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Handling an Axioline F station under Startup+

Quick start guide

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User manual

Handling an Axioline F station under Startup+

2015-02-13

Designation: UM QS EN STARTUP+

Revision: 02

Order No.: —

This user manual is valid for:

Designation	Version	Order No.
Startup+	2.30 or later	2700636

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Please observe the following notes

User group of this manual

The use of products described in this manual is oriented exclusively to:

- Qualified electricians or persons instructed by them, who are familiar with applicable standards and other regulations regarding electrical engineering and, in particular, the relevant safety concepts.
- Qualified application programmers and software engineers, who are familiar with the safety concepts of automation technology and applicable standards.

Explanation of symbols used and signal words

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety measures that follow this symbol to avoid possible injury or death.

There are three different categories of personal injury that are indicated with a signal word.

DANGER This indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING This indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION This indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

This symbol together with the signal word **NOTE** and the accompanying text alert the reader to a situation which may cause damage or malfunction to the device, hardware/software, or surrounding property.

This symbol and the accompanying text provide the reader with additional information or refer to detailed sources of information.

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1 Basics and example project

1.1 Information about this document

This document describes the functions of the Startup+ software with an example project.

1.2 Startup+ software

Startup+ is a software for easy wiring checks.

It offers the following functions:

– Parameterization of Axioline F modules of a station
– I/O check
– Diagnostics

Startup+ allows you to quickly and easily establish a connection to an Axioline F station in order to check the wiring of this station. In addition to the basic functions mentioned above, it is also possible with the Startup+ software to assign a device name and an IP address to a bus coupler, as well as to record the writing and reading of process data in a file during the I/O check for a better documentation.

Installing the software

The software can be downloaded free of charge at phoenixcontact.com.

- Install the software.
  To do this, execute the file **StartupPlusSetup.exe**.
  Then follow the installation instructions.

Interactions with PC Worx

Parallel operation of programs from the AUTOMATIONWORX Software Suite and Startup+ is usually possible. However, when you remove a program it is necessary to do a repair installation for the product that is to remain on the PC.

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1.3 Requirements

Knowledge

It is assumed the user has knowledge and experience in the operation of PCs and Windows operating systems.

Hardware

In order to be able to start up the example system, the following hardware is required:

- Programming device/PC
  - PC with at least 1 GHz, 512 MB RAM and 200 MB free hard disk space
  - MS Windows XP SP3 MS Windows 7
  - Microsoft.NET Framework 3.5 SP1
    Microsoft.NET Framework 3.5 SP1 can be downloaded free of charge from the Microsoft homepage.
- Axioline F station
- Ethernet or USB connection from the Axioline F station to the programming device/PC

1.4 Required Axioline F module versions

In order to use the software functions, the Axioline F modules require the following hardware and firmware versions:

Table 1-1 Axioline F module versions for use under Startup+

Type	Order No.	As of hardware version	As of firmware version
AXL BK PN	2688019	01	1.10
AXL DI 16/4	2688022	01	--
AXL DI 32/1	2688035	01	--
AXL DO 16/3	2688048	01	--
AXL AI 8	2688064	02	1.21
AXL AO 8	2688080	01	1.20
AXL RTD 8	2688077	03	1.20

There are no restrictions for all other Axioline F modules.

1.5 Hardware used

The Axioline F station used in the example project consists of the following components:

Table 1-2 Hardware used

Type	Order No.	Hardware	Firmware
AXL F BK ETH	2688459	02	1.10
AXL F DI8/3 DO8/3 2F	2702071	00	--
AXL F AI4/U	2688501	01	1.00
AXL F AO4	2688527	01	1.00

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1.6 Wiring the hardware, applying voltage

Please refer to the following documentation when creating the station:

– Package slips for the modules used
– UM EN AXL F SYS INST user manual
– Data sheets for the modules used

- Create the Axioline F station, consisting of a bus coupler or controller, the I/O modules and their periphery.
- Establish an Ethernet connection from the bus coupler or controller to the PC.
- Supply the system with voltage.

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2 Startup+: Online help, user interface and function calls

2.1 Online help

A comprehensive online help is available that can be accessed as follows:

- Select the “?, Help” menu item.
  The table of contents for the online help appears. Search for a help topic as described below.

Or

- Press <F1> in an active input mask or window.
  The context-sensitive online help for the active input mask or the active window appears.
  In device-specific input masks there may be an additional button or symbol for calling the online help.

2.2 The Startup+ user interface

The interface is divided into the following areas:

1	Menu bar	**5**	Workspace
2	Toolbar	**6**	DTM catalog
3	Status bar	**7**	Message window
4	Project tree		

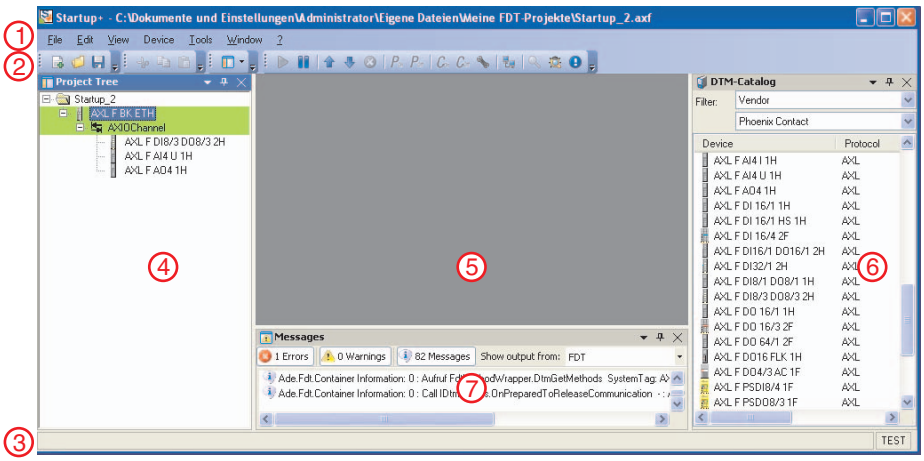

Table 2-1 User interface

Menu bar

Appearance and functioning of the menu correspond to the Windows standard.

Additional commands can be found in the various context menus such as, for example, in the context menu of a DTM in the project tree, in the context menu of a window or the context menu of a message window.

The menu commands can also be called via the toolbar or by means of shortcuts.

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Toolbar

Frequently used functions can be accessed quickly via the toolbar.

The meaning of a symbol is shown when you place the mouse pointer over the icon.

You will find a detailed description of all symbols with their functions in the online help.

The following applies for both the menu bar and the tool bar:
The available menu items depend on the currently marked object that you are working on.

The color of the icon shows whether the menu item is available or not. The icon is shown in gray if the menu item is disabled - otherwise it is colored.

Status bar

The status bar shows a progress bar, status information in the form of text messages and the name of the user currently logged in.

Project tree

The project tree shows the structure of communication connections of the field devices.

Green background: The module is connected and the user has actively worked with it.

White background:
- The module is not yet connected when the “Connect with device” icon is shown in green.
- The module is connected, but the user has not yet worked online with it, when the “Connect with device” icon is grayed out.

