

Flexy - OPCUA IO Server

1. Introduction

This info applies to eWON Flexy devices.

Since firmware 13.0s0, the Flexy integrates a new IO Server called **OPCUA**.

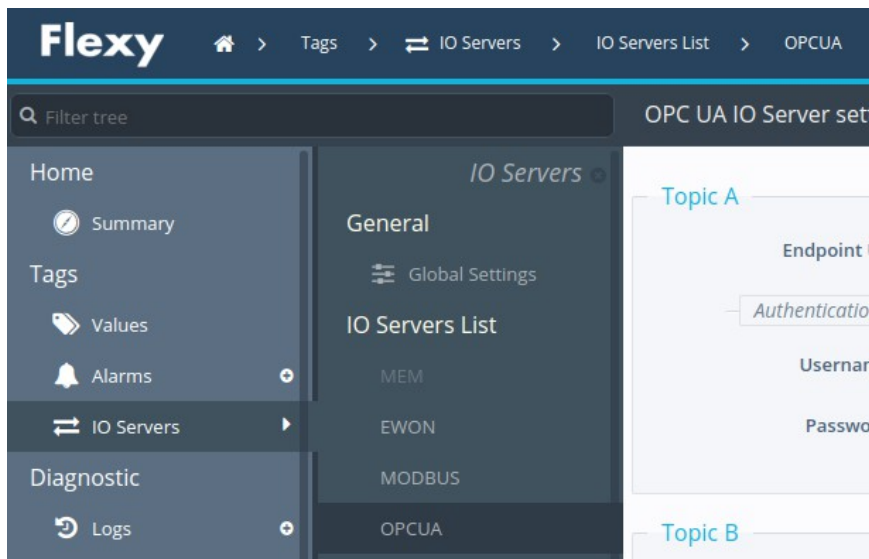
This IO Server allows eWON to act as an OPCUA client in order to retrieve tag values from other OPCUA servers, like PLCs, HMIs, etc.

The OPCUA IO-server allows eWON to connect to a maximum of 3 different OPCUA devices.

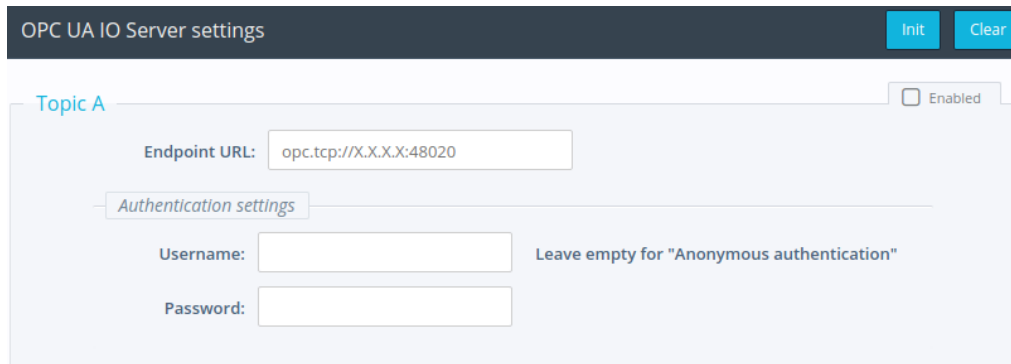
2. IO Server Configuration:

The OPCUA client is available in the IO Server list.

You can access it by browsing the eWON menu tree : Tags > IO Servers > OPCUA



In this IO Server, you can configure 3 different topics with 3 different OPCUA clients (different endpoints and authentication settings).



The screenshot shows the 'OPC UA IO Server settings' window. At the top right, there are 'Init' and 'Clear' buttons. The main area is titled 'Topic A' and has an 'Enabled' checkbox. Below this, there is an 'Endpoint URL' field with the value 'opc.tcp://X.X.X.X:48020'. A section titled 'Authentication settings' contains a 'Username' field with a note 'Leave empty for "Anonymous authentication"' and a 'Password' field.

