

OPC UA C++ Toolkits Release Notes

November 2018

Version	Date	Release Note
V5.58.0	29.01.2019	<p>New Features:</p> <ul style="list-style-type: none"> • Update to OpenSSL 1.1.1a • Endpoint can use PKI store configuration for user validation • Self-signed certificates can be created during runtime • New license keys <p>Bug fixes:</p> <ul style="list-style-type: none"> • Client::Session::getCustomDataTypes() does not work • Client::Session does not return from connect() or disconnect() under rare conditions with multiple sessions • Methods at types can be invoked without explicit HasComponent reference between object instance and method
V5.57.0	06.11.2018	<p>New Features:</p> <ul style="list-style-type: none"> • Generic validation of input arguments • Support of FileType • Samples for custom data types • New installer for Linux, Windows and VxWorks • Updated to OpenSSL version 1.1.0i <p>Bug fixes:</p> <ul style="list-style-type: none"> • Access pattern can be modified during runtime • Memory leak in rare conditions of parallel access • Minor bugs in client support of structured data types • CVE-2018-12087 See https://opcfoundation-onlineapplications.org/faq/SecurityBulletins/OPC_Foundation_Security_Bulletin_CVE-2018-12087.pdf
V5.56.0	07.08.2018	<p>New Features:</p> <ul style="list-style-type: none"> • Client support of custom data types • XML import creates custom data types
V5.54.0	15.05.2018	<p>New Features:</p> <ul style="list-style-type: none"> • Certificate Change Callback • Specific PKI store configuration for client sessions and server endpoints • Updated to OpenSSL version 1.0.2o • Windows Server 2016 Support <p>Bug-fixes and optimizations as customer feedback</p>
V5.53.2	11.08.2017	<p>Bug fixes:</p> <ul style="list-style-type: none"> • Clients based on .NET stack failed to connect. • CVE 2018-12086 See

		https://opcfoundation-onlineapplications.org/faq/SecurityBulletins/OPC_Foundation_Security_Bulletin_CVE-2018-12086.pdf
V5.53.0	21.06.2017	<p>New Features:</p> <ul style="list-style-type: none"> • Support of multi-dimensional arrays • Visual Studio 2017 project and solution files • Importing NodeSet2 XML works also when comments are included • Updated to OpenSSL version 1.0.2k • For Linux: Support for linking the Toolkit as a shared library <p>Bug-fixes and optimizations as customer feedback</p>
V5.52.0	30.09.2016	<p>New Features:</p> <ul style="list-style-type: none"> • IPV6 support for Windows and Linux versions • TranslateBrowsePathToNodeIds extended to find more than one NodeId • NodeSet Import adaptation to use OPC UA 1.03 schema <p>Bug-fixes and optimizations as customer feedback</p>
V5.51.0	03.08.2016	<p>New Features:</p> <ul style="list-style-type: none"> • MultiStateValueDiscreteType as described in part 8, chapter 5.3.3.4 of the OPC UA specification is now supported. • Model designer server backend component extended to export “virtual” nodes, nodes defined and served at application level only.
V5.50.0	02.05.2016	<p>New Features:</p> <ul style="list-style-type: none"> • Address Space Model Designer Interface added – UA compatible interface • NodeSet2 compatible files Import and Export capabilities added to Address Space Designer interface • Windows 10 Support • Basic256Sha256 security policy added • Server asynchronous service handling extended with subscriptions and session management services. • Use monotonic clock to calculate sampling and publishing interval • Client subscription can connect a list of monitored items • VxWorks 7 compatibility extensions added • Open SSL updated to 1.0.1s • Linux build scripts extended for cross compiling and share objects support
V5.41.1	27.10.2015	<p>New features:</p> <ul style="list-style-type: none"> • Support of asynchronous handling for deleting sessions • Visual Studio 2015 project and solution files • Support for VxWorks 7.0

		<ul style="list-style-type: none"> Updated to OpenSSL version 1.0.1p Bug-fixes and optimizations as customer feedback
V5.41.0	04.09.2015	New features: <ul style="list-style-type: none"> Support of user-defined enumerations (server only) Support of asynchronous handling for deleting subscription HTTPS as transport layer for OPC UA
V5.40.0	15.07.2015	New Features: <ul style="list-style-type: none"> Address space modelling: Server is now capable to export it's address space into an NodeSet2 XML file Visual Studio 2013 support Secure Channel sharing for Client::Sessions – Multiple sessions between one client and a server shares now the same Secure Channel respective TCP/IP resources. Tracing (logging) mechanism was extended with the option of the application to hook in and receive the toolkit internally generated trace mechanism
V5.36.1	04.03.2015	OPC Foundation Lab certified version – Server for Linux Bug fixes <ul style="list-style-type: none"> Adaptions and bug fixes for OPC UA 1.02 compliance
V5.36.0	19.12.2014	New Features <ul style="list-style-type: none"> Server Endpoint Binding: the toolkit now supports restriction of a servers endpoint to a single IP interface. Server Address Space Import: The import of address space via NodeSet2 XML files now supports extensions within the XML file. Server Queuing Mechanism for Monitored Items changes: The monitored items at server store changed values in a queue for reporting to client. Only one value shall be stored for a sampling interval. In former toolkit versions the timestamp used for this comparison was the actual system time in the server; now the server timestamp of the DataValue is used for this calculation.
V5.35.0	03.11.2014	New Features <ul style="list-style-type: none"> Support of custom structured data type for servers Licensing <ul style="list-style-type: none"> The toolkit licensing model extended to source code
V5.30.2	19.09.2014	New Features: <ul style="list-style-type: none"> Updated to OpenSSL version 1.0.0m isCancelled method now detects timed out transactions and requests

