Central configuration management of Bürkert devices
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1 ABOUT THESE INSTRUCTIONS

These instructions provide information about the functionality of the central configuration management of Bürkert devices. The instructions are aimed at people who project, install, start up and maintain the networking of devices.

Important safety information.
Safety instructions and information for using the communication-capable devices or products may be found in the corresponding operating instructions.

Carefully read these instructions.

1.1 Symbols

⚠ Indicates important additional information, tips and recommendations.

➡ Refers to information in these operating instructions or in other documentation.

→ Designates a procedure which you must carry out.

☑ Indicates a result.

MENUE Representation of software interface text.

1.2 Contact addresses

Germany
Bürkert Fluid Control Systems
Sales Center
Christian-Bürkert-Str. 13-17
D-74653 Ingelfingen
Tel. + 49 (0) 7940 - 10-91 111
Fax + 49 (0) 7940 - 10-91 448
E-mail: info@burkert.com

International
The contact addresses can be found on the Internet at: www.burkert.com

1.3 Warranty

The warranty is only valid if the device is used as authorized in accordance with the specified application conditions.
1.4 Information on the Internet

The operating instructions and data sheets for Bürkert products can be found on the internet at:

www.burkert.com

2 AUTHORIZED USE

The functionality of the central configuration management is designed for the simple and quick replacement of communication-capable Bürkert devices.

▶ Use according to the authorized data, operating conditions, and conditions of use specified in the contract documents and operating instructions of the corresponding devices or products.

▶ Use the functionality only in conjunction with third-party devices and components recommended and authorized by Bürkert.

▶ Correct installation and careful use and maintenance are essential for reliable and faultless operation.
3 PRODUCT DESCRIPTION

This section includes descriptions and explanations of the functionality of the configuration management of Bürkert devices.

3.1 Definition of the central configuration management

The functionality of the central configuration management enables the Bürkert devices to be replaced quickly without additional configuration.

Purpose of the configuration:
• Uncomplicated replacement of defective devices.

3.2 Components of the configuration management

• Configuration provider
• Configuration client

The central configuration management features a configuration provider which reads out the configurations of the configuration clients and saves them centrally.

A replacement of the managed device is detected by the configuration provider in the network. The configuration provider automatically parameterizes the new device with the saved configuration of the predecessor device.

Figure 1: Example of components of the central configuration management
Prerequisites for automatic configuration is a device with the same identification number and different serial number.

Additional conditional prerequisites:
• SCV2 ME4x
  - same slot
• Devices with fixed address via DIP switch
  - same address
• Compact Connect Module
  - same installation position

3.3 Prerequisites

Prerequisites for the central configuration management:
• Configuration provider function has been activated,
• Configuration provider has an SD card.
4 CONFIGURATION

The “Bürkert Communicator” software and the related general description are available on the Bürkert homepage. The exact description of the communication-capable devices or products can be found in the respective operating instructions.

4.1 Configuration provider

4.1.1 Activation of the function via Bürkert Communicator

The configuration provider function must be activated once.

The settings for the configuration provider is available in the following menu:
Menu: General settings → Detailed views Parameter → Configuration provider

Figure 2: Detailed views Parameter for configurations provider
**Parameter for configuration provider**

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration provider</td>
<td>Status</td>
<td>Activate or deactivate function</td>
</tr>
<tr>
<td></td>
<td>Erase all device configurations</td>
<td>Is implemented when the device has been restarted</td>
</tr>
<tr>
<td></td>
<td>Force reconfiguration of all device</td>
<td>Is implemented when the device has been restarted</td>
</tr>
</tbody>
</table>

**4.1.2 Activation of the function via display**

Menu → Parameter → Cfg.Provid. → On

**4.2 Configuration client**

⚠️ The device has been pre-initialized ex works and a configuration is therefore not required.

The settings for the configuration client is available in the following menu:

Menu: General settings → Detailed views Parameter → Configuration client

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**Figure 3:** Detailed views Parameter for configuration client
### Configuration client parameters

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration client</td>
<td>Mode</td>
<td>Defines whether the configuration should be managed by a device. With <strong>Automatically switch on</strong> you wait for a provider and then switch to <strong>Active</strong> (delivery status)</td>
</tr>
<tr>
<td></td>
<td>Change mode</td>
<td></td>
</tr>
</tbody>
</table>

! The devices are delivered as standard in **Automatically switch on** status.

The status switches to active as soon as an active provider is in the same network.

![Figure 4: Active mode](image)

If the configuration is not correctly managed by a provider, the configuration client signals this with a blue maintenance message.
5 DIAGNOSTICS

5.1 Configuration provider

A blue maintenance message signals that a configuration client is missing or that replaced devices are not being reconfigured.

Detailed status messages can be viewed in the following menu:

Menu: General settings → Detailed views Diagnostics → Configuration provider

Figure 5: Detailed views Diagnostics for configuration provider

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration provider</td>
<td>Status</td>
<td>Wait for changes</td>
</tr>
<tr>
<td>Number of managed devices</td>
<td>Information since the device was last started</td>
<td></td>
</tr>
<tr>
<td>- Thereof Number of offline configurations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Thereof Number of forced reconfigurations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of reconfigured clients</td>
<td>Information since the device was last started</td>
<td></td>
</tr>
<tr>
<td>Number of loaded client configurations</td>
<td>Information since the device was last started</td>
<td></td>
</tr>
<tr>
<td>Number of missing clients</td>
<td>Information since the device was last started</td>
<td></td>
</tr>
<tr>
<td>Number of failed configuration loads</td>
<td>Information since the device was last started</td>
<td></td>
</tr>
<tr>
<td>Number of failed reconfigurations</td>
<td>Information since the device was last started</td>
<td></td>
</tr>
<tr>
<td>Managed clients</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.2 Configuration client

A blue maintenance message signals that one or more configurations are not being correctly managed. In this case the device cannot be replaced.

![Maintenance message](image)

**Figure 6:** Maintenance message

Detailed status messages can be viewed in the following menu:

Menu: **General settings** → Detailed views **Diagnostics** → **Configuration client**

![Detailed views](image)

**Figure 7:** Detailed views Diagnostics for configuration client
### Diagnostics for configuration client

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration client</td>
<td>Transferable memory status</td>
<td>Device is managed by a provider</td>
</tr>
<tr>
<td>Status</td>
<td>Managed by provider</td>
<td></td>
</tr>
<tr>
<td>Number of reconfigurations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 6 DEVICE REPLACEMENT

Procedure for replacing a device:

→ Replace desired device.

A replacement of the managed device is detected by the configuration provider and the device is restarted 1 minute after integration into the network.

✔ The replaced device has accepted the configuration of the predecessor device.

⚠️ A blue maintenance message signals that the configuration provider is not being correctly managed and that the device has not been correctly replaced.

The maintenance message appears 180s after the start.