

Advantech AE Technical Share Document

Date	2019/11/27	SR#	1-4039871691
Category	<input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP	Related OS	N/A
Abstract	How to use OPCUA driver in Edgelink		
Keyword	OPCUA client		
Related Product	ADAM-3600, ECU1251, ECU-1051, ECU-1152		

■ **Problem Description:**

This document explain how to use OPCUA driver in Edgelink.

■ **Answer:**

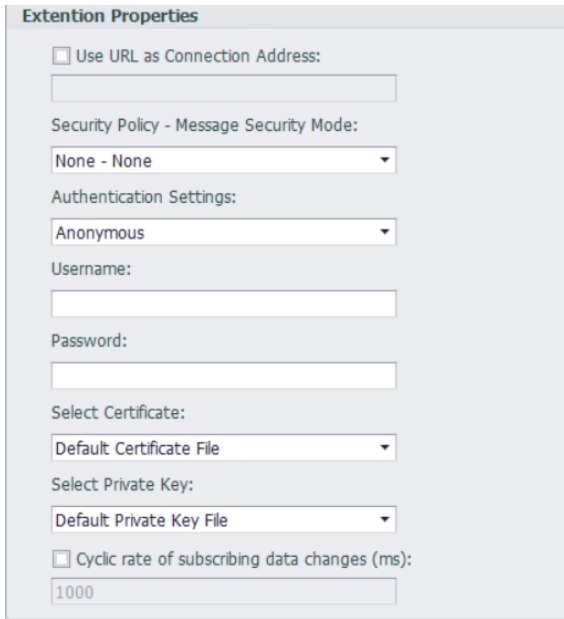
1. Use Uaexpert to connet to OPCUA Server to check if the OPCUA server is running.
2. Edgelink OPCUA master configuration.
 - 1) Add a OPCUA device

The screenshot shows a configuration window with two sections: 'General Information' and 'TCP/IP'. In the 'General Information' section, the 'Enable' checkbox is checked, 'Name' is 'NewDevice', 'Device Type' is 'OPC UA', 'Device Model' is unchecked, 'Unit Number' is '1', 'Tag Write Type' is 'Single Write', and 'Add device name as prefix to IO tags' is checked. A 'Bulk Copy' button is present. In the 'TCP/IP' section, 'IP Address' is '11.0.0.32' and 'Port Number' is '4840'. Red boxes highlight the 'Device Type', 'Unit Number', 'IP Address', and 'Port Number' fields.

Device Type: OPCUA

Unit Number: Different from other devices in one interface is ok.

IP Address and Port Number: OPCUA server's IP and Port.



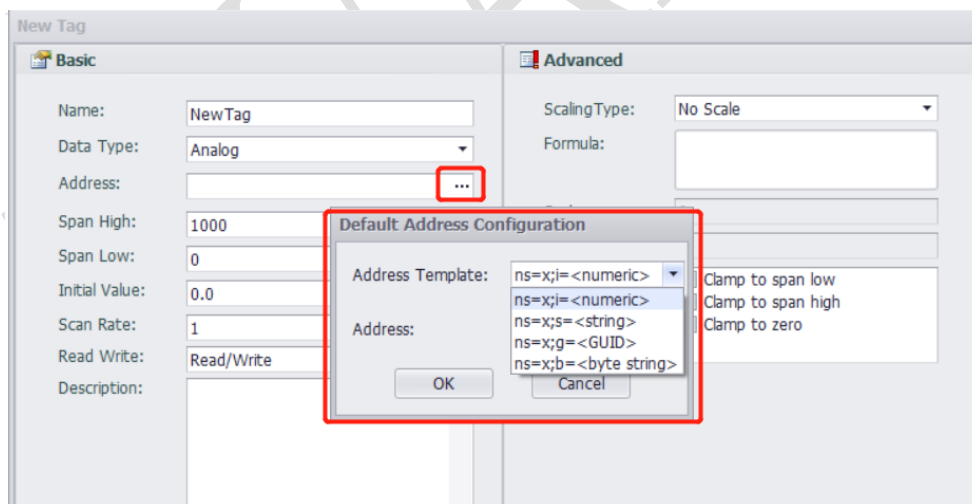
Use URL as Connection Address: If OPCUA server must be connected by its URL, you can choose this.

Security Policy and Authentication Setting: Follow the OPCUA server.

Certificate and Private Key: We have self authentication files by default. If customer needs to use the special file, they can choose in here.

Cyclic rate of subscribing data changes: By default, the mode of our opcua master is Asking-Answer. If choosing this, the mode we use will be: We send a message to OPCUA server to tell it to check itself by cycle if there is some data changed. When some data changing, server will tell us, we don't need to ask server any more.

2) Add tags.



