



## Application User Guide

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AUG 064 / Rev. 1.0

# OPC UA Server in eWON Flexy

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## 1. Introduction

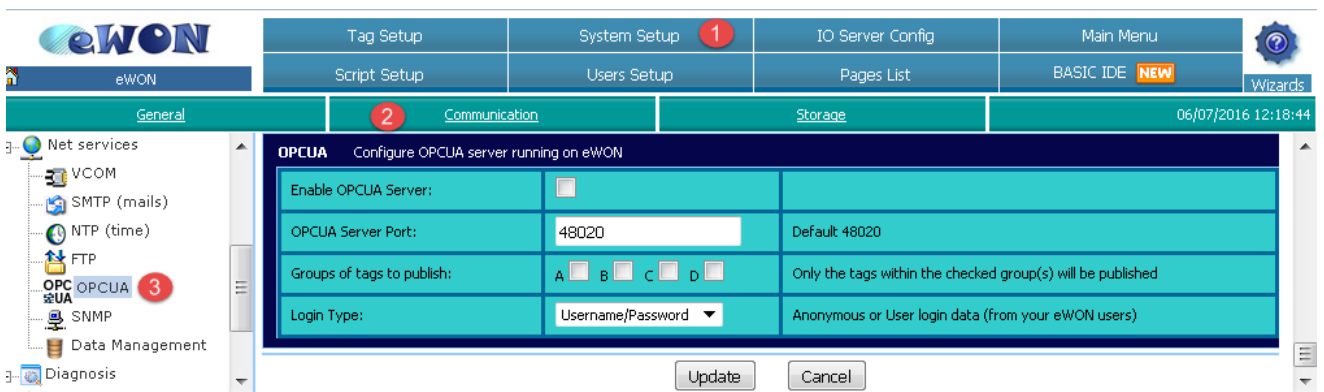
As of firmware 11.2, the eWON Flexy features an OPC UA server that allows you to access your Tags through an OPC UA Client.

Only the instantaneous Tag values are accessible in Read&Write through OPC UA. The historical logging or the alarms cannot be retrieved.

## 2. Configuration

To activate the functionality, go to :

*Configuration > System Setup > General > Net services > OPC UA*

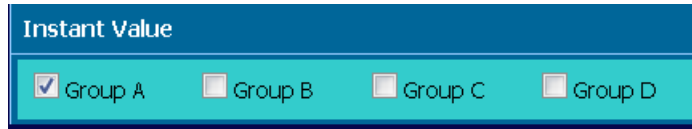


Here is the list of the available parameters :

Parameters	Description
Enable OPCUA Server	Check the box to enable the OPC UA Server
OPCUA Server Port	Type the port which the eWON OPC UA Server will listen to. (Default : 48020). The server is accessible through any IP interfaces : VPN, LAN and WAN.

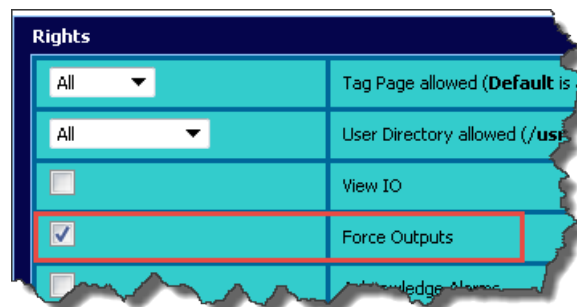
Group of Tags to publish

Select the group(s) of Tags to publish. One group must be at least selected.  
To define a tag in a specific group, edit the Tag and scroll down to the section "Tag Visibility" :



Login Type

The access to your eWON OPC UA Server can be opened to any clients (anonymous access) or protected by a user/password. In the second case, the OPC UA Client will have to login with an eWON user for which the right "Force Outputs" is granted.



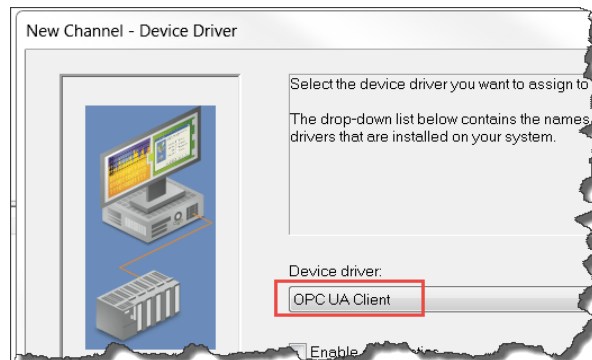
### 3. OPC UA Client configuration

An OPC UA Client configuration is very easy if we compare to other publishing protocols like SNMP or ModbusTCP. Indeed, with OPC UA, there is no need to define and maintain a map of addresses for the Tags you publish. The OPC UA protocol allows the client to simply browse the list of the available Tags and the user just needs to pick up the Tags he wants to monitor.

