***Fast, simple, secure and legally compliant way to implement digital signing in your applications!***

***SETCCE proXSign® is a set of the most advanced cross-platform and multiple web-browser components for Public Key Infrastructure*** (***PKI) based digital signing, encryption and time-stamping. Programmable libraries* *offer simple, secure, legally compliant and seamless integration into any WEB or desktop application.***

***Operating systems and WEB browsers***

SETCCE proXSign® v2.1 supports the following operating systems and browsers (for WEB applications):

|  |  |
| --- | --- |
| Operating systems | Web browsers |
| Windows  XP(1),7,8,8.1,10 | C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(1).jpg Internet Explorer from v8 to v11  C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(2).jpg Edge from v20  C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(3).jpg Mozilla Firefox from v30  C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(4).jpg Google Chrome from v55  C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(5).jpg Opera from v42  C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(6).jpg Safari v5.1.7 |
| C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(45).pngMAC OS X/macOS   * Yosemite 10.10 * El Capitan 10.11 * Sierra 10.12 | Safari 9.0.1 and 9.0.3  Safari 10.0.1 (Sierra 10.12)  C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(3).jpg Mozilla Firefox from v52  C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(55).png Google Chrome from v57 |
| C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(7).jpgLinux  Officially supported distributions(2):   * Ubuntu 16.10 (amd64) * Ubuntu 16.04 (amd64) * Fedora 24 (x86\_64) * Fedora 25 (x86\_64)   Some other Linux distributions are also available but they are not officially supported: see [Supported Linux distributions](https://proxsign.setcce.si/proXSignCustomerPages/troubleshooting.html#Linux). | C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(3).jpg Mozilla Firefox - see recommendations for specific Linux distributions  C:\Program Files (x86)\SETCCE\proXSign SDK Setup 3.14.0\Documentation\1. proXSignIntegrationManual\Topics\Images\Image(55).png Google Chrome from v55 |
| Notes:  (1) Minimum requirements: Windows XP, Service Pack 3.  (2) Latest two versions available on 24th of Jan 2017. | |

***Standards***

SETCCE proXSign® v2.1 supports the following standards:

* W3C XMLDsig
* W3C XMLEnc
* ETSI XAdES-BES, eSLOG/XAdES, ETSI XAdES-T, ETSI PAdES-BES
* Adobe PDF (ISO/IEC 32000-1:2008)
* PDF/A
* Client for time-stamping server (ETSI XAdES-T or Entrust XML scheme)

***SETCCE proXSign® v2.1 follows provisions of Regulation (EU) No 910/2014 (eIDAS).***

***Key features***

SETCCE proXSign® v2.1 key features:

* Support for **Windows, Mac** and **Linux** operating systemsand **all popular browsers.**
* **Simple**, **single installation for all browsers**.
* Support for **silent installation** (WIN).
* **Autoupdate** support (WIN).
* **Simple integration:** single javaScript API for all platforms and browsers.
* **Concurrent support for various certificate stores:**
* Windows and Mozilla Firefox (NSS) certificate store on WIN OS.
* Keychain and Mozilla Firefox (NSS) certificate store on MAC OS X / macOS.
* Mozilla Firefox and Google Chrome/Chromium (NSS) certificate store (LINUX).
* Support for digital certificate installed in on external device (smart cards/ smart USB keys) or in browser certificate store (“soft” digital certificates).
* Compliant with standards: **XMLDsig**, **XAdES-BES**, **eSLOG/XAdES**, **Adobe (PKCS#7)**, **PDF/A**, **PAdES-BES**, **XML Entrust schema** and **XAdES-T** for **time-stamping**, **PKI based** (X.509 certificates).
* Support for PDF file format **up to** **PDF 1.7**.
* Support for **SHA1**, **SHA2** (SHA-256, SHA-384, SHA-512) cryptographic hash algorithms.
* Some functionalities are not available on MAC OS X/macOS due to Mac Crypto limitations (Personal Digital certificates installed in Keychain):
* OS X Yosemite (10.10): SHA2 (SHA-256, SHA-384, SHA-512) cryptographic hash algorithms and PAdES.
* OS X El Capitan (10.11) and macOS Siera (10.12): SHA-384, SHA-512 cryptographic hash algorithms and PAdES.
* **On OS X/macOS all functionalities** **are supported over Mozilla Firefox** (NSS); if digital certificates are installed in Mozilla Firefox certificate store.
* Support for **RSA/DSA** signing crypto algorithms.
* **Supported types of signatures:** Enveloped, Enveloping, Detached(XMLDsig).
* **XML/PDF signature verification** (XML Verify according to XMLDsig).
* **Digital certificate verification** (Validity, Certificate chain, CRL).
* Support for **batch signing**.
* **Supported input data formats:**
* XML string (any type of signature).
* Embedded binary in base64 format (only enveloping signature).
* External XML file (any type of signature).
* External binary file (only detached signature).
* **Flexible parametrization:**
* Multiple signature (sequential signing).
* Signing different data entities (parts of XML, whole document, etc.).
* Digital certificate selection by common name, distinguished name, issuer, serial number or hash value.
* Fully configurable visual presentation of digital signature on PDF document: with watermarking support (adding an image) and it’s free positioning on the document (by passing coordinates).
* **Support for Encryption** and **Decryption** (Input is an XML string or a binary file with any content).
* **Time-stamping client** (XAdES-T or Entrust XML scheme)
* **Multi-language** support.
* **Various demo samples** for fast and simple integration.
* **On-line testing tool.**
* Confirmed interoperability (see [www.w3.org/Signature](http://www.w3.org/Signature)).

***NOTE:***

* Some functionality may not be available, such as SHA-2 hashing and encryption; depending on crypto provider the smart card/USB key supports.
* Digital certificates on external device(Smart cards/smart USB keys):
* Supported, if they are supported by Windows/Keychain digital certificate stores.
* Support for PKCS#11 is planned for one of the future release.

***SETCCE proXSign® SDK package***

**SETCCE proXSign® SDK package** for developers provides:

* **proXSign® v2.1 WEB** (browser plugin replacement).
* proXSign components
* proXSign javaScript library
* Demo Samples
* Integration Manual
* End User Manual
* Various utilities
* **proXSign® v2.1 COM** component for desktop applications(it is not included into SETCCE proXSign® SDK, please ask [info@proxsign.com](mailto:info@proxsign.com) for details).

Ask [info@proxsign.com](mailto:info@proxsign.com) for information **about other components**.