V5.30.1	10.04.2014	<p>New Features:</p> <ul style="list-style-type: none"> • Support for native 64 Bit applications on Linux • Support for asynchronous create, modify and delete for Monitored Items
V5.30.0	21.02.2014	<p>New features:</p> <ul style="list-style-type: none"> • Support for native 64 Bit applications on Windows • Import nodes to a server using a NodeSet2 XML file • Address space validation to OPC UA conformance for servers • Custom handling of Browse and TranslateBrowsePathToNodeId on servers • Redundancy support for clients for working with redundant servers
V5.21.2	01.07.2013	<p>New features:</p> <ul style="list-style-type: none"> • Linux versions now deliver static OpenSSL 0.9.8 library <p>Bug fixes:</p> <ul style="list-style-type: none"> • Set an empty string array to a value does not work
V5.21.1	07.03.2013	<p>Bug fixes:</p> <ul style="list-style-type: none"> • Diagnostic nodes are not always removed when disabling diagnostic • Problems retrieving values of type Duration and UtcTime • Crash in server in case of calling RefreshSubscription with an invalid subscription ID
V5.21.0	17.01.2013	<p>New Client and Server Features:</p> <ul style="list-style-type: none"> • Support for HistoryRead Services • Support for Query Services • Support for Cancel Service • Support for Node Registration Services • Authentication with WS-Security Tokens • General fixes and performance optimization <p>New Client Features</p> <ul style="list-style-type: none"> • Auto-Reconnect • Connection Watchdog <p>New Server Features</p> <ul style="list-style-type: none"> • Support for Disabling Services • Data Access Server Facet • Condition Branches • Server Diagnostics • Language Support • Support for SemanticChange events • Support for ModelChange events • Bulk Access to Cached Data Values • Initial Values of Subscriptions <p>Notes</p> <ul style="list-style-type: none"> • Source code version is available as Client & Server bundle in 3 flavors: Windows, Linux, VxWorks

		<ul style="list-style-type: none"> • Product name changed to OPC UA C++ Toolkit • The former .NET API is discontinued • The VxWorks deliverables are available in zip format only
V5.10.03.6665	04.11.2011	Bug fixes: <ul style="list-style-type: none"> • #408: Corrected marshalling of StatusCode.GetErrorText for .NET API • #409: Memory Leak under very rare conditions • #419: Client session name is not passed to server
V5.10.03.6594	31.08.2011	Bug fixes: <ul style="list-style-type: none"> • #397: Crash due to wrong reference counting in MonitoredItem::getNode and MonitoredItem::getSubscription • #402: Crash "out-of-bounds" if context filter causes casting of an XML element • #403: Subscriptions of sub-ranges return complete array • #407: Memory leak in server if a client invokes a not supported history-Read of historyWrite service
V5.10.02.6340	20.06.2011	Bug fixes: <ul style="list-style-type: none"> • Memory leaks in OPC UA stack in specific error conditions • #377: Crash in event filter in specific circumstances • #380: Possible leak on removing nodes from address space under very rare timing circumstances • #382: Possible deadlock (Linux and VxWorks only) under very rare conditions (re-use of thread handle before thread is terminated) • #383: Client can remove wrong monitored item • #387: Some event filters do not work as expected • #388: Memory leak (server) when filter is modified • #391: Monitored items in triggered mode do not always report changes • #394: Client deadlock in synchronous browseNext with 0 continuation points • Correct initialization of ServerArray and NamespaceArray
V5.10.01.6067		New features: - Support for Linux Debian/Ubuntu and Scientific Linux Asynchronous Bug fixes: <ul style="list-style-type: none"> • #345: Improved performance in reference access • #369: Browse direction not correctly evaluated in TranslateBrowsePathToNodeId service • Potential crash on shutdown tracing module • Initial value reporting of monitored item
V5.10.01.5872	31.05.2011	Bug fixes: <ul style="list-style-type: none"> • #334: Tutorials 8 and 9 fixed • #346: Default install path adapted • #364: Fixed deadlock in removeEndpoint • #365: User access check for write variables fixed

V5.10.00	22.10.2010	<p>New Features</p> <ul style="list-style-type: none"> • Alarms&Condition added, • Support of VxWorks version 6.7.1.1 and 6.8.2 <p>Server and Client:</p> <ul style="list-style-type: none"> • #331: Memory leak (Windows only under very rare conditions) <p>Server only:</p> <ul style="list-style-type: none"> • Memory leak discovered on replay attack <p>Client only:</p> <ul style="list-style-type: none"> • #303: Memory leak (and possible crash) • #317: .NET client API support for A&C filters
V5.00.04	14.12.2009	<p>First release of OPC Toolbox UA for Windows and VxWorks supporting UA Binary protocol and Data Access.</p> <p>There is no clear correspondence to Profiles and Facets, yet.</p> <p>There has not been available any Compliance Test Tool for OPC UA (UA CTT), yet.</p>