

## October 2020

## **OPC UA .NET Standard SDK Release Notes**

Version	Date	Release Note
V2.60.0	16.10.2020	- dataFEED OPC UA .NET Standard SDK Server Library:
		<ul> <li>Support for reverse connectivity.</li> <li>In NodeManager class:         <ul> <li>The CreateObjectFromType() and CreateVariableFromType() methods were enhanced with an additional parameter (createOptionalProperties) that specifies if the properties that have optional modelling rule are instantiated when creating an object/variable. Note that the types from OPC UA .NET Standard Stack from OPC Foundation will not create optional properties.</li> <li>The ReportEvent method was enhanced to accept also the node id of the event type that will be reported.</li> </ul> </li> </ul>
		- dataFEED OPC UA .NET Standard SDK Client Library:
		<ul> <li>Support for reverse connectivity.</li> <li>Asynchronously methods added for Connect (<i>ConnectAsync</i>), Disconnect (<i>DisconnectAsync</i>), GetEndpoints (<i>GetEndpointsAsync</i>), DiscoverServers (<i>DiscoverServersAsync</i>) and DiscoverServersOnNetwork (<i>DiscoverServersOnNetworkAsync</i>).</li> <li>Bug fixes.</li> <li>- dataFEED OPC UA .NET Standard SDK PubSub Library:</li> </ul>
		• Bug fixes.
V2.50.0	09.07.2020	- dataFEED OPC UA .NET Standard SDK Server Library:
		<ul> <li>Internal support for AccessRestrictions, RolePermissions and UserRolePermissions attributes.</li> <li>Support for GDS and Push Management of application certificates and trust lists.</li> <li>Bug fixes.</li> <li>dataFEED OPC UA .NET Standard SDK Client Library:</li> </ul>
		<ul> <li>Support for GDS and Pull Management of application certificates and trust lists.</li> <li>ReadNode method from <i>ClientSession</i> will not throw a ServiceResultException when the node is not found, but will return an instance of <i>VariableNodeEx</i>. Status codes for each attribute are available via <i>GetStatusCode()</i> method.</li> </ul>

		Bug fixes.
		- dataFEED OPC UA .NET Standard SDK PubSub Library:
		• Bug fixes.
		<ul> <li>.NET Framework support updated to version 4.6.2 in accordance with OPC UA</li> <li>.NET Standard Stack from OPC Foundation .</li> <li>Support for Visual Studio 2015 was removed.</li> </ul>
		SDK libraries are compiled using NuGet package OPCFoundation.NetStandard.Opc.Ua - version 1.4.362.42. When using dataFEED OPC UA .NET Standard SDK version 2.50 it is important to use the same version of OPC UA .NET Standard Stack from OPC Foundation.
V2.40.0	26.02.2020	- dataFEED OPC UA .NET Standard SDK Server Library:
		<ul> <li>Support for creating custom DataType, VariableType and ObjectType nodes and instances</li> <li>Extended support for complex data types: <ul> <li>Support for custom Structure, StructureWithOptionalFields, Union, Enumeration and OptionSet types.</li> <li>Expose DataTypeDefinition attribute of DataType nodes to allow clients to read custom data types.</li> <li>Enhanced ImportNodeSet functionality for reading the DataTypeDefinition attribute of DataType nodes.</li> <li>Sample code for creating and handling custom types.</li> </ul> </li> <li>Support for creating custom variable and object types.</li> <li>Bug fixes. <ul> <li>NET Standard 1.4 support removed.</li> </ul> </li> <li>dataFEED OPC UA .NET Standard SDK Client Library:</li> </ul> <li>Extended support for complex data types: <ul> <li>Support for custom Structure, StructureWithOptionalFields, Union, Enumeration and OptionSet types.</li> <li>Load server custom data types by reading the DataTypeDefinition attribute of DataType nodes for V1.04 servers.</li> <li>Sample code for handling custom data types.</li> </ul> </li>
		Bug fixes. SDK libraries are compiled using NuGet package OPCFoundation.NetStandard.Opc.Ua - version 1.4.359.31. When using dataFEED
		OPC UA .NET Standard SDK version 2.40 it is important to use the same version of - dataFEED OPC UA .NET Standard SDK PubSub Library: OPC UA .NET Standard Stack from OPC Foundation.
V2.30.0	06.08.2019	- dataFEED OPC UA .NET Standard SDK PubSub Library:
		<ul> <li>Provides simplified API for configuring a PubSub application.</li> </ul>