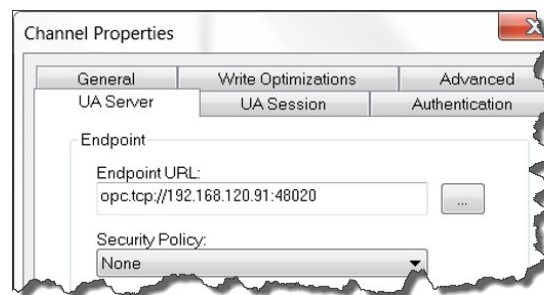
#### Example of OPC UA Client configuration : Kepware

The following example shows how to configure a standard OPC UA client. For this, we will use "Kepware Communication Server v5.20".

- Create a new channel and select "OPC UA Client" as device driver

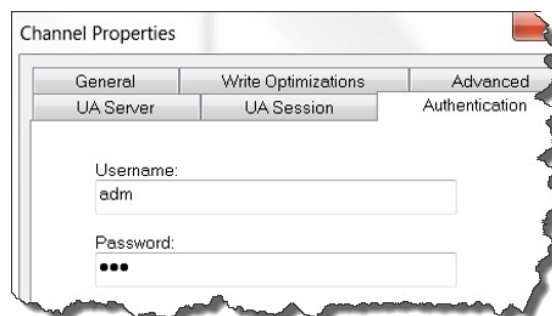


- In the Channel properties,
  - type the Endpoint URL which must have the following syntax : **opc.tcp://IPofEWON:Port**

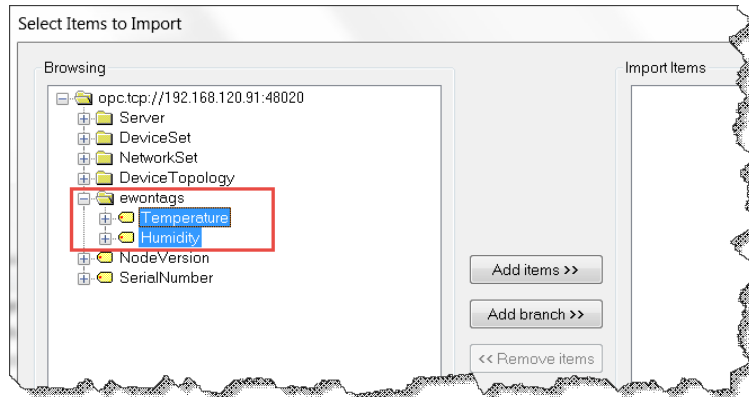


NB : The security policy must be set to NONE.

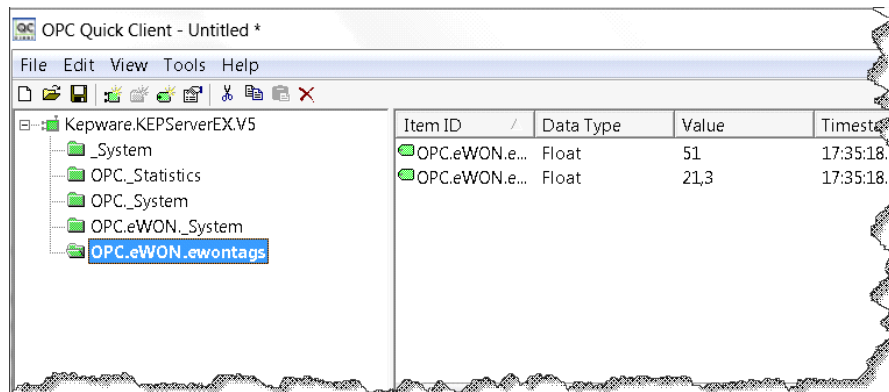
- Type the username and password in the authentication tab if you have enabled the username/password authentication in the eWON OPC server



- Add a new device and click "Select Import items" from the "Import" tab. You then have access to the list of the different items accessible from the eWON. You can then find the list of the available Tags in Root → ewontags. Select the Tags to monitor and click "Add items".



- You can now start the Kepware Runtime (Tools → Launch OPC Quick Client)



## 4. Miscellaneous

### Simultaneous connections

There is no limitation regarding the number of simultaneous clients that connect the same eWON. A test with three simultaneous clients has been performed and it did not affect the performances of the eWON.

### Security

Be aware that the OPC UA server can be accessed from all network interfaces. The use of the “Anonymous” authentication is therefore not recommended if your eWON is accessible from an untrusted network.

### Timezone

The OPC UA client often expects to receive the timestamp at UTC+0 from OPC UA servers to re-interpret it into a local time. To prevent time offset in your OPC UA client, it is therefore recommended to set the time of your Flexy at UTC+0.



## Revision

### Revision History

Revision Level	Date	Description
1.0	07/06/2016	Original version

### Document build number: 32

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