

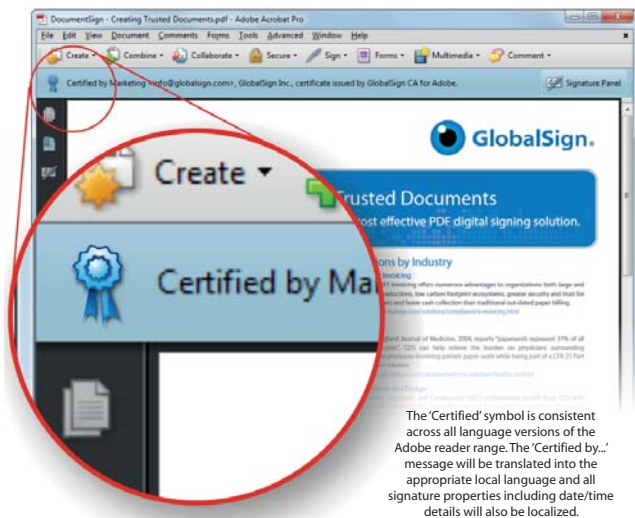
DocumentSign™ - PAdES - Best Practice - Timestamping

Certified Document Services (CDS) provides a cost effective PDF digital signing solution.

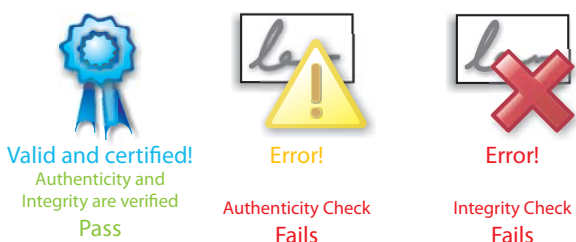
How to create trusted documents with CDS

Certified Document Services (CDS) is a service which is enabled by the Adobe Root Certificate Authority and was introduced into the Adobe® Acrobat® product range from version 6.0 onwards. CDS empowers document authors to digitally sign Portable Document Format (PDF) files, using an industry standard X.509 digital certificates chained to the Adobe Root Authority to allow automatic validation of authenticity of the author using the free Adobe Reader software. No additional client software or configuration is required.

A major advantage to any organization with stakeholders in multiple countries, is the built-in international language support within the PDF reader itself. Available in over 30+ languages, Adobe Reader ensures a consistent digital signature experience worldwide. CDS was designed specifically to enable any organization providing documents to large and disparate recipients, who may be in multiple countries, to increase the assurance level of the document. The document's integrity and authenticity are digitally preserved by the addition of the CDS signature to the PDF. Document authors are able to increase this assurance level without requiring recipients to deploy additional processes - it simply works, ensuring an effective ROI through a vast reduction in the investment normally associated with supporting a proprietary security system.



Following a thorough verification of the 'Applicant' requesting a Document-Sign certificate, GlobalSign will issue a 'pickup' link which allows a certificate to be generated and securely stored on a SafeNet® hardware cryptographic device. Authors can digitally certify PDFs using certificates "chained" up to the trusted Adobe Root. Recipients simply need to open the document using the Adobe free reader to instantly verify the authenticity and integrity of the document. Adobe's simple to interpret "Blue Ribbon, Yellow Warning Triangle, and Red X" trust messaging allows even novice users an easy to understand method to determine if the document is legitimate.



For more information about GlobalSign solutions, please call Belgium +32 16 89 19 00 or UK +44 1622 766766.

Visit www.globalsign.eu or www.globalsign.co.uk for more information

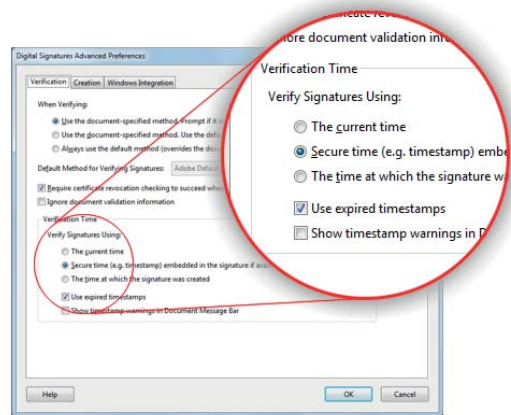
International Standards and Best Practice

Security through obscurity does not suit delivery of products and/or services to a mass market via the Internet. The Internet itself is a generic service, where as PKI (Public Key Infrastructure) is a highly suitable security service for the Internet and delivering trusted documents.

Whilst 800M+ users worldwide have access to the Adobe PDF reader, is PDF not a proprietary standard? The answer is no, in that PDF is an International Standards Organization (ISO) standard. (ISO 32000-1) and equally importantly the signature mechanisms built into Adobe Acrobat, Reader and LiveCycle ES conform to a European Standard. ETSI/ESI Technical Standard (TS) 102 778, better known as PAdES (pronounced with either a long or short a), highlights how the digital signature format described in ISO 32000-1 meets the needs of the 1999 EU Signature Directive.

