Create and use OPC-UA variables

FAQ No. 010

<table>
<thead>
<tr>
<th>Part</th>
<th>Version</th>
<th>Revision</th>
<th>Datum</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>en</td>
<td>5.0.1183.44</td>
<td>004</td>
<td>2020-06-02</td>
<td>Released</td>
</tr>
</tbody>
</table>

Content

Introduction ................................................................. 2
OPC UA Server on COMBIVIS studio 6 .................................................. 3
OPC UA client ................................................................. 4
   COMBIVIS studio HMI ..................................................... 4
   UaExpert ................................................................. 6
Disclaimer ................................................................. 8
Introduction
This document describes the steps to create variables in COMBIVIS studio 6 and communicate via OPC UA to COMBIVIS studio HMI or UaExpert.

Hint:
It’s mandatory to choose a network location for a communication with OPC UA. Our suggestion is to select the “work network”.

Figure 1 [Set Network Location]
OPC UA Server on COMBIVIS studio 6

Hint: An OPC UA server licence is necessary on the target device

Add in COMBIVIS studio 6 the symbol configuration and enable the checkbox “Support OPC UA Features”

Choose in the symbol configuration the variables which you want to use via OPC-UA. Download and start the COMBIVIS studio 6 application on your PLC. Add the created variables in the KEB visualization COMBIVIS studio HMI or in UaExpert. (Follow the next chapters)
OPC UA client

You can use the different programs to receive the variables from the OPC UA Server. Following are the steps to use COMBIVIS studio HMI and UaExpert.

**COMBIVIS studio HMI**

Add a new OPC UA Tag with a right click to your project. If you click “Add Endpoint” a new window is open. Enter there following code:

```plaintext
opc.tcp://"IP-Address of the PLC":"Port"
```

E.g.: opc.tcp://172.17.131.3:4840

![Figure 4 [Add OPC UA Tag]](image)

![Figure 5 [Add Endpoint]](image)
You can open the new added session and choose the variables which you want to use in your COMBIVIS studio HMI visualization.

Figure 6 [Add Variable]

The OPC UA variables are implemented in COMBIVIS studio HMI and you can use it in the program like internal variables.
UaExpert

Add a new Server like the following picture. Enter there the IP Address of the PLC like following example:

opc.tcp://"IP-Address of the PLC"
E.g.: opc.tcp://172.17.131.3

After connecting with the server you have access to the variables. You can link the variables via drag and drop in the Data Access View.
Figure 9 [Display Variable]
Disclaimer

KEB Automation KG reserves the right to change/adapt specifications and technical data without prior notification. The safety and warning reference specified in this manual is not exhaustive. Although the manual and the information contained in it is made with care, KEB does not accept responsibility for misprint or other errors or resulting damages. The marks and product names are trademarks or registered trademarks of the respective title owners.

The information contained in the technical documentation, as well as any user-specific advice in verbal or in written form are made to the best of our knowledge and information about the application. However, they are considered for information only without responsibility. This also applies to any violation of industrial property rights of a third-party.

Inspection of our units in view of their suitability for the intended use must be done generally by the user. Inspections are particular necessary, if changes are executed, which serve for the further development or adaption of our products to the applications (hardware, software or download lists). Inspections must be repeated completely, even if only parts of hardware, software or download lists are modified.

Application and use of our units in the target products is outside of our control and therefore lies exclusively in the area of responsibility of the user.

KEB Automation KG
Südstraße 38 • D-32683 Barntrup, Germany
Phone: +49 5263 401-0 • Fax: +49 5263 401-116
www.keb.de • Email: info@keb.de