



E-Lock ProSigner

vs.

In-built Acrobat 6.0 signatures

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1 INTRODUCTION

This document discusses the highlights and advantages of using E-Lock ProSigner over the inherent digital signature capability provided within the Acrobat 6.0 Professional. E-Lock ProSigner provides several value additions to the use of digital signatures.

One of the most important things in digital signatures is not the signing of the document but the level of verification and validation of the digital signatures and the associated digital certificates. E-Lock ProSigner has been designed to work at very great depths of validation to provide an extremely high level of security for signed documents.

1.1 E-LOCK PROSIGNER WORKS WITH ANY SECURITY FRAMEWORK

ProSigner is designed to work with any security framework – Microsoft IE, Netscape or Entrust. Acrobat 6.0 works only with digital certificates that are stored in the IE security store.

1.2 EASY WIZARD BASED SIGNING OPERATION

E-Lock ProSigner guides the user through a step by step process of signing. At a minimum signing through E-Lock ProSigner is just a two-click process.

In Acrobat 6.0, a user will have to go through a seven-step process after choosing to sign the document.

1.3 BACKWARD COMPATIBILITY

ProSigner allows you to sign documents in any version of Acrobat and verify it in any other version (Acrobat 4.0 onwards).

Documents signed in Acrobat 6.0 can only be verified in Acrobat / Reader 6.0.

1.4 ASSOCIATION OF HANDWRITTEN SIGNATURES WITH DIGITAL SIGNATURES

In the signature bitmap that gets inserted into the document for visible signatures, ProSigner supports creation of the handwritten signature at runtime when signing the document.

Alternatively, this handwritten signature image can be created and stored as a .esg file and used every time during signing.

Acrobat 6.0 supports insertion of graphical representation of your signature when digitally signing the document, but this has to be saved as an image file in PDF format. Creation of the signature at runtime during the signing process is not supported.

1.5 CONFIRMATION PRIOR TO SIGNING AS REQUIRED BY SIGNATURE LAWS IN MANY COUNTRIES

Digital Signature laws in several countries mandate that users should be presented with a declaration to the effect that they have understood the significance of the electronic signing they are about to perform. Soliciting a user's consent ensures that the user is aware of the action about to be performed and that it may have legal significance. ProSigner provides a Signing Declaration to ensure that the user is aware of the information that is about to be digitally signed. This feature is not available in Acrobat 6.0.

1.6 SUPPORT FOR SMARTCARDS

ProSigner supports smart cards and allows users to select their certificates from a smart card when signing documents. This support is for PKCS #11 drivers also.

Acrobat 6.0 supports only smart cards with CAPI support.

1.7 VALIDATION OF ENTIRE CHAIN OF CERTIFICATES

ProSigner has the capability of verifying not only the revocation status of the end user certificate but also the entire trust chain of the issuing authorities. In high value transactions and in Government transactions, this is one of the mandatory requirements.

In Acrobat 6.0, by default the certificate validation does not take place. Some settings need to be modified for Acrobat to be able to validate the certificates.

1.8 ALTERNATE MECHANISMS OF CERTIFICATE VALIDATION

ProSigner allows for OCSP as well as CAM validation mechanisms.

Acrobat 6.0 does not support these validation mechanisms.

1.9 MECHANISM TO VALIDATE CERTIFICATES WITHOUT CRLDP

Many certificates do not have CRL Distribution points to fetch the CRL for validation. ProSigner provides for a facility to install such CRLs and then validate the certificates.

Acrobat 6.0 does not allow for validation of such certificates.

1.10 TIME STAMP SUPPORT FOR DIGITAL SIGNATURES

For time sensitive documents and documents signed across geographical boundaries, one cannot rely on the local time when signing or verifying documents. It is essential to time stamp the digital signatures through a Standard Time Stamp server – thus providing a Digital Notarization of the signed document and a trusted time reference. ProSigner provides the capability of time stamping digital signatures against a Time Stamp server and validation such documents at a later time.

Acrobat 6.0 does not provide this.

1.11 CERTIFICATE VALIDATION AGAINST SIGNING TIME

Digital certificates are valid for a specified period of time and documents signed with such certificates are bound to show as invalid when the life period of the certificate (typically one year) expires. Also, a particular signatory may have a valid certificate at the time of signing, but the certificate may get revoked at a later date for reasons such as change in job status, authority or if the individual initiates the revocation of his/her own certificate due to a compromised private key.

Such documents need to show the validation per the signing time. During validation, ProSigner not only validates the document with reference to the current time but also checks if the certificate was valid at the time of signing (even though it may now be revoked). In real life scenarios and in the case of archived documents, this has tremendous legal implications.

Acrobat 6.0 does not support this feature.

1.12 CREATION OF USER PROFILES

ProSigner allows for the creation of user profiles, which help users automate signing tasks. Users can pre-select their signing preferences and store them as profiles, which can be used for signing of documents.

Acrobat 6.0 does not support this feature.

1.13 USE OF ENTERPRISE POLICIES

Every organization has some standards for security. Even for digital signatures, organizations would like to enforce standards on how digital signatures should be applied. ProSigner allows for use of such policies forcing user compliance of enterprise rules and decreasing the need to learn complicated tasks.

Acrobat 6.0 does not support this feature.

1.14 APPROVAL MANAGEMENT

ProSigner allows for using policies, which can dictate the sequence of signing in case of approval management. This ensures that for particular documents, signing happens in a pre-defined sequence and not in a random manner.

This feature is not available in Acrobat 6.0.

1.15 DIGITAL SIGNATURES FOR MS OFFICE

ProSigner is a single vendor solution for an Enterprise, which provides for digital signing and verification of MS office documents and Adobe Acrobat Exchange.

1.16 DIGITAL SIGNATURES FOR ANY FILE FORMAT

ProSigner also allows for digital signing and encryption of any file format through its e-Sign application. It also allows for digitally signing of files of any format to PKCS#7 compliant signed files through its e-Guard application.

1.17 INTEGRATION WITH THE WINDOWS EXPLORER

ProSigner allows you to right click and sign/verify files on the Desktop and through Windows Explorer.