Workspace

The workspace is used to display the “Properties” window and the device-specific screen masks provided by the respective DTM.

DTM catalog

The current DTM catalog is displayed.

Message window

The message window displays information on the internal program execution.
This information may be helpful when errors have to be removed.

2.3 Function calls with Startup+

There are often several ways of calling up a function.

For example, the following options are available for calling the online parameters:

1. Context menu of the module (right-click on the module in the project tree): “Parameters, Online Parameter”
2. Icon in the command line:
3. Menu bar of the program: “Device, Online Parameter”
4. Double-click on the entry of the module in the project tree.
   This opens offline parameters. When there is a connection to the module, you can send the offline parameters to the module just like the online parameters.
5. Shortcuts

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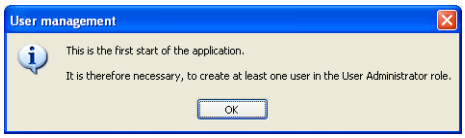
3 Starting the software and creating a project

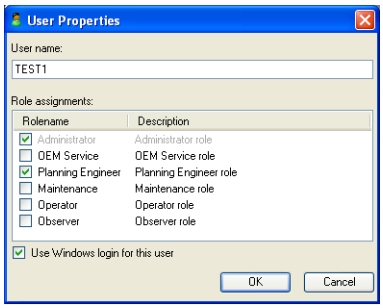
3.1 Starting the software for the first time

- Start the software. To do this, select “Start, Programs, Phoenix Contact, Startup+, Startup+”.

Select the desired language. If you want to change the language, please follow the first steps listed below and change the language when you are requested to do so in the documentation.



- Confirm this window with “OK”.



- Define the user roles when you start the software for the first time.
  Define at least one user as an administrator.
- Confirm your entry with “OK”.

DTM catalog management

The DTM catalog of Axioline F modules is installed with the software. In the following, add these DTMs to the software.

- Search for the installed DTMs.
  In the “DTM Catalog Management” window that appears, click on “Search for installed DTMs”.

All DTMs installed on the PC are shown as known DTMs.

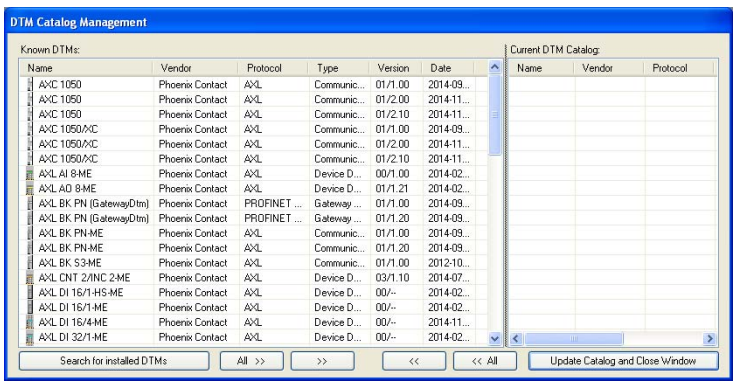


Figure 3-1 Known DTMs

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- Add the DTMs to the current catalog by clicking the “All >>” button.
- Confirm the selection with “Update Catalog and Close Window”.

Option: Adding further DTMs

You have now added all available DTMs to the software. If additional DTMs are available at a later time, add these as well. To do this, select the “Tools, DTM Catalog Management” menu.

The Axioline assistant opens after you have closed the “DTM Catalog Management” window. If you do not wish to change the language, follow the description from “Axioline assistant” on page 15 onwards.

Option: Changing the language

- If you want to change the language, stop the Axioline assistant with “Cancel”.
- Select the “Tools, Options..., International Settings” menu from the menu bar and select the language.
- Confirm your selection with “OK”.
- Restart the program to activate the language selection.

3.2 Starting the software for the second time and every subsequent start

If you start the software for the second time, you are prompted to log in as a user.

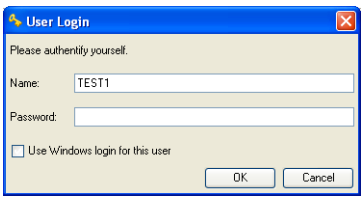

Figure 3-2 User login

- Enter the user name under “Name”.

There are two options for the password entry:

1. Enter a password.
   This password will be requested every time the program is started.

Or:

2. Activate the “Use Windows login for this user” checkbox.
   In this case, the password will not be requested every time the program is started.

The Axioline assistant will start after authentication.

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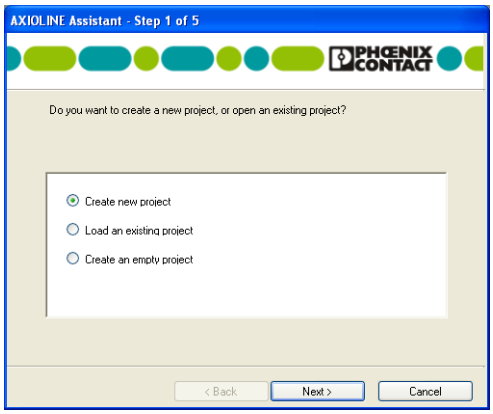
3.3 Axioline assistant

When starting the software for the first time, the Axioline assistant opens after identification.

On every subsequent software start, you start the Axioline assistant via “File, New...”.

3.3.1 Step 1 of 5: Creating or loading a project



- Load an existing project or create a new project.
- Confirm your selection with “Next”.

Loading an existing project

- If a project has already been created, select this project and confirm your selection with “Finish”.

Creating a new project

- Select “Create new project” in order to create a new project.

Please refer to Section 6 “Special features of individual bus couplers/controllers”.

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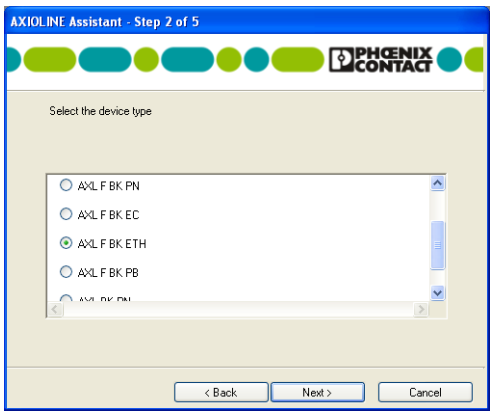
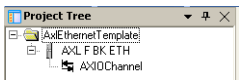
3.3.2 Step 2 of 5: Device type

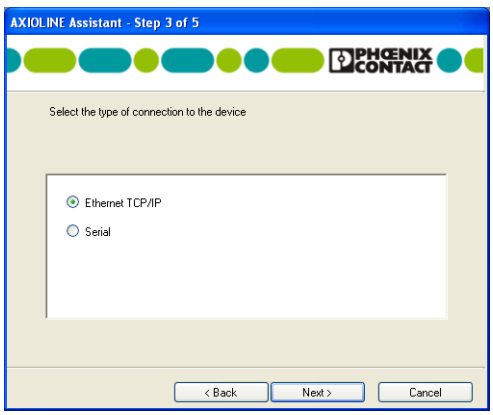


- Select the connected bus coupler (here: AXL F BK ETH).
- Confirm your selection with “Next”.