	<u>۱</u>
	<ul> <li>SampleServer provides a new dedicated node manager that uses dataFEED OPC UA .NET Standard SDK PubSub Library and behaves like a Publisher and Subscriber.</li> <li>Implemented PubSubState State Machine.</li> <li>Implemented Unicast and Multicast communication for OPC UA UDP Transport</li> </ul>
	Protocol.
	<ul> <li>Changes in licensing namespaces: In version 2.20 the <i>PubSub</i> licensing classes were part of <i>Softing.Opc.Ua.Private</i> namespace. Starting with version 2.30 the <i>PubSub</i> licensing classes are part of <i>Softing.Opc.Ua.PubSub</i> namespace. Please change your code to point to the new namespace.</li> </ul>
	- dataFEED OPC UA .NET Standard SDK Server Library:
	<ul> <li>Bug fixes.</li> <li>Changes in licensing namespaces: In version 2.20 the <i>Server</i> licensing classes were part of <i>Softing.Opc.Ua.Private</i> namespace. Starting with version 2.30 the <i>Server</i> licensing classes are part of <i>Softing.Opc.Ua.Server</i> namespace. Please change your code to point to the new namespace.</li> </ul>
	- dataFEED OPC UA .NET Standard SDK Client Library:
	<ul> <li>Bug fixes.</li> <li>Changes in licensing namespaces:</li> <li>In version 2.20 the <i>Client</i> licensing classes were part of <i>Softing.Opc.Ua.Private</i> namespace. Starting with version 2.30 the <i>Client</i> licensing classes are part of <i>Softing.Opc.Ua.Client</i> namespace. Please change your code to point to the new namespace.</li> </ul>
	SDK libraries are compiled using NuGet package OPCFoundation.NetStandard.Opc.Ua - version 1.4.356.27. When using dataFEED OPC UA .NET Standard SDK version 2.30 it is important to use the same version of OPC UA .NET Standard Stack from OPC Foundation.
V2.20.0 15.05.2019	• The initial version of dataFEED OPC UA .NET Standard SDK PubSub Library:
	<ul> <li>Provides an API for simplified OPC UA Publisher and Subscriber development using UDP transport and binary encoded messages.</li> <li>Provides SamplePublisher and SampleSubscriber projects that use the simplified API from dataFEED OPC UA .NET Standard SDK PubSub Library.</li> </ul>
	dataFEED OPC UA .NET Standard SDK Server Library:
	<ul> <li>Enhanced ImportNodeSet functionality that allows instantiating data types loaded from dictionaries.</li> <li>New method GetDefaultValueForDatatype was added to NodeManager. It creates and returns the default value for the specified data type , including data types imported from NodeSet2 XML files.</li> <li>Added support for Aes256_Sha256_RsaPss security policy.</li> <li>dataFEED OPC UA .NET Standard SDK Client Library:</li> </ul>

Page | 3 Softing Industrial Automation GmbH > Richard-Reitzner-Allee 6 > 85540 Haar > Tel.: +49 89 4 56 56-0 > Fax: +49 89 4 56 56-399 > info.automation@softing.com > http://industrial.softing.com

