



## ADSS Go>Sign Desktop™

- Applies **end-user** digital signatures using Windows CAPI/CNG, Mac Keychain or PKCS#11
- Enables PDF, XML and PKC#7 / CMS signing and ETSI PAdES, XAdES, CAdES timestamped and long-term validation (LTV) signatures



ADSS Go>Sign Desktop makes it easy for end users to sign documents or data using locally held keys and certificates. Many countries have eID smartcards issued on smartcards and over 50 certificate service providers issue high trust AATL certificates that are automatically accepted within Adobe Reader. ADSS Go>Sign Desktop allows such smartcards, USB tokens or even local software tokens to create long-term validation, timestamped digital signatures.

Go>Sign Desktop is the replacement for Go>Sign Applet, a signed Java applet, now discontinued because web browsers no longer accept Java applets. Go>Sign Desktop offers the same functionality in a simple to install desktop middleware application for Windows desktops and MacOSX systems.

### Support for Windows CAPI/CNG, Keychain and PKCS#11

ADSS Go>Sign Desktop has unmatched capability for creating PAdES, XAdES, CAdES, PDF, XML Dsig, PKCS#7 / CMS signatures using local keys held within Windows or MacOSX.

### Full Control over the User Experience

The web-application developer has complete control over the look, feel and language of the user interface. Ascertia provides sample source code web-pages to show how a solution can quickly be deployed.

### Rapid Development and Retro-fitting

ADSS Go>Sign Desktop is driven by the ADSS Server Go>Sign Service and this makes it easy for developers to add digital signature generation and verification options to any web-application. All signing complexities are handled by ADSS Server products using high-level calls.

### Enables Greater Usability and Fewer Mistakes

In many cases business managers and citizens do not know how to select the correct certificate for signing and so it makes no sense to ask them. ADSS Go>Sign Desktop can be instructed to look for the right certificate based on name, issuer, key usage, policy or other criteria and thus select the right one without asking the end-user.

### Sign what you see (WYSIWYS) for PDF documents

ADSS Go>Sign Service has an option to display PDFs using a server-side viewer so that PDF documents can be displayed to users securely. The user is shown a flattened PDF before being asked to sign it, any existing signatures can be clearly seen and verified. All trust decisions are taken by ADSS Server so that local trust decisions are not required.

### Data Leakage Prevention (DLP)

The ADSS Go>Sign Viewer allows specific control over actions such as (a) saving a copy, (b) printing a copy and (c) the signature itself. These features help organisations to tightly control data and prevent loss / leakage.

### Why use ADSS Go>Sign Desktop

- ➔ Works as part of a web-browser environment and these web pages can be updated and functionality immediately rolled-out – compare this with installed desktop software and the associated support and maintenance & new software roll-out overheads
- ➔ Supports a wide variety of PDF, XML and data/file/email signing formats, plus timestamped and long-term digital signatures (ETSI PAdES, XAdES and CAdES profiles)
- ➔ Supports automated digital certificate filtering to allow the business application to control which local signing certificate is acceptable for use
- ➔ Works with the ADSS Server Go>Sign Viewer with controllable features for signature field creation, printing, downloading, plus visible signing and signature verification
- ➔ ADSS Go>Sign Viewer displays signature status and all signature appearance elements including hand-signature and company logos
- ➔ Supports Certified PDF signing using visible or invisible signatures, plus the ability to create new or use existing signature fields. Supports high trust AATL certificates
- ➔ Signs documents received from the server or documents held locally on user's systems
- ➔ Can optionally encrypt content using XML Encryption after signing as part of a secure upload process, e.g. for tenders, voting etc.
- ➔ Supports roaming credentials, where keys/certs are held in secure container on ADSS Server and sent to the Go>Sign Desktop at the time of signing
- ➔ Supported all modern HTML5 browsers
- ➔ Also able to generate keys and insert these into local key/certificate stores
- ➔ For the future ask about mobile device signing using strong authentication and authorisation to sign using secured, centrally held keys and certificates

## Multi-lingual User interfacing

ADSS Go>Sign Service and Go>Sign Desktop has been designed such that the user interface can be defined by the web-application developer. Thus all communication with the user can be made in whatever terms are required to make it easy to use. For example a signing action button could be presented as a Sign or Confirm or Accept button in their local language. Certificate selection and other interactions can be fully controlled by the application.