The structure of the project is created in the project tree.

3.3.3 Step 3 of 5: Connection type



- Select the type of connection between bus coupler and PC.
- An Ethernet connection is used in the example. Therefore, select “Ethernet TCP/IP”.
- Confirm your selection with “Next”.

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Connection via serial interface (not selected in our example configuration)

The “Serial” interface” option can generally be used for each bus coupler. In this case, the bus coupler needs to be connected to the PC via USB.

With regard to bus couplers for PROFIBUS and EtherCAT®, the connection via serial interface is the only option available.

If the connection is established via the serial interface, step 4 of 5 is skipped.

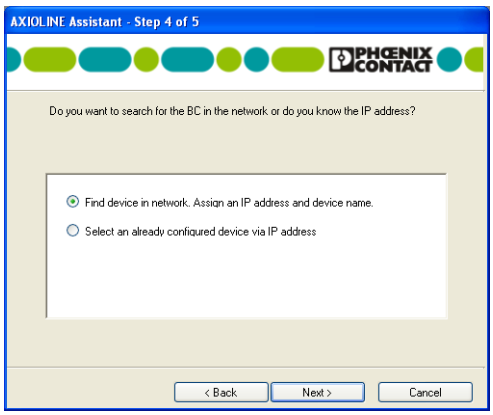
If the USB port is not detected during the first connection via serial interface:

- Select the “Configuration...” menu item from the context menu for the bus coupler (right mouse button) or .
- Select the COM port for “Serial” and click “Apply” to accept the selection. Close the window with “OK”.
- In the project tree, select “Scan Topology...” from the context menu for the AXIOChannel item (right mouse button).

The Topology Scan Wizard will run, see Section “Step 5 of 5: Determining the connected bus” on page 20.

3.3.4 Step 4 of 5: Searching for the bus coupler in the network or selecting the bus coupler

This step is only required for Ethernet TCP/IP connections.



- Specify how you wish to search for the bus coupler in the network.
- Select “Find device in network...” if you do not know the IP address or if you do not want to enter the address. Please pay attention to the note below.
- If you know the IP address, enter it in the following mask.
- Confirm your selection with “Next”.

The “Find device in network ...” option is currently only available for controllers and bus couplers for PROFINET and Sercos. Please observe the information in Section 6, “Special features of individual bus couplers/controllers”.

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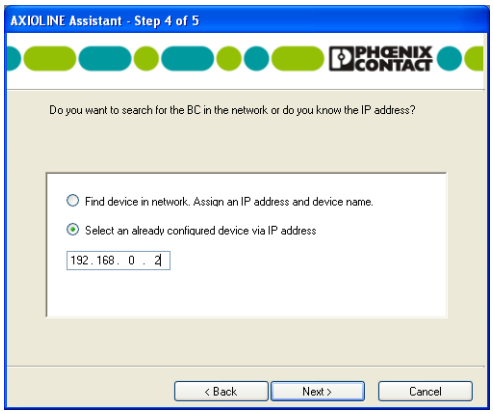
3.3.4.1 Selection: Select an already configured device via IP address (selected in our example configuration)



- In the example, the IP address of the bus coupler is 192.168.0.2. Therefore, activate the “Select an already configured device via IP address” option.
  Enter the IP address in the following mask.
- Confirm your selection with “Next”.

The next step is step 5 of 5, see “Step 5 of 5: Determining the connected bus” on page 20.

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3.3.4.2 Selection: Find device in network. Assign an IP address and device name.

If you have selected this option, the software displays a window that enables you to search for devices in the network.

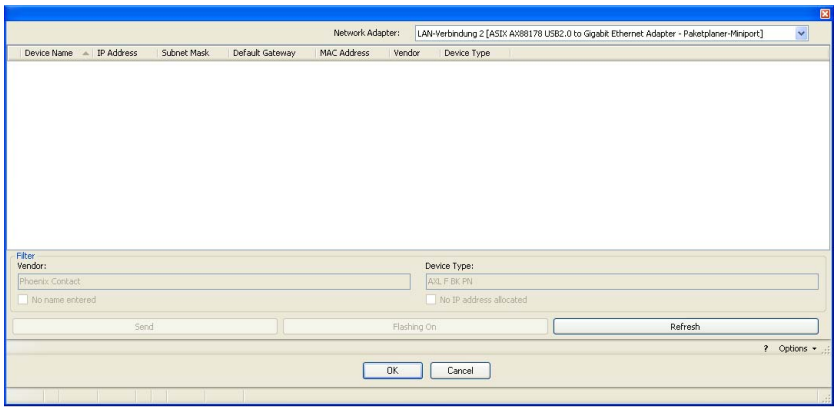

Figure 3-3 Window used to search for devices in the network

The appearance of this window depends on the bus coupler/controller used.

- Select the network card of your connection under “Network Adapter”.
- Click on “Refresh”.
  The current settings of the bus coupler will be displayed.

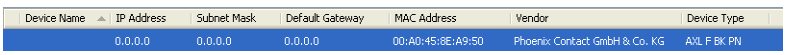

Figure 3-4 Bus coupler found with factory settings

- Change the settings if required.

Follow the PROFINET naming conventions when assigning a name. If you assign a name that does not conform to the naming conventions, transmission will not be possible. In this case, the marker bar is highlighted in red, the “Send” button is grayed out.

- Confirm the settings with “Send”.
  When the settings have been applied successfully, a green check mark appears to the left of the row.
- Click “Refresh” to update the window.

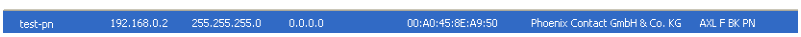

Figure 3-5 IP address of the bus coupler

- Confirm the settings with “OK”.

This leads to step 5 of 5 of the Axioline assistant.

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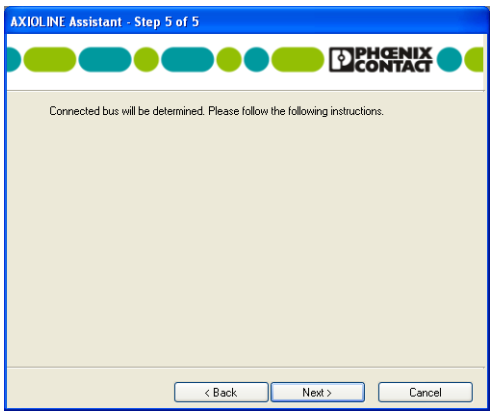
3.3.5 Step 5 of 5: Determining the connected bus

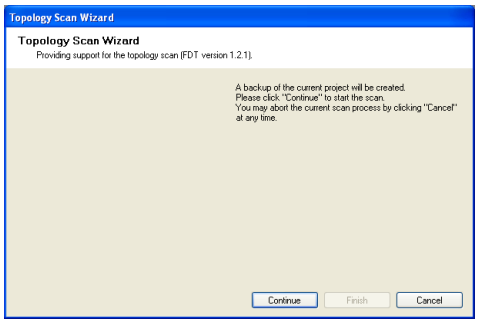


The connected bus is determined.