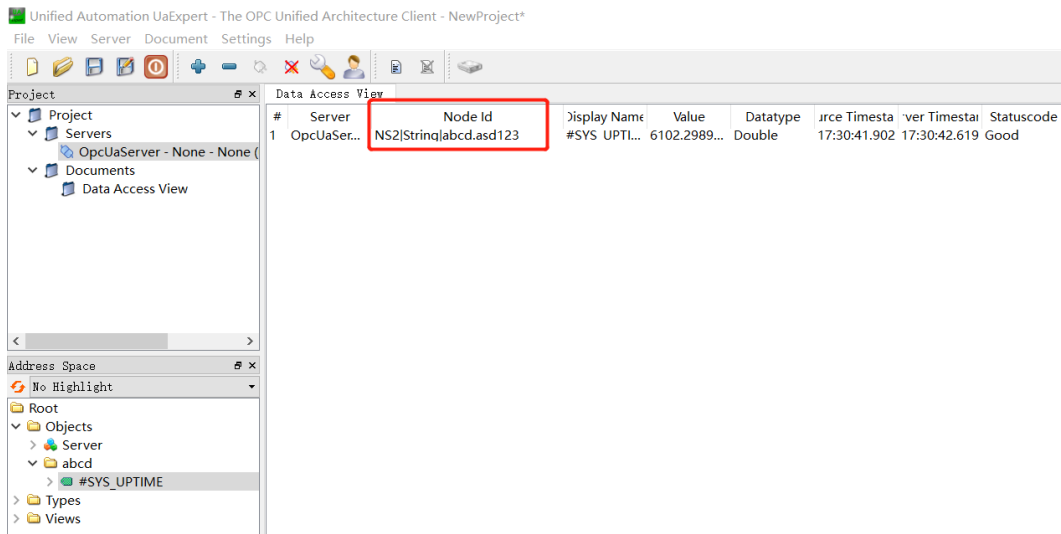
The address grammer is : ns=<Namespace Index>;<type>=<value>

Examples

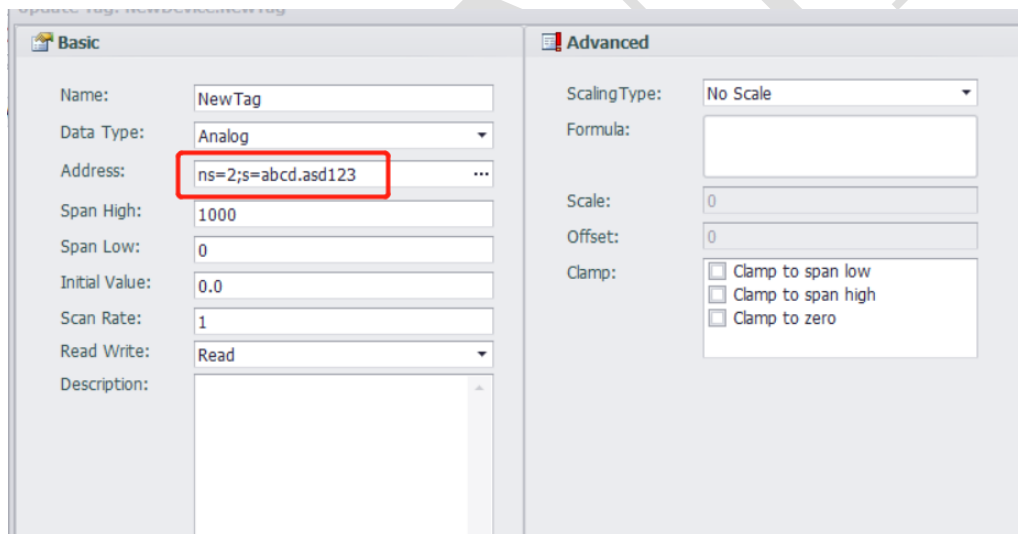
Address Type	Namespace Index	Example
Numeric	2	ns=2;i=1234
String	2	ns=2;s=Device.System_Tag.#SYS_TIME_SECOND

GUID	0	ns=0;g={8ACE8827-ECC3-4c9a-8032-CA1E9957A8E8}
Opaque	2	ns=2;b=M/RbKBsRVkePCePcx24oRA==

We can see the address by UaExpert (An OPCUA test tool).



In this example, we can see “ns=2”, type is string, value is “abcd.asd123”. So the address in edgelinek should be “ns=2;s=abcd.asd123”



3) Download the project. We can see the result in online monitor.

ECU-1251-R10

Tags

System Information

Configuration

Tags

System Tag **IO Tag** User Tag Calculation Tag

IO Tag

Tag Name Tag Value

Tag	Value	Quality	Timestamp
NewDevice.NewTag	6425.75	Good	2019-11-27T09:36:06 (UTC)

Showing 1 to 1 of 1 rows