## Example Usage Scenarios

ADSS Go>Sign Service and Go>Sign Desktop can be used in a range of business application scenarios, e.g.:

- ➔ e-Banking applications where end-users must sign and upload financial data or documents as part of payments or loans environment or approve centrally held documents
- ➔ e-Government applications where citizens wish to communicate with local and central services to register, update information, request changes, request new services, pay taxes or even vote
- ➔ e-Business applications where web forms or documents must be signed by employees or customers as part of a web-based workflow system
- ➔ Integration of digital signatures within ECM, ERP or CRM based workflow systems. A document can be viewed and signed within the Go>Sign Desktop. The application can ask ADSS Server to verify the signature and continue with the required workflow
- ➔ e-Tendering applications where suppliers must sign an encrypt their documents as part of a secure online submission process

## Advanced Functionality

Working with the ADSS Server a timestamp can be appended to the end-user signature and CRL or OCSP-based certificate validation data can also be embedded to create long-term signatures. Signed documents and data can additionally be verified via the ADSS Server verification service.

## Enhanced Trust with Reduced Complexity

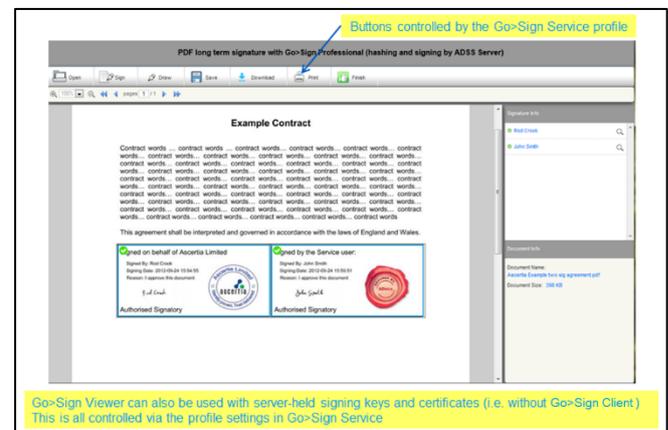
For visible PDF signatures ADSS Go>Sign Service manages the other complexities that include signature appearance, obtaining a timestamp, obtaining certificate chain status information. The PDF can also be certify signed and locked. All these parameters are configured within signing profiles on the ADSS Server.

When using the optional PDF viewer, users may also be allows to draw signature fields. Where a signature field exists the user can click within it to initiate signature creation. For greater control over trust the status of the signature is displayed based on ADSS Server decisions rather than local desktop trust decisions.

## Multiple Key Stores

Two factor authentication ensures extra security for the signing process and ADSS Go>Sign Desktop supports most desktop/laptop key stores so that it can work with both software-based keys or secure smartcards/USB tokens.

ADSS Go>Sign Desktop also supports roamed credentials. This is a solution where the signing keys are generated and stored in a secure software container which is uploaded to the ADSS Server. The secure container is delivered to the user's ADSS Go>Sign Desktop whenever the user wishes to sign a document. This is a cheaper alternative to smartcards or USB tokens but still provides tight user control over the signing keys. Go>Sign Desktop can also locally generate keys and manage certificates for Windows CAPI/CNG CSP key stores.



Screenshot of ADSS Go>Sign Viewer

## ADSS Go>Sign Service and ADSS Go>Sign Desktop Standards Compliance:

|                                |  |
|--------------------------------|--|
| <b>Signature generation:</b>   | PDF signatures, ETSI PAdES, CAdES and XAdES (ES, -T, -C,-X,-X-Long,-A), XML DigSig, CMS/PKCS#7<br>Works with ADSS Server to deliver timestamps, validation data and enhanced signature formats |
| <b>Signature verification:</b> | Uses ADSS Server to manage trust anchors and verification using CRL and OCSP based status checking   |
| <b>Time stamping:</b>          | Uses ADSS Server to manage RFC3161 TSAs  |
| <b>Token Support:</b>          | Various CAPI/CNG and PKCS#11 compliant software, smartcards or tokens / middleware   |
| <b>Operating Systems:</b>      | Windows 10, Windows 7, Mac OS X 10.4 Tiger and above   |
| <b>Browsers:</b>               | Go>Sign Desktop works with any modern HTML 5 browser including Edge, Chrome, Firefox etc.  |
| <b>Interfaces:</b>             | SOAP/XML or HTTP/S APIs in Java or .NET or via WSDL web-services   |

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