

## CCDWS - History of Changes

| Date       | Version      | Changes   |
|------------|--------------|---|
| 2011-10-26 | 0.9.0.1 beta | <input type="checkbox"/> Initial beta version   |
| 2011-10-27 | 0.9.0.2 beta | <input type="checkbox"/> Update to relay framework to include various definition options added to reduce dependencies across modules (no functional changes).   |
| 2011-11-03 | 0.9.0.3 beta | <input type="checkbox"/> Statically link ssleay32.lib and libeay32.lib to avoid additional dependency on MS runtime distributable msvcrt100.dll   |
| 2011-11-05 | 0.9.1.0 beta | <input type="checkbox"/> Moved to gSOAP 2.8.3 with enhanced WSSE support<br><input type="checkbox"/> Fixed WSSE signature handling.<br><input type="checkbox"/> Compiled for 64-bit Ubuntu  |
| 2011-11-09 | 0.9.1.1 beta | <input type="checkbox"/> Fix deletion of existing ' _ ' prefixed temporary input file.<br><input type="checkbox"/> Use ' _ ' temporary output file to store response, then rename to output filename.   |
| 2011-11-10 | 0.9.2.0 beta | <input type="checkbox"/> Added translateRequest() and translateResponse() methods to CCcdws class.<br><input type="checkbox"/> Added Prefix configuration option for CDAnet A01 field during request translation.   |
| 2011-11-14 | 0.9.2.1 beta | <input type="checkbox"/> Retry input and output files up to three times when open fails.<br><input type="checkbox"/> Properly handle case where input or output files could not be opened.  |
| 2011-11-14 | 0.9.2.2 beta | <input type="checkbox"/> Fixed duplicate response stored in the output file, introduced in prior version.   |
| 2011-11-16 | 0.9.3.0 beta | <input type="checkbox"/> Removed carriage return from end of response when generating the output file.  |
| 2011-11-24 | 0.9.3.1 beta | <input type="checkbox"/> Ensured "(beta)" is not included in the service name, for consistency in adding removing the service and ensuring multiple copies are not running.   |
| 2011-12-12 | 0.9.4.0 beta | <input type="checkbox"/> Added EncryptMessageParts, EncryptMessageBody, EncryptCertificateFile options<br><input type="checkbox"/> Renamed SignMessage option to SignMessageParts   |
| 2011-12-21 | 0.9.4.1 beta | <input type="checkbox"/> Updated gSOAP to version 2.8.6, for WS-Security fixes<br><input type="checkbox"/> Used new WSDL to change web service definition<br><input type="checkbox"/> Add CDAnet Prefix option to populate transaction prefix (A03)<br><input type="checkbox"/> Added MaxRetries configuration option |
| 2011-12-31 | 0.9.5.0 beta | <input type="checkbox"/> Changed default <i>DetectParseErrors</i> to 0  |
| 2012-03-20 | 0.9.5.1 beta | <input type="checkbox"/> Synchronized relay source to make current, providing stricter  |

