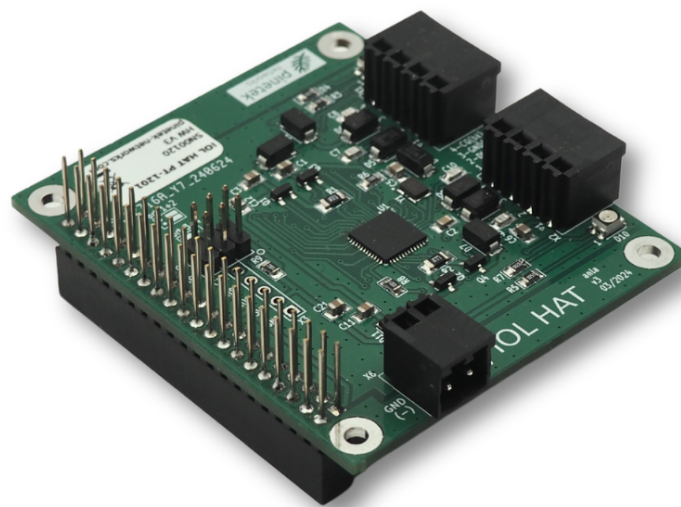


# 5.3 Node-RED – Writing Parameters

## Application Manual

[www.pinetek-networks.com](http://www.pinetek-networks.com)





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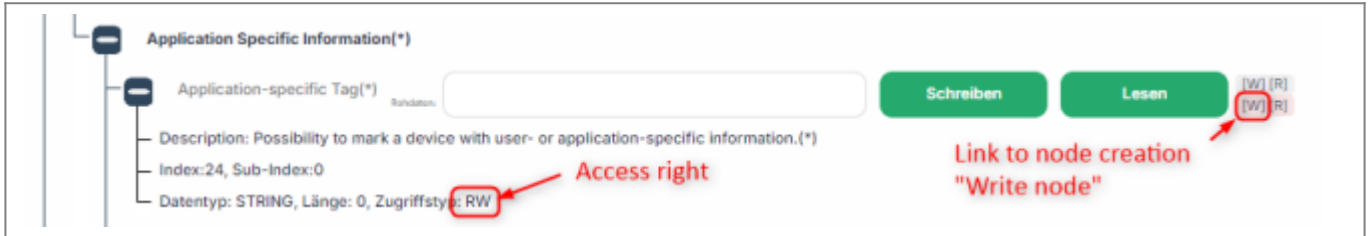
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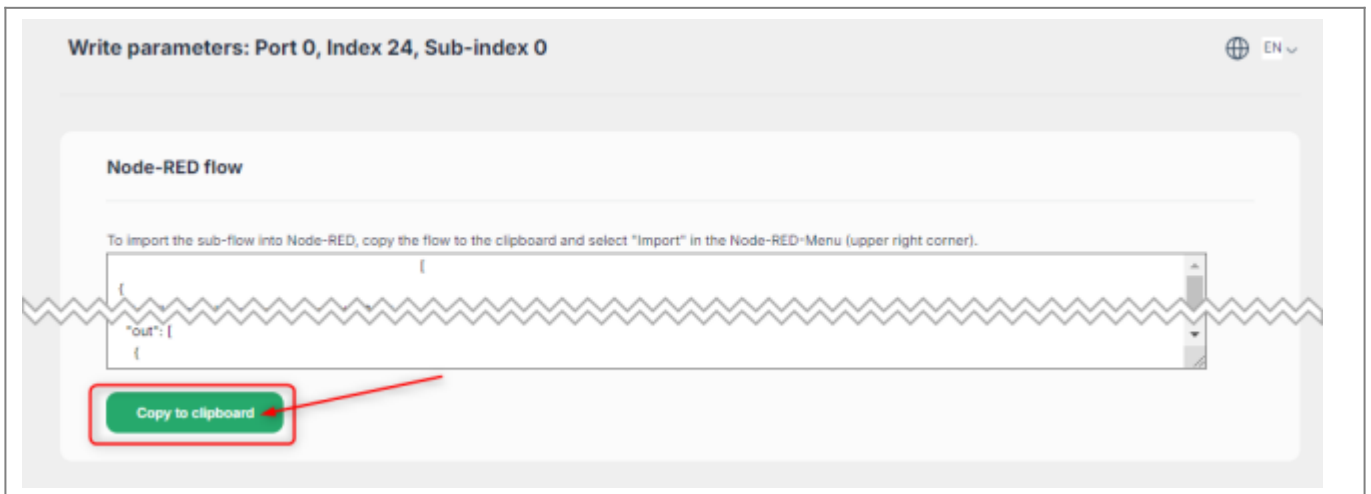
# 5.3 Node-RED – Writing Parameters

