

# PDF Signing for Adobe CDS - Certification & Accreditation

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

## Electronic Certification & Accreditation Drivers

The importance of 'Trust' in the age of the Internet cannot be underestimated as the Internet continues to expand and the availability of desktop publishing tools becomes virtually ubiquitous. This is especially true considering the diverse nature of many global businesses where language barriers of cause issues with interpretation of local regulations. It is also paramount to understand in the Internet model that it is not necessarily the direct client of the testing authority that needs to rely upon the information. It could easily be a relying party at a sub level, or an auditor several years hence. Once a relying party makes a business decision on the suitability of a business partner as verified by a certification body, it is the brand of the authoritative certification body itself that suffers if the certificate of compliance is later shown to have been manipulated or modified. Compliancy and the need to adhere to growing regulatory requirements now forces relying parties to question the authenticity and integrity of material received. Strong irrefutable audit trails are essential for future reference. Only digitally signed documents supporting long lived digital signatures offer this level of scalability to multiple relying parties and their need to archive content used to facilitate critical business decisions.

The Authenticity and Integrity of a certificate of compliance remains the primary concern for any relying party. i.e. it is vital to know 'who' created or approved the certificate, and whether the certificate has been tampered with or modified in any way post publication/release.

For many organizations the electronic document format of choice is unquestionably PDF (Portable Document Format) mainly due to the fact that almost 800+ million people have access to Adobe's Acrobat reader supporting multiple languages across multiple operating systems. The growth in the use of PDF documents across a number of industry verticals has been widely recognized as best practice for well over 10 years. Unfortunately many organizations fail to recognize is the simple final step which has been available since the release of Version 5 of Adobe's Acrobat product range in 2004 - The Application of Digital Signatures. Used both to secure and to attest to the authenticity of the signed content digital signatures add significant value to any underlying document. Whilst Adobe's Acrobat product offers the ability to digitally sign a document with any X509 compliant digital certificate it was the release of CDS (Certified Document Services) at version 7 which allowed authors to meet all of the critical requirements previously discussed when signing with a SHA-256 certificate.

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"

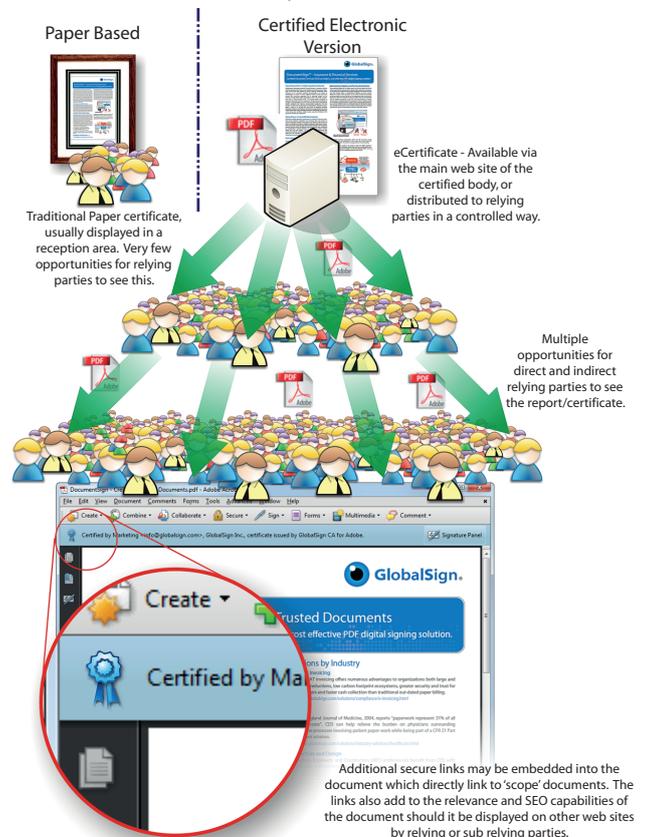
This document you are viewing conforms to Part 2 and as best practice embeds a copy of the certificate used to sign the document, the status of the certificate (Via a Certificate Revocation List) and also a digitally signed Timestamp.

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## What are the advantages to a Certification Body?

As illustrated below, the number of replying parties exposed to the brand of the certification body is significantly higher for an electronic document delivered via the website of a certified body. The representation of the brand is also fully controlled by the brand owner rather than letting the certified enterprise decide how best to scan/display the document on their website. Relying parties are able to store and use digital copies and any use of the certification document on a 3rd party website provides SEO (Search Engine Optimization) for the certification body.



## Customer Case Study



### Exova (Formerly Bodycote Testing Group)

Formerly the testing arm of Bodycote plc, Bodycote Testing Group was established in 1980. Rebranded as Exova in 2009, the company operates from 110 facilities in 24 countries and employs over 3,500 people across Europe, North America, South America, the Middle East and Asia/Asia Pacific.

Exova required a solution with a simple and effective method for the end customer (i.e. the party reliant on the test results) to be able to independently check the document's authenticity and integrity. Exova has a large international network of experts that need to independently approve test results, and ultimately tie the certified results to a specific laboratory further down the chain of reliance. This meant a requirement for a highly distributable and scalable system to provide its experts, clients and clients' customers with the means to easily certify test result documents. PDF Signing for Adobe CDS from GlobalSign provided the best solution.