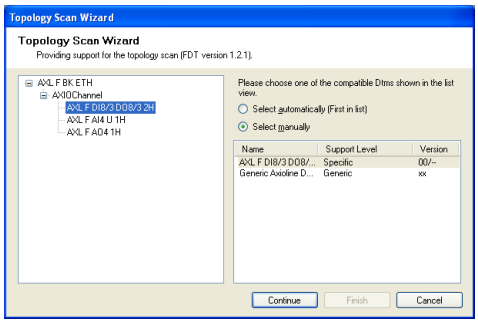
- Confirm the window with “Next”.

When using a controller, please observe the following:

The configuration frame for the connected bus must be saved on the controller. Create this configuration frame if it does not already exist.
To do this, proceed as described in Section 6.6, “Controllers (AXC 1050...)”.



- Confirm the window with “Next”.



The connected bus will be shown.

- Select the compatible DTMs either automatically or manually.
- Confirm the window with “Next”.

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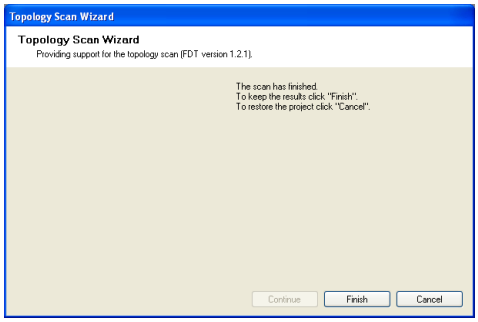
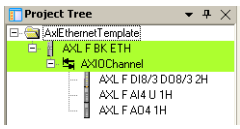


The topology has been scanned.

- Accept the topology with “Finish”.
- The following window shows all steps that have been carried out. Exit this window with “Finish”.



The Axioline F station is displayed in the project tree.

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4 Parameterization, diagnostics and I/O check

There are always several options to trigger a command (see also Section “Function calls with Startup+” on page 12).
Information about where you can find the corresponding command in the menu bar and how to call it using the toolbar is given in the following explanations. In most cases, the same command is also available in the context menu for the device. You can call the context menu by right-clicking on the device in the project tree.

Example: Connecting the device
- Menu bar: “Device, Connect”
- Context menu: “Connect”
- Toolbar:

4.1 Parameterization

You can read the parameterization and change it online or offline.

- Establish the connection to the device.
  For example, select “Device, Connect” or .
- Upload the parameters from the device.
  For example, select “Device, Parameter Upload” or .

Since you are now working actively on the device, it is shown with a green background in the project tree.

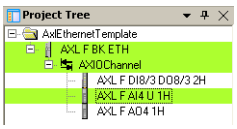

Figure 4-1 Active communication with the device

- Now you can parameterize the device.
  For example, select “Device, Online Parameter” or .

The window with the parameters opens. Different information may be displayed depending on the module.

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Identification

The device rating plate is shown for each module under “Parameter Menu, Identification”.

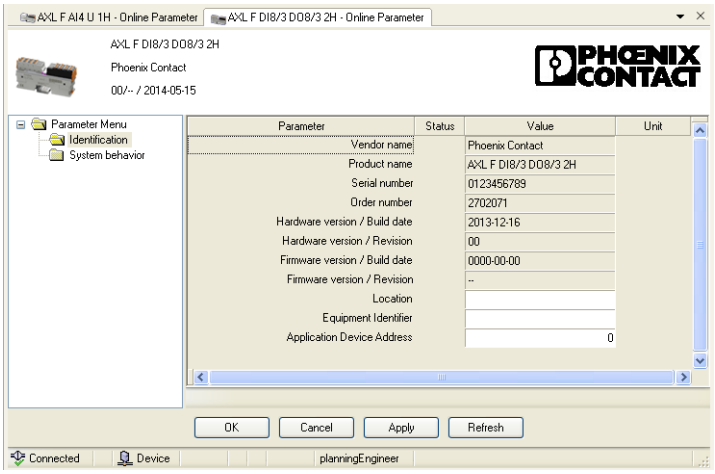

Figure 4-2 Parameters for identification

- Adapt these entries, if necessary.
  Confirm your entries with “Apply”.
  The parameterization will be sent to the module.
- Then confirm with “OK”.
- Answer the following question.

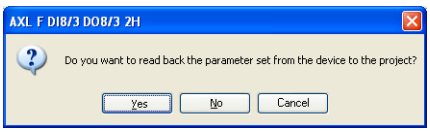

Figure 4-3 Read back parameter record?

If you answer this question with “Yes”, the changes will also be transferred to the offline project data.
If you answer this question with “No”, the changes will not be transferred to the offline project data. In this case, online and offline project data will be different.
The window will be closed after you have answered the question.

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Parameters/ system behavior

- If a module can be parameterized, the current parameterization is shown in the parameter menu.

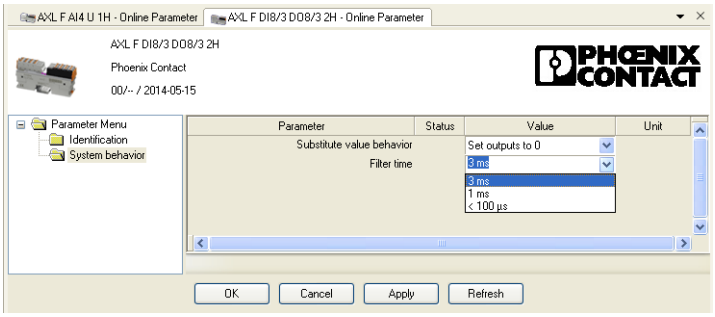

Figure 4-4 Parameterization of a digital module

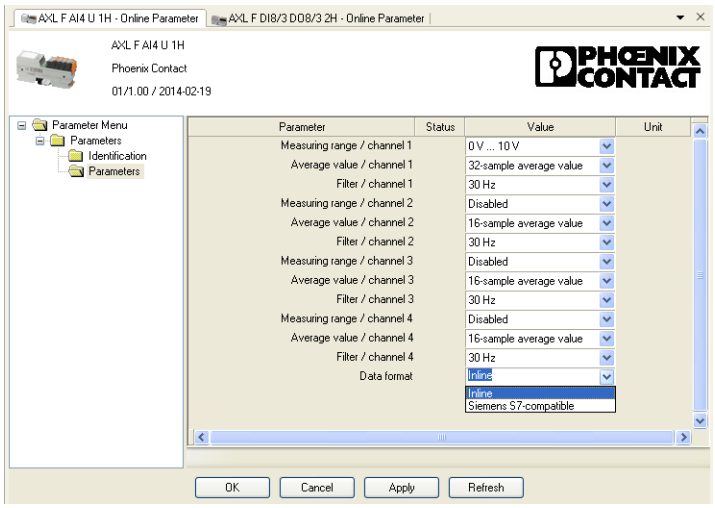

Figure 4-5 Parameterization of an analog module

- Adapt the parameterization, if necessary.
  Confirm your entries with “Apply”.
  The parameterization will be sent to the module.
- Then confirm with “OK”.
- Answer the following question.