Encode the OPCUA endpoint URL of the device you want to connect with.

As for example: **opc.tcp://192.168.0.54:4840**

where 192.168.0.54 is the IP address of the OPCUA device
and 4840 the port used for OPCUA on this device.

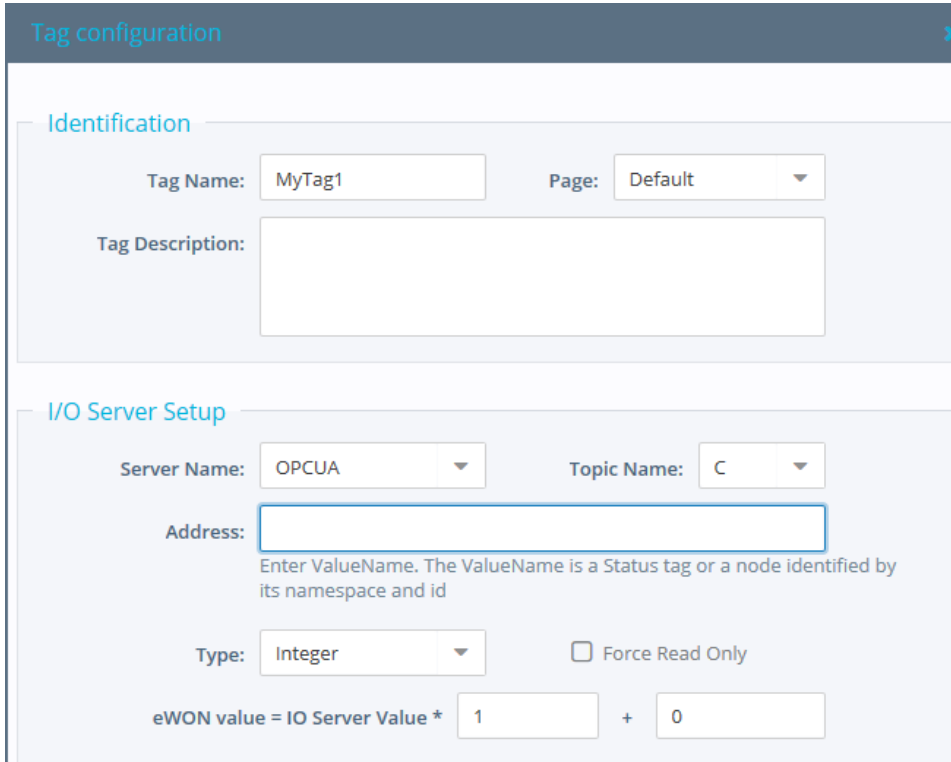
Once configured, you need to enable the topic.

Note: The IP address of the OPCUA device needs to be compatible with your eWON network setup.

3. Tag address specification using the OPCUA browser

When configuring an eWON Tag on the OPCUA IOserver, you have the possibility to browse the OPCUA server to which you want to connect.

Create a TAG by specifying a Tag Name and select for the Server Name "**OPCUA**". For the Topic Name, select the one you just configured before (A,B or C). This will link the Tag to the OPCUA device you want to reach.



Tag configuration

Identification

Tag Name: MyTag1 Page: Default

Tag Description:

I/O Server Setup

Server Name: OPCUA Topic Name: C

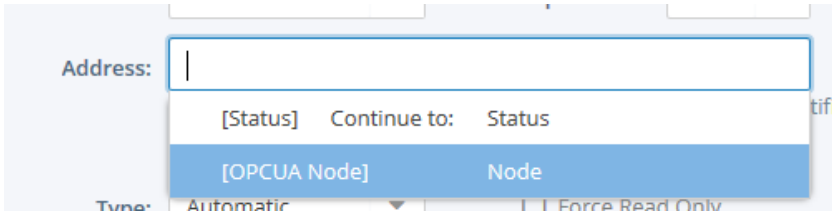
Address:

Enter ValueName. The ValueName is a Status tag or a node identified by its namespace and id

Type: Integer Force Read Only

eWON value = IO Server Value * 1 + 0

To specify the address, click on the field and the Tag Helper will propose you 2 choices:

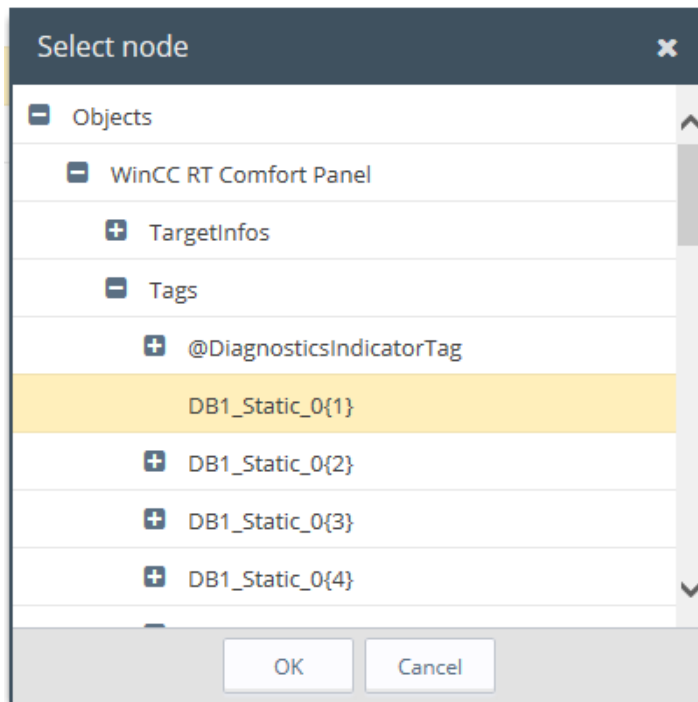


Address:

[Status] Continue to: Status

[OPCUA Node] Node

To link the Tag to the device you want to connect to, select [OPCUA Node]
The OPCUA browser window will open:

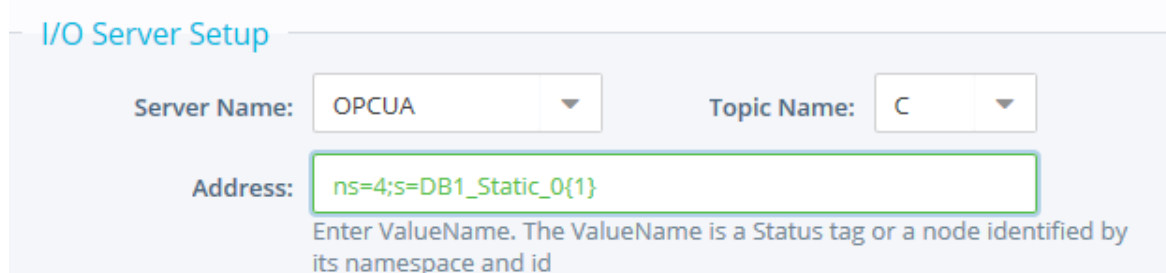


The browsing is dynamic and refreshes each time you click on "+".

Note: You never have a complete view of the node architecture because it can be huge and it's not really a tree (it's a graph and can contain cycles).

Once you found your OPCUA node on your OPCUA server, click on it and then click on "OK" to validate the IO address.

The Tag Address field will now contain the correct syntax for the OPCUA node.



The Tag type field (Boolean, Integer, etc.) is automatically updated with the corresponding type. So you do not need to update this one.

Fill in the other Tag parameters if required (alarm setting, historical settings, etc.) and click on "Add Tag" to create the Tag.

The Tag is now created. If you switch to the View mode, the Tag should now reflect the value of the corresponding OPCUA node.

Revision

Revision History

Revision Level	Date	Description
1.0	30/03/2018	Original document
1.1	03/05/2018	Changed Firmware version

Document build number: 6

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