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|            |              | CDAnet validation (only if DetectParseErrors is enabled).   |
| 2012-05-15 | 0.9.5.2 beta | <ul style="list-style-type: none"> <li><input type="checkbox"/> Fixed auto-detection of CDAnet version for populating Format element (was always setting to CDANET4).</li> <li><input type="checkbox"/> Added mandatory ReplyTo element when using WSAddressing</li> <li><input type="checkbox"/> Removed uuid: prefix from MessageID</li> <li><input type="checkbox"/> Write all SOAP fault elements to log file</li> <li><input type="checkbox"/> Reuse SOAP context instead of clearing every time</li> <li><input type="checkbox"/> Ensure retries due to server error correctly initializes WS-Address elements</li> <li><input type="checkbox"/> Fixed minor memory leaks.</li> </ul> |
| 2012-05-30 | 0.9.6.0 beta | <ul style="list-style-type: none"> <li><input type="checkbox"/> Added retries for connection and read timeouts</li> <li><input type="checkbox"/> Set the default read timeout to 60 seconds.</li> </ul>   |
| 2012-05-31 | 0.9.6.1beta  | <ul style="list-style-type: none"> <li><input type="checkbox"/> Ensured that invalid Prefix (e.g. containing an asterisk) would not truncate the Transaction Prefix field, corrupting the message.</li> </ul>   |
| 2012-06-05 | 0.9.6.2 beta | <ul style="list-style-type: none"> <li><input type="checkbox"/> Fix path identifiers to work correctly within non-default installation locations.</li> </ul>  |
| 2012-08-28 | 0.9.6.3      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Fixed parsing of CDAnet2 transaction type 01</li> <li><input type="checkbox"/> More robust handling of faults</li> <li><input type="checkbox"/> Upgraded gSOAP library to version 2.8.9</li> <li><input type="checkbox"/> Updated installation app to support numerous TELUS network aliases.</li> </ul>  |
| 2012-10-18 | 0.9.6.4      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Fixed parser error for last field of claim when plan record flag (field C18) is set.</li> </ul>   |
| 2012-11-04 | 0.9.6.5      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Installation application update to set prefixes for TELUS type A vs. type B destinations.</li> </ul>  |
| 2012-12-31 | 0.9.6.6      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Added locking mechanism to disable duplicates being sent due to multiple instances of CCDWS running.</li> <li><input type="checkbox"/> Default TELUS to be disabled for 'Complete' install. Will enable when they go live.</li> </ul>   |
| 2013-01-08 | 0.9.6.7      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Additional exclusive locking of input file in case CCD is monitoring the same directory.</li> </ul>   |
| 2013-01-24 | 0.9.6.8      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Locking bug fix</li> </ul>  |
| 2013-10-24 | 0.9.6.9      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Fixed default setting for LogMaxSize (512000 bytes).</li> </ul>   |
| 2014-06-01 | 0.9.6.10     | <ul style="list-style-type: none"> <li><input type="checkbox"/> Add support for type 09 and 19 messages, for CDAnet v4.1 attachment submission and response.</li> <li><input type="checkbox"/> Add support for type 07 (embedded eob) messages.</li> </ul>  |
| 2014-07-07 | 1.0.0.0      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Support for operating system certificate store</li> </ul>   |
| 2014-07-08 | 1.0.0.1      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Allow attempted processing if client certificates are not found.</li> </ul>   |

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| 2014-07-08 | 1.0.1.0 | <input type="checkbox"/> Added CRL support.  |
| 2014-10-10 | 1.0.1.1 | <input type="checkbox"/> Fix problem with initial client certificate being retained for subsequent transactions<br><input type="checkbox"/> Updated CRL support to recognize client certificate and stop   |
| 2014-11-26 | 1.0.1.2 | <input type="checkbox"/> Fix CRL retrieval to use proxy options if provided<br><input type="checkbox"/> Ensure CRL retrieval uses primary distribution point first, then alternate<br><input type="checkbox"/> When matching certificates for retrieval, use entire OID values, not just practitioner and office extensions  |
| 2014-11-28 | 1.0.1.3 | <input type="checkbox"/> When sslVerify is not disabled, ensure that the client certificate is within a valid timeframe. If multiple certificates are found, bypass those with invalid timeframes looking for valid ones.<br><input type="checkbox"/> If communications fail due to a certificate with an invalid timeframe, set the error code in the output file to 1013<br><input type="checkbox"/> Change error code for keys marked as not exportable to 1013<br><input type="checkbox"/> Check that the CRL signature hash algorithm matches the certificate, and download a new CRL if they do not match. |
| 2014-12-01 | 1.0.1.4 | <input type="checkbox"/> Do not report expired client certificate if sslVerify=0   |
| 2014-12-03 | 1.0.2.0 | <input type="checkbox"/> Added Foreground configuration option. When launched as a Windows executable (not from a user console) CCDWS will now close its console and run in the background automatically unless Foreground=1 is enabled.<br><input type="checkbox"/> In installation application, create default TELUS directories to TELUSA and TELUSB when no other TELUS destinations are found.  |
| 2015-01-19 | 1.0.2.1 | <input type="checkbox"/> Altered generation of ccdws.inf installation configuration file during installation to avoid clear text password storage.<br><input type="checkbox"/> Updated copyright notice year.  |
| 2015-01-22 | 1.0.2.2 | <input type="checkbox"/> Fixed predetermination parse bug introduced in version 1.0.2.1.   |
| 2014-01-29 | 1.0.2.3 | <input type="checkbox"/> Fix to honour LogMaxSize configuration.   |
| 2015-05-13 | 1.0.3.0 | <input type="checkbox"/> Ported to Mac OS X. No new Windows features.  |
| 2015-07-03 | 1.0.4.0 | <input type="checkbox"/> Added support for transaction types 05/15 and 06/16.  |
| 2015-08-17 | 1.0.4.1 | <input type="checkbox"/> Fix parsing of transaction type 06 to include field F38   |
| 2015-08-19 | 1.0.5.0 | <input type="checkbox"/> Added support for transaction types 08/18.<br><input type="checkbox"/> Ported to Linux  |
| 2015-11-12 | 1.0.5.1 | <input type="checkbox"/> Add parse validation for downloaded CRLs<br><input type="checkbox"/> Updated to OpenSSL v1.0.2d<br><input type="checkbox"/> Updated gSOAP to 2.8.25, to provide default negotiation of TLS v1.0 and higher.   |