- Part 1: "PAdES Overview - a framework document for PAdES";
- Part 2: "PAdES Basic - Profile based on ISO 32000-1"; (Best Practice)
- Part 3: "PAdES Enhanced - PAdES-BES and PAdES-EPES Profiles";
- Part 4: "PAdES Long Term - PAdES-LTV Profile";
- Part 5: "PAdES for XML Content - Profiles for XAdES signatures".

This document you are viewing conforms to Part 2 and as best practice embeds a copy of the certificate used to sign the document, the status of the certificate (Via a Certificate Revocation List) and also a digitally signed Timestamp. All versions of Acrobat reader can use the Timestamp (Including expired timestamps) to effectively allow the trust status of the document to last as long as the underlying cryptographic technology is secure.



SafeNET iKey 4000 and PCI 3000

GlobalSign's Certified Document Services Certificates are usually provided with a SafeNET iKey 4000. As an extension of smart card technology, the iKey 4000 plugs into any USB port to provide strong portable user authentication without the need for costly reader devices. Certificates installed onto the iKey 4000 ensure regulatory compliance with the FIPS 140-2 Level 3 requirements of the Adobe CDS program but also provide a Common Criteria EAL 2 chip to allow storage of other credentials.

For organizations with high volume signing requirements or the need for automation, GlobalSign is able to provide a HSM (Hardware Security Module) in either PCI, PCI(e) or Network attached. (PCI 3000 is the default) In addition, GlobalSign's ePKI (Enterprise PKI) solution is available for companies that require multiple digital identities.



The ePKI platform is a simple, easy to use web-based portal for non-technical managers with around the clock access for issuing and managing Digital IDs. All Digital IDs are issued from pre-vetted legal identities (Certificate Profiles) ensuring that proper audit trails are in place for true transparency. Full Digital ID management features (issuance, renewal, reporting and revocation) are accessible 24/7 - essential for organizations operating globally and often with temporary resources or partnerships.

DocumentSign™ - How it Works & Solutions by Industry

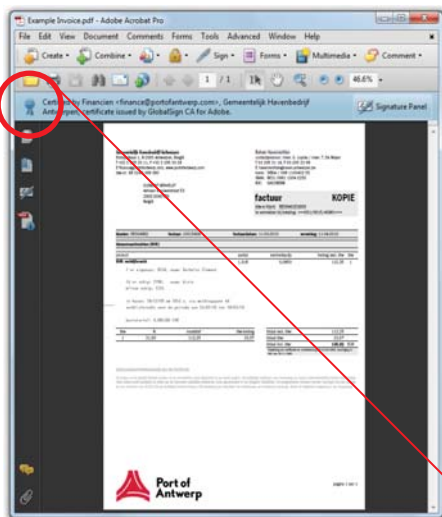
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Valid and certified!
Authenticity and Integrity are verified
Pass



Error!
Authenticity Check Fails



Error!
Integrity Check Fails

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Solutions by Industry

Electronic Invoicing

Electronic VAT invoicing offers numerous advantages to organisations both large and small – cost reductions, low carbon footprint ecosystems, greater security and trust for all stakeholders and faster cash collection than traditional out-dated paper billing.

<http://www.globalsign.com/solutions/industry-solutions/e-invoicing.html>

Healthcare

The New England Journal of Medicine, 2004, reports "paperwork represent 31% of all healthcare costs". CDS can help relieve the burden on physicians surrounding cumbersome processes involving patient paper-work while being part of a CFR 21 Part 11 compliant solution.

<http://www.globalsign.com/solutions/industry-solutions/healthcare.html>

Manufacture and Design

Architecture, Engineers, and Construction (AEC) professionals benefit from CDS with faster design collaboration, more efficient and less expensive electronic document storage, and stronger protection via tamper evident engineering and product documentation as documents are exchanged among customers, partners, contractors, and building departments.

<http://www.globalsign.com/solutions/industry-solutions/manufacturing.html>

Education

More and more educational institutions are increasing student and alumni satisfaction as universities and colleges disseminate sensitive documents like transcripts and admissions letters electronically in a fraction of the time and costs seen with their paper equivalent.

<http://www.globalsign.com/solutions/industry-solutions/education.html>

Government

CDS supports both local and federal government initiatives including the Government Paperwork Elimination Act helping reduce costs, enhance citizen accessibility to government information, and reduce unnecessary environmental waste while at the same time providing high assurances to its citizens that the information is legitimate.

<http://www.globalsign.com/solutions/industry-solutions/government.html>

Financial Services

Industry best practices coupled with government imposed regulation like Sarbanes-Oxley make CDS an attractive option as a thorough audit of the signature properties are embedded in the document itself. Well after the Digital ID expires, the signature characteristics are preserved providing relying parties strong authentication of both the organisation and individual or role that signed the PDF, whether the content is still intact, and the exact date and time of the transaction as determined by a RFC 3161 compliant time-stamp.

<http://www.globalsign.com/solutions/industry-solutions/financial-services.html>

The Notarial and Legal Professions

CDS provides unequalled support of trusted documents in multiple languages. This alone facilitates cross border transactions as both sides are able to interrogate the authenticity of a document in their local language; the ideal solution for e-Notarisation.

<http://www.globalsign.com/solutions/industry-solutions/notary-legal.html>

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