forms and transactions anywhere using SafeNet eToken as the Secure Signature Creation Device (SSCD), ensuring compliance with regulatory requirements, and a seamless transition towards a paperless office environment. Adobe and SafeNet guarantee signer authenticity and the data integrity of documents in a manner that is secure and easy to deploy and manage.

An Integrated Approach

The combination of SafeNet and Adobe Acrobat enables the strongest utilization of desktop (client-side) digital signatures on Adobe's Portable Document Format (PDF) files.

The Advantages of Secure Digital Signing with Adobe and SafeNet

Streamline Business Processes - Replace handwritten signatures and paperwork, and reduce approval process timelines for multiple authorizing signatures.

Paperless office - Reduce costs associated with traditional paper-based processes (i.e., paper, printing, ink, faxing, postage, and processing time).

Non-Repudiation – SafeNet and Adobe can be implemented to provide non-repudiation of documents or transactions. Digitally signed documents and transactions are sealed electronically, providing evidence of signer and document authenticity and guaranteeing document integrity and thus are resistant to fraud and tampering. By utilizing a hardware-based device, ensures users that the private keys are never exposed outside the hardware token or module.

High assurance - With PKI-based trusted credentials, the level of assurance is typically higher than that of electronic signatures protected only by a password. Moreover, SafeNet offers native support for the highly secure RSA 2048-bit keys.

Compliance – Utilizing standards-based digital signatures and X.509 certificates in accordance with regulatory guidelines enables integrity of documents to be maintained.

Standards-Based - Adobe and SafeNet enable compliance with security and privacy standards. Adobe products feature industry-leading support for PKI standards, FIPS-validated cryptographic modules, NIST test suite validation, and JITC/SAFE/IdenTrust certification, all of which combine to provide a powerful, dependable, and interoperable digital signature solution. SafeNet offers FIPS 140-2 validated solutions with a PKI Client standards-based middleware that enables smooth integration with Adobe applications. SafeNet eTokens and eToken PKI Client support Mac and Linux users, as well as those using Windows-based operating systems.

SafeNet eToken for Portable Hardware-Based Digital Signing

Adobe Acrobat users who want to digitally sign or secure documents need only select the digital certificate that is stored on the eToken. This process enables users to create certified documents that authenticate their identity and validate their integrity. Since users carry their certificates and credentials with them on a convenient-to-use USB device, eToken provides an easy and fully portable way to securely sign documents. This hardware-based approach allows users to use a PKI-based smart card token to securely digitally sign documents from anywhere, eliminating the challenges of other signing solutions that tie credentials to a singular computer or laptop while ensuring the validity of the signature.

SafeNet Hardware Security Modules Protect the Digital Signing Key

SafeNet HSMs address the security and operational needs required to maintain the integrity of PKIs with true hardware key management, trusted path multi-person authentication, and direct hardware-to-hardware backup. Enabling the strictest hardware security for Certificate Authorities (CAs) issuing digital identities in PKIs, SafeNet HSMs protect the PKI root key and performs all key management, key storage, and key operations (such as digital signing) exclusively within hardware. Adobe LiveCycle ES2 Digital Signatures leverages this robust hardware with the ability to sign and certify large volumes of PDF documents, as well as validate signatures on forms in a round trip scenario. The combination of these products enables customers to protect the integrity of critical documents as well as establish authorship. SafeNet HSMs advanced features include direct hardware-to-hardware backup, split user role administration, multi-person authentication and trusted path authentication coupled with proven security and operational deployment experience in some of the largest PKIs in the world.

How Digital Signing Works

1. User views document

User views document, fills in form fields, chooses credential, and clicks signature field to approve

2. Signing process

User initiates signing process, is prompted for smart card token pin to authenticate to credentials stored on the hardware token or smartcard

3. Document received

Adobe Acrobat or Adobe Reader® validates signature from trusted CA. Recipient views signed document

Digital ID Protection

Secure certificate issuance and key management provided by HSMs

About Adobe

Adobe revolutionizes how the world engages with ideas and information. Our award-winning software and technologies have set the standard for communication and collaboration for more than 25 years, bringing vital and engaging experiences to people across media and to every screen in their lives, at work and at play. For more information, visit *www.adobe.com*.

About SafeNet

SafeNet is a global leader in information security, founded more than 25 years ago. The Company protects identities, transactions, communications, data and software licensing through a full spectrum of encryption technologies, including hardware, software, and chips. More than 25,000 corporate and government customers in 100 countries including UBS, Nokia, Fujitsu, Hitachi, Bank of America, Adobe, Cisco, Microsoft, Samsung, Texas Instruments, the U.S. Departments of Defense and Homeland Security, the U.S. Internal Revenue Service, trust their security needs to SafeNet. In 2007, SafeNet was acquired by Vector Capital, a $2 billion private equity firm specializing in the technology sector. For more information, visit *www.safenet-inc.com*.

2009 SC Magazine "Best Buy" 5-Star Rating

Network Product Guide's Best in Tokens

2009 WindowSecurity.com Reader's Choice 1st Runner Up

Key SafeNet eToken Benefits

- Paperless office for efficient and cost-effective organizations
- Dual solution for digital signing and secure access based on strong two-factor authentication
- Offer a portable USB design: users carry their digital identity with them - no special reader needed
- Based on industry-standard interfaces for out-the-box integration with digital signing applications
- Cost-effective: no back-end infrastructure or ongoing maintenance required

Key SafeNet eToken Features

- On-board PKI generation; private keys are never exposed outside the hardware token or module for secure storage of user credentials, keys and sensitive information
- FIPS 140-2 validated and Common Criteria certified cards and smart card chips
- Native support for long key encryption including RSA 2048-bit

SafeNet® The Foundation of Information Security

www.safenet-inc.com

Corporate Headquarters:
4690 Millennium Drive, Belcamp, Maryland 21017 USA
Tel.: +1 410 931 7500 or 800 533 3958, Fax: +1 410 931 7524,
Email: info@safenet-inc.com

EMEA Headquarters:
Tel.: +44 (0) 1276 608 000, Email: info.emea@safenet-inc.com

APAC Headquarters:
Tel: +852 3157 7111, Email: info.apac@safenet-inc.com

For all office locations and contact information, please visit www.safenet-inc.com/company/contact.asp