



Weld your way.

OPC UA

Interface documentation

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1 OPC UA server

C-Gate offers the OPC UA interface. The OPC UA server is accessible on the IP address of the IPC and on Port 4840. A typical URL for connecting:

```
opc.tcp://<ip>:<port>
```

The C-Gate data points are all stored in namespace `urn:Cloos:CGate:APIv1`. This index is commonly (but not necessarily) assigned index 2. Only data points having access type *current*, so having a current value not based on a time interval, are offered. Data points having access type *writable* can be written via the OPC UA.

Every data point is stored under a Node ID. This is made up of the index described above, and the IDs of the device and data point. Data point `OperatingMode` on the robot with ID 0012345 gives Node ID:

```
Index: urn:Cloos:CGate:APIv1  
Identifier: APIv1/0012345/OperatingMode
```

1.1 Limitations

Data points having a special data type (refer to the data points documentation) can not be visualised with the UaExpert tool (see section 3). The values are still available and can be read with an OPC UA client using the structure definition and as required the array size. For this, the type definitions must be entered manually on the client.

2 Security

The OPC UA server is freely accessible in the network. Access is not protected by a password or other means. If the requirement is to limit access, the network infrastructure must be used to do so.

3 UaExpert

You can use the *UaExpert* tool to gain an overview of the OPC UA server and the data points. The tool has been developed by Unified Automation and can, following registration, be downloaded free of charge and installed.

<https://www.unified-automation.com/de/produkte/entwicklerwerkzeuge/uaexpert.html>