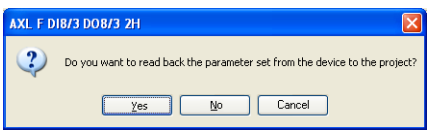

Figure 4-6 Read back parameter record?

If you answer this question with “Yes”, the changes will also be transferred to the offline project data.
If you answer this question with “No”, the changes will not be transferred to the offline project data. In this case, online and offline project data will be different.
The window will be closed after you have answered the question.

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Not transmitted changes

Changes that have not yet been transmitted are indicated with a pen icon in the “Status” column as well as in the status line.

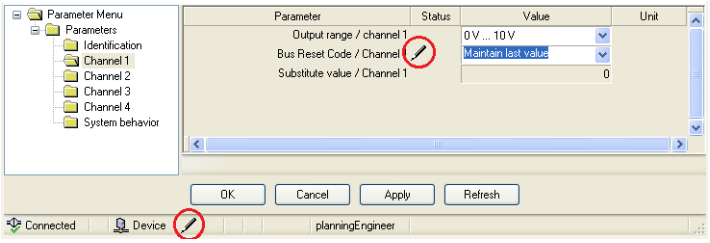
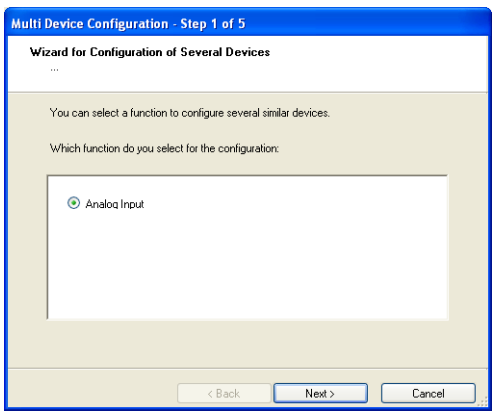


Figure 4-7 Not transmitted changes

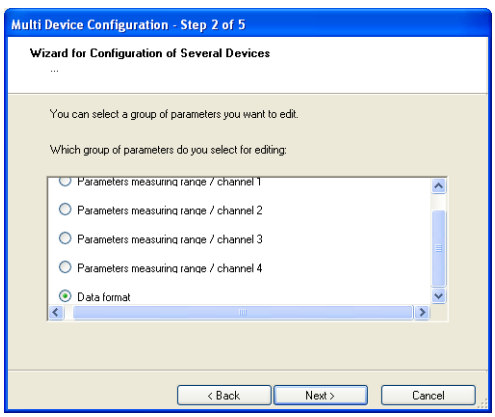
Parameterization of several devices

Specific functions can be parameterized for several devices in only one step.

- Select a device in the project tree window whose parameters you want to configure for several devices (e.g., AXL F AI4 U 1H).
- Select “Device, Configuration of Several Devices ...”.



- Select the function to be configured for several devices.
  Here: “Analog input”
- Confirm your selection with “Next”.



- Select the group of parameters that you want to edit.
  Here: “Data format”
- Confirm your selection with “Next”.

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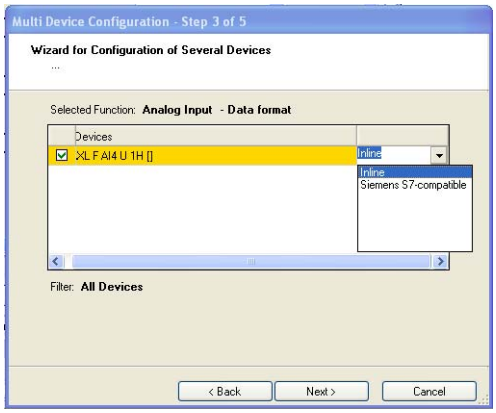
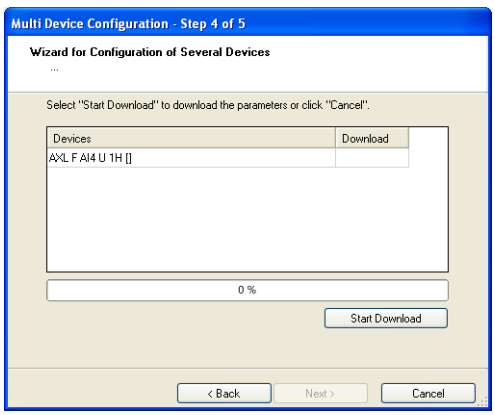
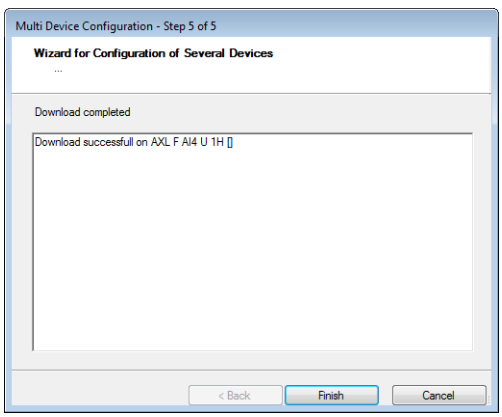


- Select on the left the checkboxes of the devices for which the parameterization should be valid.
- Specify the common parameterization of all selected devices.
- Confirm your selection with “Next”.



- Select “Start Download” in order to download the parameters.
- Once the download has been completed successfully, confirm this step with “Next”.



- Confirm the message informing you about the successful completion of the download with “Finish”.

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4.2 Diagnostics

The status of the station and individual devices can best be monitored via the entry of the bus coupler.

- Double-click on the bus coupler entry in the project tree. This opens the diagnostics window.

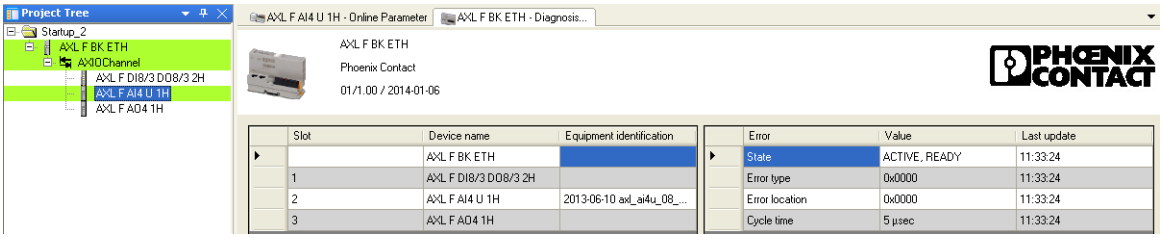

Figure 4-8 Diagnostics: OK

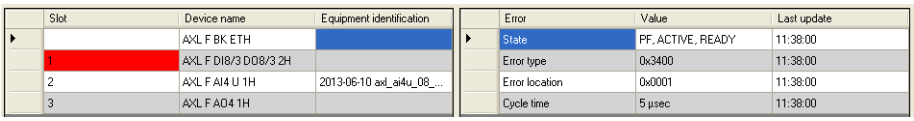

Figure 4-9 Diagnostics: An error has occurred

- The error cause will be displayed when you switch to the module concerned under “Slot”.

