

DocumentSign™ - Creating Trusted Documents

Digital IDs for the Adobe PDF Platform: Certified Document Services (CDS)

As enterprises, governments, and educational institutes broaden their eCommerce initiatives outside traditional defined and established electronic boundaries, they must be mindful of the assurances that stakeholders demand in order to readily accept alternatives to paper. Leveraging an existing and relatively inexpensive electronic infrastructure like the internet makes good business sense as organizations face increased pressure to preserve or increase margins, open alternative revenue channels, improve customer experience, and reduce environmental waste. However, simply moving commerce to the electronic world isn't as easy as taking advantage of existing secure electronic channels better suited for intra-company transactions. Sensitive data like student records, company IP, and product information must be delivered in a highly secure method that provide all relying parties, author and recipients alike, that the document remains authentic no matter where it travels and how many "hands" and networks it has touched.

Whether exchanging clinical trial data, intellectual property, high-value purchase orders, or contractual agreements both government and industry are mandating fundamental precautionary measures be in place prior to electronic exchange. Furthermore, every day, enterprises are implementing best security practices surrounding the electronic exchange of sensitive company information especially in the wake of increased on-line fraud and identity theft. However, obtaining the benefits of electronic communications within an "open community" can not be done at the expense of legally binding transactions, ease of use, and security.

GlobalSign is an authorized participant in the Adobe Certified Document Services (CDS) program. CDS provides a rigorous certificate policy that relying parties can use to determine whether an Adobe PDF document is authentic. Participating CAs are held to a stringent standard developed by Adobe and Web Trust audited to allow DocumentSign Digital IDs holders to digital sign PDFs from a trust model inherent in Adobe Reader 6.0+. Recipients of these "Certified" and "Signed" PDFs can easily make trust decisions based on Adobe's user friendly symbols (See opposite 'How it works')

Certified Document Services

Certified Document Services (CDS) is one of the services enabled by the Adobe root certificate authority. CDS enables document authors to sign Portable Document Format (PDF) files, using standard digital certificates, which automatically validate when authors are using free Adobe® Reader® software. No additional client software or configuration is required.

CDS was designed to enable organizations and individuals who publish high-value documents to large and disparate recipient groups to increase the assurance level that the document's integrity and authenticity are preserved. By adding a CDS signature to a PDF file, document authors can increase this assurance level without requiring recipients to deploy additional software.

Which Versions of PDF reader support Certified Document Services?

The technology to recognise inherently trusted digital signatures incorporated into PDF documents first appeared with version 6.0. The blue security bar was introduced with version 8.1 of the product suite (including the free reader) to ensure a greater level of visual impact and therefore a higher level of trust and assurance than the previous versions.



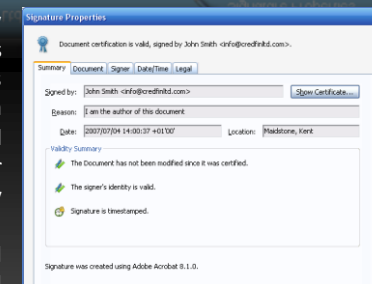
How it works...

Following a thorough verification of both the individual and / or the organization requesting a DocumentSign digital ID, GlobalSign will issue the digital ID in the form of a Digital Certificate, securely stored and protected on a SafeNet® hardware cryptographic device. Authors can digitally certify PDFs (desktop and server-based solutions available) using certificates "chained" up to the trusted Adobe Root. Approval signatures may also be applied at a later stage. 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, Question Mark, and Red X" trust messaging allows even novice users an easy to understand method to determine if the document is from a legitimate source.



By clicking on the signature properties, recipients can view additional information, such as signing certificate details including information about the certificate policy, signer's contact information, Certificate Revocation information via embedded Certificate Revocation List (CRL) details and time-stamping information which are the foundation for strong authentication, long term validity, data-integrity and non-repudiation of the signature.

Enterprises no longer need to fear their brand and reputation are at risk in the event a legitimately authored PDF is maliciously modified and falsely re-circulated under their name.



Modified/Changed
Potential Issue!



Unknown Author
(Revoked, Expired or non trusted Digital ID)
Potential Issue!

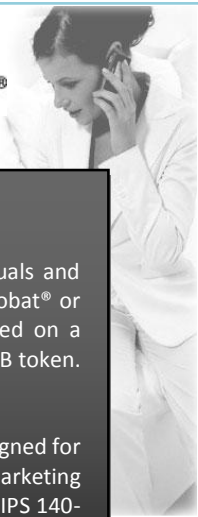


Certified
Trusted

Remember! For the highest assurances of who created a document, look for the Blue Security Bar and Blue Rosette.

DocumentSign™ - Who benefits from CDS

Digital IDs for the Adobe PDF Platform: Certified Document Services (CDS)



Healthcare:

The New England Journal of Medicine, 2004, reports “*paperwork represent 31% of all health care 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.

Manufacturer 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.

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.

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.

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 organization 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.

The Notarial and Legal professions

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

Other uses:

All sectors can benefit from publishing external facing marketing materials, supplier e-agreements, and internal high stakes documents that have been certified with DocumentSign Digital IDs. The Adobe CDS program protects the organization’s brand name from malicious alteration of company generated e-documents.

Solution Highlights...

PersonalSign™ Pro Digital ID for Adobe PDF is a desktop solution designed for individuals and organizations with low volume requirements. Authors can certify PDFs using Adobe® Acrobat® or Adobe® LiveCycle® solutions and a GlobalSign DocumentSign™ Digital ID securely stored on a cryptographic device. For low volume requirements this is a SafeNet FIPS 140-1 level 2 USB token. *(highlighted below)*

DepartmentSign Digital ID for Adobe PDF is an automated PDF digital signing solution designed for organizations with medium volume requirements. A role-based credential e.g. ‘Marketing Department’ is issued and its corresponding private key securely protected on a SafeNet FIPS 140-1 level 2 cryptographic device such as a Luna® PCI HSM (Hardware Security Module)

Enterprise PKI Lite (from Q2 2009) for includes options for an Enterprise to manage the full life-cycle of Digital IDs issued under their organization name. i.e. Individual signing USB tokens or central-based credentials for either role-based signings or server held individual Digital IDs. Distributed implementations involve providing organization administrators (acting as the organization registration authority) a bulk shipment of Safenet USB tokens which work in conjunction with Acrobat Standard/Professional/3D. Centralized, server-based implementations work with SafeNet hardware security modules (optionally sold) that are highly integrated with Adobe’s LiveCycle Enterprise Server suite. The net result is a highly automated solution with robust signing functionality.



SafeNET iKey™ 2032 USB Cryptographic security comes as standard for all PersonalSign and PersonalSign professional solutions – Portable/Flexible/Reliable

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