		<ul> <li>ClientSession.KeepAlive handling was moved on a separate thread to avoid possible deadlocks.</li> </ul>
V2.10.0	06.02.2019	• "Softing OPC UA .NET Standard Toolkit" was renamed to "dataFEED OPC UA .NET Standard SDK".
		OPC UA Server Compliance Certification.
		<ul> <li>dataFEED OPC UA .NET Standard Server SDK Library:          <ul> <li>Enhanced ImportNodeSet functionality that handles duplicate nodes.</li> <li>Added Export NodeSet functionality.</li> <li>Added sample code for file transfer.</li> <li>Added sample code for temporary file transfer.</li> </ul> </li> <li>Added support for Aes128_Sha256_RsaOaep security policy.</li> <li>Removed Windows 8.1 support due to known security limitations incompatible with dataFEED OPC UA .NET Standard SDK implementation.</li> <li>Properties marked as deprecated in ServerToolkitConfiguration.</li> </ul>
V2.00.0	31.07.2018	Softing Client Toolkit Library:
		Dll name was changed from Softing.Opc.Ua.dll to Softing.Opc.Ua.Client.dll.
		<ul> <li>Namespace changes:</li> <li>All entities from namespace Softing.Opc.Ua were moved to namespace Softing.Opc.Ua.Client (SecurityPolicy enum, ToolkitUtils and UaApplication classes)</li> </ul>
		<ul> <li>All entities from namespace Softing.Opc.Ua.Private were moved to Softing.Opc.Ua.Client.Private (License class and LicenseFeature enum)</li> </ul>
		<ul> <li>All entities from namespace Softing.Opc.Ua.Types were moved to Softing.Opc.Ua.Client.Types.</li> </ul>
		<ul> <li>ApplicationConfigurationEx class available in version 1.00 and 1.10 in namespace Softing.Opc.Ua was removed. We are using the ApplicationConfiguration class available in OPC UA .NET Standard Stack from OPC Foundation . A new configuration class ClientToolkitConfiguration was added to the Softing Client Toolkit Library, it is used as a configuration extension as described in Client configuration section.</li> </ul>
		New method added to ClientSubscription class. ConditionRefresh method tells the server to refresh all conditions (alarms) being monitored by the subscription.
		Softing Server Toolkit Library - initial version:
		<ul> <li>Provides an API for simplified server development. The Softing Server</li> <li>Toolkit Library offers a simplified approach for Data Access, Methods and Standard Event Subscriptions</li> <li>SampleServer and XamarinSampleServer are refactored to use the new Softing</li> </ul>
		Server Toolkit Library (Softing.Opc.Ua.Server.dll).

V2.00.0	31.07.2018	Softing Client Toolkit Library:
		Dll name was changed from Softing.Opc.Ua.dll to Softing.Opc.Ua.Client.dll.
		<ul> <li>Namespace changes:</li> <li>All entities from namespace Softing.Opc.Ua were moved to namespace Softing.Opc.Ua.Client (SecurityPolicy enum, ToolkitUtils and UaApplication classes)</li> <li>All entities from namespace Softing.Opc.Ua.Private were moved to Softing.Opc.Ua.Client.Private (License class and LicenseFeature enum)</li> <li>All entities from namespace Softing.Opc.Ua.Types were moved to Softing.Opc.Ua.Client.Types.</li> <li>ApplicationConfigurationEx class available in version 1.00 and 1.10 in namespace Softing.Opc.Ua was removed. We are using the ApplicationConfiguration class available in OPC UA .NET Standard Stack from OPC Foundation . A new configuration class ClientToolkitConfiguration was added to the Softing Client Toolkit Library, it is used as a configuration extension as described in Client configuration section.</li> <li>New method added to ClientSubscription class. ConditionRefresh method tells the server to refresh all conditions (alarms) being monitored by the subscription.</li> <li>Softing Server Toolkit Library - initial version:</li> <li>Provides an API for simplified server development. The Softing Server</li> <li>Toolkit Library offers a simplified approach for Data Access, Methods and Standard Event Subscriptions</li> <li>SampleServer Toolkit Library (Softing.Opc.Ua.Server.dll).</li> </ul>
V1.10.0	13.04.2017	<ul> <li>Added support for Linux distributions. Ubuntu 16.04 and Debian 9.30.</li> <li>Added support for Android. Sample Client and Sample Server for Android implemented with Xamarin Forms were added in the samples folder.</li> </ul>
V1.00.0	31.12.2017	Initial Version