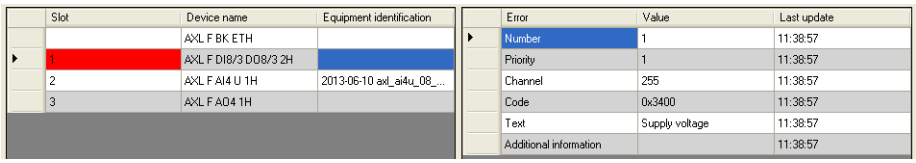

Figure 4-10 Diagnostics: Error cause

- You can also call the diagnostics function on the individual modules.
  Select the “Device, Diagnosis” entry from the context menu of the module (right mouse button) or .

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4.3 I/O check

- Select the I/O check function on a connected module by selecting the “Functions, IO Check” entry from the context menu (right mouse button) of the module.

If an I/O check has not been implemented in a module via the current firmware version, you will receive the “No IoCheck control defined” message.

In this case, close the window with “Close”.

If an I/O check is required, use a module with a higher firmware version or a different module.

If the I/O check can be carried out, a window appears with areas representing the process data of the module.

- Click the “Refresh on” button in this window.

Activities can be logged in this window, see “Logging process data” on page 34

In addition, you can specify the output values for output modules.

4.3.1 Digital input/output modules

The current status of the module inputs and/or outputs is displayed here.

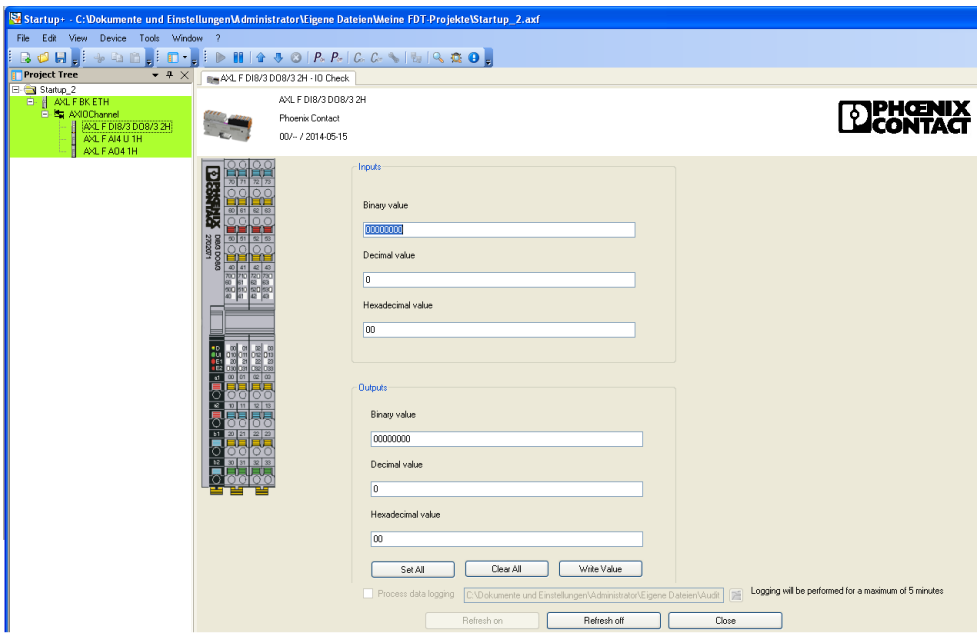

Figure 4-11 IO check of a digital module (example: AXL F DI/8 DO8/3 2H)

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Activating or deleting outputs

With regard to output modules, you have different options to activate or delete one or several outputs.

1. **Activate or delete each output separately in the graphic**

- Move your mouse pointer over the outputs in the graphic.
  On a permissible terminal point the mouse pointer changes into a hand.
- Click on the corresponding output.
  When you modify an output for the first time, the “Do you want to start writing the process data” prompt appears.

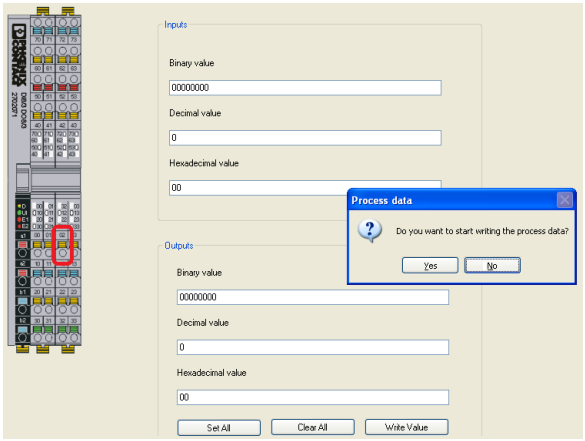

Figure 4-12 Activating the output

- If you confirm this prompt with “Yes”, the following actions take place:
  - The module output is activated or deleted.
  - In the graphic, the color of the LED changes accordingly.
  - The process data value is updated in the display.

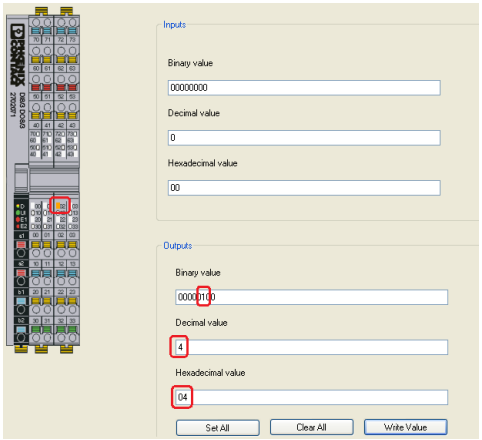

Figure 4-13 Result: Output activated

You can now activate or delete additional outputs. The last status is retained when you switch off the refresh feature and when you close the window.

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2. “Set All” or “Clear All” buttons

- In order to activate all outputs, first click on the “Set All” button.
  This causes all outputs to be set to “1” in the interface.
  The LEDs in the graphic have not yet changed their color accordingly.

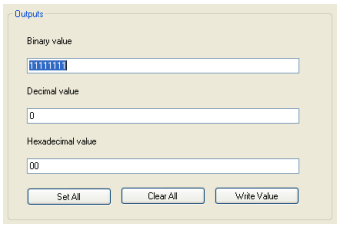

Figure 4-14 Activating all outputs

- Click the “Write Value” button to transfer the values to the module.
  This causes the outputs to be set on the module. In addition, the LEDs shown in the graphic are changed accordingly in the user interface.
- In order to clear the outputs, you have to proceed in a similar way.
  First click the “Clear All” button and then “Write Value”.