This section is about writing parameter data to an IO-Link device using Node-RED. The target is the creation of a specific Node-RED node for the write operation of the parameter’s index and sub-index.

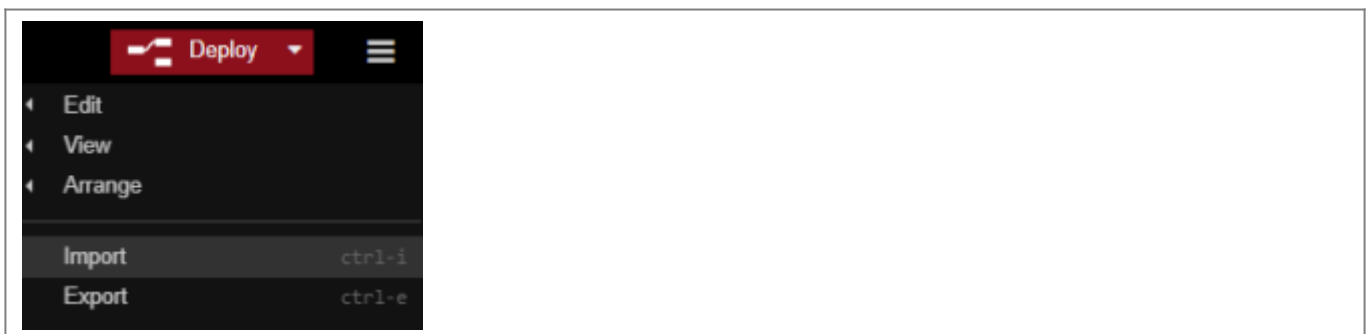
Starting point is the configuration web interface. If a parameter is writeable (Read/Write, Write Only), the Node-RED node creation link is shown at the variable:



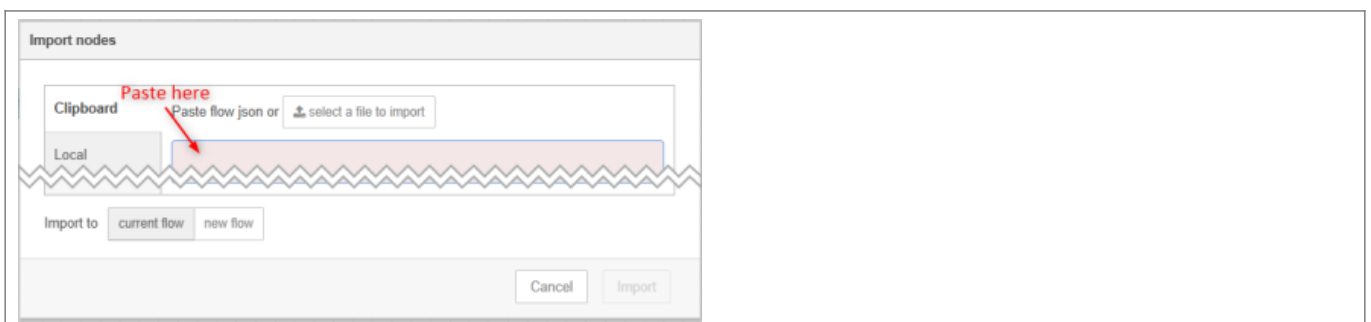
In the new tab that opens, click on “Copy to clipboard”:



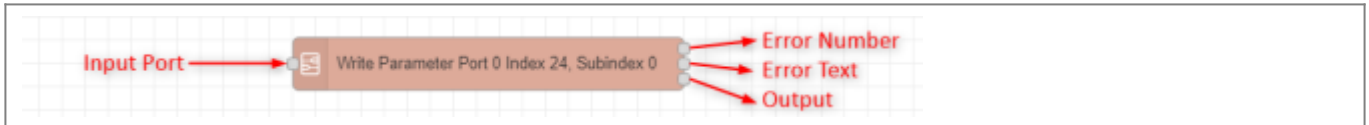
In Node-RED Flows workspace, import the node (ether with the menu or CTRL-I).



Paste the content of the clipboard to the node/flow JSON box:



The specific node is the imported into Node-RED:



- The Input Port receives the input data. This data needs to be formatted as described in the sections below. The node is triggered by writing data to this port.
- The Error Number and Error Text hold the error number (see <https://www.pinetek-networks.com/knowledge-base/pinebox/10-appendix/appendix-error-codes/>)
- Output is the data that is read back from the parameter (Write-Read-Verification). For datatypes like Numbers or Strings, this is usually the data that was written. For more complex datatypes like BLOB (represented by OctetString data), this might be formatted data that requires unpacking before further treatment.

## Numbers (Integers, Bool) and Strings

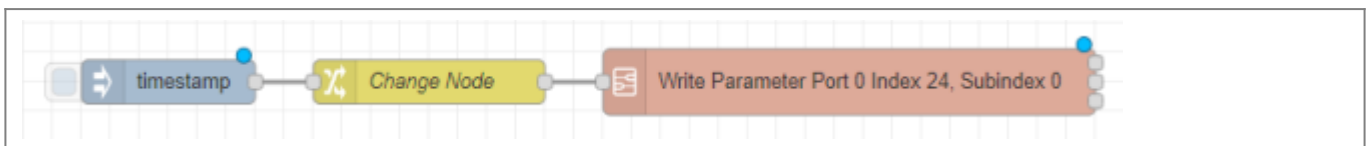
Numbers and strings can be put to the input of the Write Parameter Node in the native Javascript format. The input is expected as payload to the message.

## OctetString

There are two ways to format OctetString input data:

### Format as buffer

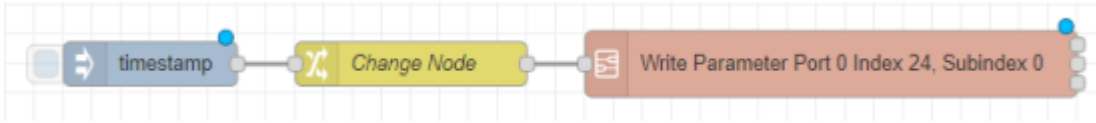
Example: Change Node



For the buffer, the data needs to be formatted accordingly:

## Format as Base64 string

Example: Change Node



For the string, the data needs to have Base64 encoding:

The screenshot shows the configuration interface for the 'Change Node' in Node-RED. The title bar reads 'Node 'change' bearbeiten'. At the top, there are three buttons: 'Löschen', 'Abbrechen', and 'Fertig'. Below this is a section titled 'Eigenschaften' (Properties) with a gear icon, a document icon, and a refresh icon. The 'Name' field contains 'Change Node'. Under the 'Regeln' (Rules) section, there is a rule with the action 'Setze' (Set) and the target 'msg.payload'. The rule is configured to 'to the value' of 'MTIzNDU=' in a dropdown menu. A red arrow points to the dropdown menu with the word 'String' written above it, indicating that the value must be a string.