Global Drive
Global Drive Control (GDC) with OPC
General information
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1 About this Manual

Version 4.3 and higher of the Global Drive Control (GDC) parameter setting software include an integrated OPC interface (OLE for Process Control) that allows access as an OPC client to bus servers supported by the Lenze DriveServer.

This Manual complements the “Global Drive Control – Getting Started” documentation and provides information about the use of GDC as an OPC client.

Tip!
The DriveServer delivery package includes bus servers for the fieldbus systems LECOM and System bus (CAN). A bus server for the MPI bus (bus server S7-MPI) is also available from Lenze.

For an overview of the bus servers supplied by Lenze and third party manufacturers, please refer to the “DriveServer – Accessories” documentation.

1.1 Conventions used

This Manual uses the following conventions to distinguish between different types of information:

<table>
<thead>
<tr>
<th>Type of information</th>
<th>Marking</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Names of dialog boxes, input fields and selection lists</td>
<td><em>italics</em></td>
<td>The dialog box Settings...</td>
</tr>
<tr>
<td>Radio buttons</td>
<td><strong>bold</strong></td>
<td>Click OK to...</td>
</tr>
<tr>
<td>Menu commands</td>
<td><strong>bold</strong></td>
<td>Use the command Start to...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If several commands must be used in sequence to carry out a function, then the individual commands are separated by an arrow: Select Options → Desktop to...</td>
</tr>
<tr>
<td>Keyboard commands</td>
<td><strong>bold</strong></td>
<td>Use &lt;F2&gt; to...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If a command requires a combination of keys, then a “+” is placed between the key symbols: Use &lt;Shift&gt;+&lt;ESC&gt; to...</td>
</tr>
<tr>
<td>Tip</td>
<td>![icon]</td>
<td>TIP! Use the function key &lt;F1&gt; to...</td>
</tr>
</tbody>
</table>
Configuring GDC as an OPC client

Tip!
Before configuring GDC as an OPC client, the appropriate bus server must be configured so that it is available for selection in GDC.

- For details about configuring the bus server, please refer to the bus server documentation.

To enable GDC to communicate with the DriveServer via the OPC interface, the GDC communication parameters have to be configured accordingly:

1. Select Options→Communication... to open the dialog box Select communication driver:

   - All communication drivers available are displayed in the list box.

2. Select the entry OPC in the list box and click the button Parameter... to open the dialog box OPC:

3. Enter the name of the computer on which the bus server is installed in the input field Computer name.
   - Click the button Network to select the corresponding computer from your network environment.
   - If the bus server is installed on the same computer as GDC, you can simply leave the input field Computer name blank.
Tip!
When accessing a bus server via a network, please bear in mind:
In order to protect a computer from unauthorised access, the default DCOM safety settings do not allow OPC access.
- Check the DCOM settings for the bus server concerned and change them, if necessary. For details, please refer to the “DriveServer – Getting Started” documentation.

4. Click the button Refresh to update the list of available OPC servers.

Tip!
The program distinguishes between “normal” OPC servers and OPC bus servers:
- Configuring OPC servers (Data Access 2.0) is usually a difficult and time-consuming process.
- OPC bus servers (DRIVECOM) have been optimised for use with GDC/DriveServer and therefore require only minimum configuration.

We therefore recommend the use of OPC servers that also display bus server features (presetting OPC options: Bus server (DRIVECOM)).

5. Select the corresponding OPC server from the list field Available OPC servers and close the dialog box OPC by clicking Ok.
6. Close the dialog box Select communication driver by clicking Ok.
Configuration of GDC as an OPC client is now complete.
3 Searching for OPC drives

Once GDC has been configured as an OPC client, you can search online to find the drives connected to the OPC bus server:

1. If GDC is still in offline mode, click **Options→Online** or press function key <F4> to change to online mode.
2. Select **Drive→Search...** or press function key <F2> to open the dialog box **Find OPC drives**:

![Find OPC drives dialog box](image)

3. Click the button **Search** to start searching or click **Cancel** to abort.

**Tip!**
- The drive controllers found on the bus are listed in the window “Drives connected to bus”.
- GDC automatically tries to allocate device descriptions to the drive controllers found.
  - If only one drive was found and a device description could be allocated, the device description is loaded immediately.
  - If automatic allocation of the device description for a drive fails, the device description for the drive can be allocated manually.
    Select the corresponding drive in the window “Drives connected to bus” or click **Drive→Choose...** in offline mode to open the dialog box for manual allocation.
- Use the command **Drive→Communication parameters...** to display the OPC access path for the active drive in the dialog box **Active drive** in the text field **Access path** (e.g. “COM1.Device_01”).
- For more information about operating GDC, please refer to the “Global Drive Control – Getting Started” documentation or the GDC Online Help.
4 Using the S7-MPI bus server

In conjunction with the bus server S7-MPI, GDC can also be used to set the parameters for drive controllers networked via PROFIBUS DP and controlled via a Siemens SIMATIC S7 PLC.

The figure below shows the architecture of such a system:

- The GDC oscilloscope function is the only function that is not available via this communication path.