3. Specifying the process data value

- Specify in the corresponding area the process data value for the outputs as a binary, decimal **or** hexadecimal value.
- In order to transfer this value to the module, click the “Write Value” button.
  This causes the module outputs to be set.
  In the user interface, the values are updated in the different data formats and the LEDs shown in the graphic are adapted accordingly.

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4.3.2 Analog input/output modules

- Activate the inputs or outputs that you want to monitor in the “Diagram” column.

This leads to an input or output description under “Signal description”.
The “Process value” window columns display the current process data of the module as both a value and a slider. In addition, it is shown as a graph in the diagram.

The process data is shown in the diagram and logged on demand in the log file only for the inputs or outputs that have been selected under “Diagram”.

For output modules: You can change the process data for all outputs. It is transferred to the module no matter whether the output has been selected under “Diagram” or not.

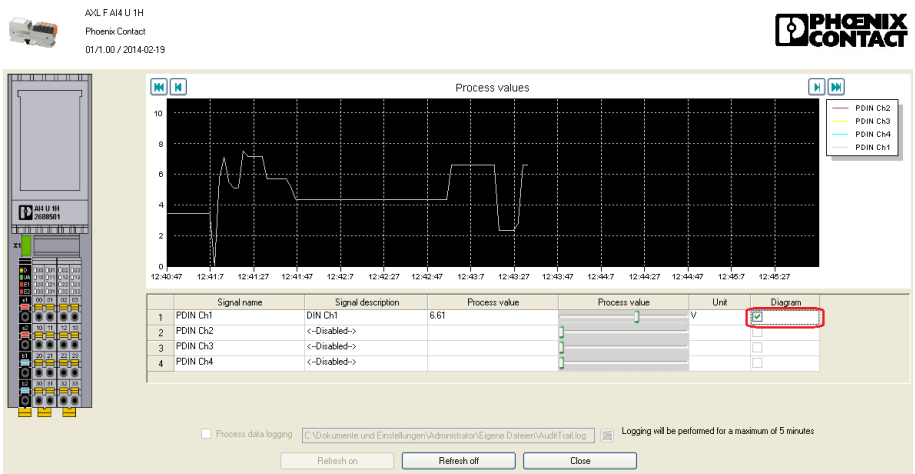

Figure 4-15 IO check of an analog module (example: AXL F AI4 U 1H)

You can change the position in the diagram area as follows:

⏮	Back to starting point
⏪	Put back by five minutes
⏩	Put forward by five minutes
⏭	Forward to end point
Mouse	Position the mouse pointer on the diagram. The pointer changes to a hand. Hold down the mouse button to move the diagram.

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For output modules, you can change each output by entering a value in the left-hand column “Process value” or modify it in the right-hand column “Process value” by changing the position of the slider.

- Change the process value by specifying the value or changing the position of the slider.
- Complete the action by confirming with <Enter> or by clicking anywhere else. Only then will the new value be accepted.

The output is set accordingly. Now you can specify more output values. The last status is retained when you switch off the refresh feature and when you close the window.

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4.3.3 Logging process data

For every module you can log the process data for up to five minutes.

- To do so, activate the checkbox in the window for the I/O check.

Figure 4-16 Logging process data

- Click the “Refresh on” button.

The data is logged (up to five minutes) until you press the “Refresh off” button.

AuditTrail.log - Editor

Timestamp	Moduletype	Channel	HEX-value
04.04.2011 10:56:59	AXL DO 16/3-ME	1	0
04.04.2011 10:56:59	AXL DO 16/3-ME	2	0
04.04.2011 10:56:59	AXL DO 16/3-ME	3	0
04.04.2011 10:56:59	AXL DO 16/3-ME	4	0
04.04.2011 10:56:59	AXL DO 16/3-ME	5	0
04.04.2011 10:56:59	AXL DO 16/3-ME	6	0
04.04.2011 10:56:59	AXL DO 16/3-ME	7	0
04.04.2011 10:56:59	AXL DO 16/3-ME	8	1
04.04.2011 10:56:59	AXL DO 16/3-ME	9	0
04.04.2011 10:56:59	AXL DO 16/3-ME	10	0
04.04.2011 10:56:59	AXL DO 16/3-ME	11	0
04.04.2011 10:56:59	AXL DO 16/3-ME	12	0
04.04.2011 10:56:59	AXL DO 16/3-ME	13	0
04.04.2011 10:56:59	AXL DO 16/3-ME	14	0
04.04.2011 10:56:59	AXL DO 16/3-ME	15	0
04.04.2011 10:56:59	AXL DO 16/3-ME	16	0
04.04.2011 10:57:00	AXL DO 16/3-ME	1	0
04.04.2011 10:57:00	AXL DO 16/3-ME	2	0
04.04.2011 10:57:00	AXL DO 16/3-ME	3	0
04.04.2011 10:57:00	AXL DO 16/3-ME	4	0
04.04.2011 10:57:00	AXL DO 16/3-ME	5	0
04.04.2011 10:57:00	AXL DO 16/3-ME	6	0
04.04.2011 10:57:00	AXL DO 16/3-ME	7	0
04.04.2011 10:57:00	AXL DO 16/3-ME	8	1
04.04.2011 10:57:00	AXL DO 16/3-ME	9	0
04.04.2011 10:57:00	AXL DO 16/3-ME	10	0
04.04.2011 10:57:00	AXL DO 16/3-ME	11	0
04.04.2011 10:57:00	AXL DO 16/3-ME	12	0
04.04.2011 10:57:00	AXL DO 16/3-ME	13	0
04.04.2011 10:57:00	AXL DO 16/3-ME	14	0
04.04.2011 10:57:00	AXL DO 16/3-ME	15	0
04.04.2011 10:57:00	AXL DO 16/3-ME	16	0
▪ ▪ ▪			
04.04.2011 10:57:41	AXL DO 16/3-ME	1	0
04.04.2011 10:57:41	AXL DO 16/3-ME	2	0
04.04.2011 10:57:41	AXL DO 16/3-ME	3	0
04.04.2011 10:57:41	AXL DO 16/3-ME	4	1
04.04.2011 10:57:41	AXL DO 16/3-ME	5	0
04.04.2011 10:57:41	AXL DO 16/3-ME	6	0
04.04.2011 10:57:41	AXL DO 16/3-ME	7	1
04.04.2011 10:57:41	AXL DO 16/3-ME	8	0
04.04.2011 10:57:41	AXL DO 16/3-ME	9	1
04.04.2011 10:57:41	AXL DO 16/3-ME	10	0
04.04.2011 10:57:41	AXL DO 16/3-ME	11	1
04.04.2011 10:57:41	AXL DO 16/3-ME	12	0
04.04.2011 10:57:41	AXL DO 16/3-ME	13	0
04.04.2011 10:57:41	AXL DO 16/3-ME	14	0
04.04.2011 10:57:41	AXL DO 16/3-ME	15	1
04.04.2011 10:57:41	AXL DO 16/3-ME	16	0

Figure 4-17 Logged process data

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5 Functions on the bus coupler

Additional functions are available on the bus coupler.

5.1 Device list

- Open the “Functions, Device List” menu item from the context menu (right mouse button) for the bus coupler.