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|            |         | <ul style="list-style-type: none"> <li>❑ Changed copyright message from HIEC to CLHIA</li> <li>❑ Changed user agreement in Windows installation to reflect latest CLHIA wording.</li> </ul>  |
| 2016-03-03 | 1.0.5.2 | <ul style="list-style-type: none"> <li>❑ Linux and OS X only: Massage certificate string retrieved from keystore to remove blank lines.</li> <li>❑ Linux and OS X only: Correctly report when Java keystore files cannot be found.</li> </ul>  |
| 2017-08-18 | 1.0.6.0 | <ul style="list-style-type: none"> <li>❑ Added ability for both certificate file and digital IDs to be able to monitor the same input/output folder, so denturist/hygienist claims can be transferred using the same folder as dental claims.</li> <li>❑ Updated to OpenSSL v1.0.2k</li> </ul>   |
| 2017-08-23 | 1.0.6.1 | <ul style="list-style-type: none"> <li>❑ Initialize variable in loadCertKeyFromCertStore method for Windows application.</li> <li>❑ Fixed name of CertificateFileProviderPrefixes configuration option in default config file.</li> </ul>  |
| 2018-07-04 | 1.0.7.0 | <ul style="list-style-type: none"> <li>❑ Added CP-850 to UTF-8 conversion between inputs/outputs and webservice calls.</li> <li>❑ Added instream and Manitoba Blue Cross configuration in installation application and distribution files.</li> </ul>  |
| 2018-08-23 | 1.0.7.1 | <ul style="list-style-type: none"> <li>❑ Changed unsignedd to unsigned typo in ccdws_win.cpp</li> </ul>  |
| 2021-03-22 | 2.0.0.0 | <ul style="list-style-type: none"> <li>❑ Update to include full relay framework.</li> <li>❑ Add (multithreaded) REST interface</li> </ul>  |
| 2021-09-27 | 2.0.0.6 | <ul style="list-style-type: none"> <li>❑ Added retries for retrieving certificate/key pairs from Windows certificate store</li> </ul>  |
| 2021-10-19 | 2.0.0.7 | <ul style="list-style-type: none"> <li>❑ Move initialization of soap SSL server context outside of accept loop.</li> <li>❑ Add input/output logging capabilities to REST listener.</li> <li>❑ Update relay framework to latest version</li> </ul>  |
| 2021-11-17 | 2.0.1.0 | <ul style="list-style-type: none"> <li>❑ Removed CrlDistributionPoint and CrlAltDistributionPoint options</li> <li>❑ Retrieve server's CRL from distribution point of its certificate rather than using that of the client cert.</li> <li>❑ Retrieve all possible certificates that match practitioner and office and attempt to use in the order found, in attempt to bypass problem retrieving cert and key from certificate store.</li> </ul> |
| 2021-11-25 | 2.0.1.1 | <ul style="list-style-type: none"> <li>❑ Fixed missing parse field C16 for transaction request type 08.</li> </ul>   |
| 2022-02-28 | 2.0.1.2 | <ul style="list-style-type: none"> <li>❑ Fix behaviour when sslVerify is disabled, allowing to load CA certs and discard expired client certs when retrieving from certificate store.</li> </ul>   |
| 2022-04-27 | 2.0.2.0 | <ul style="list-style-type: none"> <li>❑ Ported latest changes to Linux / MacOS</li> </ul>   |