The connected modules are displayed.

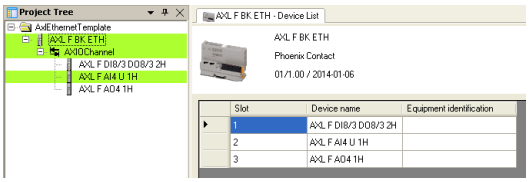

Figure 5-1 Device list

5.2 Parameter view

- Open the “Functions, Parameter View” menu item from the context menu (right mouse button) for the bus coupler.

In the parameter view, the “Parameter View”, “Firmware Update” and “Configuration File” tabs are available.

Figure 5-2 Parameter view

5.2.1 Parameter view

Information on the bus coupler is provided under the “Parameter View” tab.

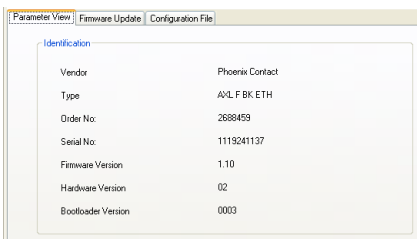

Figure 5-3 Parameter view - bus coupler identification

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5.2.2 Firmware update

A firmware update is only possible via USB.
If you wish to update the firmware, connect your PC and the bus coupler via a USB cable.

Using Startup+ you can update the firmware on the bus coupler.

You can find new firmware for your bus coupler on the Internet in the download area for the bus coupler at phoenixcontact.net/products, if available.

Save the update file to your PC.

In general, the file name is cxxxxxxxx.fw (xxxxxxxx = order number). For the AXL BK ETH bus coupler, this means c2688495.fw.

- Switch to the “Firmware Update” tab.
- Select the update file.
- Click “Update”.
- Follow the instructions.

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5.2.3 AXL BK ETH configuration file

Using Startup+ you can create a SVC file for the AXL BK ETH startup parameterization for the connected configuration.

- Switch to the “Configuration File” tab.
- Select the path where you wish to save the file using the file selection icon and assign the file name *config.svc*.
- Close the window with “Save”. The file name will then be displayed in the corresponding field.
- Click the “Create” button for the creation of the CSV file.
  You receive the “The configuration file was created in the defined directory.” confirmation message.

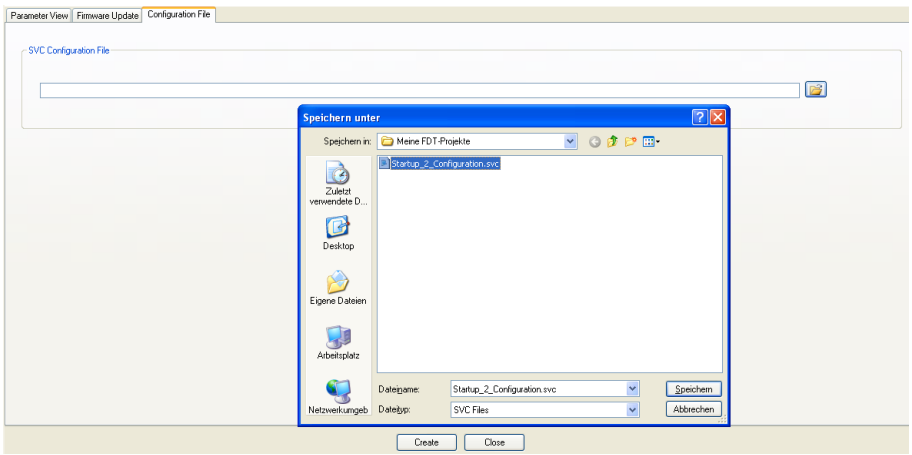

Figure 5-4 Parameter view

The CSV file is saved on your PC.

The CSV file can be saved on the bus coupler. The startup parameterization of the connected modules is saved in this way. To do this, proceed as follows:

- Open the FTP area for the bus coupler.
- If required, rename the *config.svc* file existing on the bus coupler (e.g., to *config_old.svc*) or save it on your PC.
- Copy the created *config.svc* file and paste it onto the bus coupler. Overwrite the *config.svc* file that is already available on the bus coupler if it should not be saved.

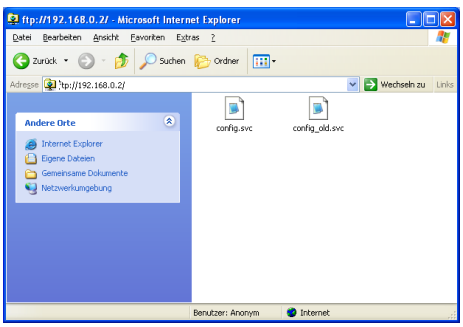

Figure 5-5 FTP area of the bus coupler

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When starting up the bus coupler with the connected configuration, the stored parameterization will be transferred to the modules.

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6 Special features of individual bus couplers/controllers

6.1 Bus couplers for Ethernet (AXL F BK ETH..., AXL F BK SAS)

In order to operate a bus coupler for Ethernet using Startup+, the connected local bus must be known on the bus coupler. In addition, the bus coupler requires a fixed IP address.

To meet these requirements, proceed as follows:

Prerequisite: The station must be created and supplied with power.

In the bus coupler delivery state, the plug and play mode is activated (yellow PP LED is on).

After modifying the switch position, restart the bus coupler, as the modification to the switch position does not take effect during operation.
To do this, perform a voltage reset or press the reset button.

• If the bus coupler is not in plug and play mode, activate this mode. In plug and play mode, the bus coupler reads in the connected I/O modules and stores the configuration in the bus coupler.	Switch position 1A
• Deactivate the plug and play mode to change to normal mode.	Switch position 1B
• Assign a fixed IP address to the bus coupler (e.g., IP address 192.168.0.x using a rotary coding switch)	Switch position 01...50

You can now operate the bus coupler using Startup+.

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6.2 Bus couplers for PROFINET (AXL F BK PN...)

By default, the bus coupler has no preset device name and IP parameters.

In this case, select “Find device in network. Assign an IP address and device name.” in step 4 of 5. Assign the IP address and the name.

6.3 Bus couplers for PROFIBUS (AXL F BK PB)

Connect this bus coupler to the PC via a USB connection.

6.4 Bus couplers for EtherCAT® (AXL F BK EC)

Connect this bus coupler to the PC via a USB connection.

6.5 Bus couplers for Sercos (AXL F BK S3)

By default, the IP address 192.168.0.10 and the subnet mask 255.255.255.0 are preset on the bus coupler.

Make sure that your PC has suitable IP settings. If this is the case, you do not have to make any further settings.

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6.6 Controllers (AXC 1050...)

By default, the controller has no preset IP address.

- Follow steps 1 to 4 of the Axioline assistant as described in Section 3.
- If a valid configuration frame has not yet been saved on the controller, exit the assistant by clicking “Cancel” at the beginning of step 5 of 5.
- Establish a connection to the controller.
- You can open the diagnostics feature on the controller by double-clicking on the AXC 1050 entry, via the “Diagnosis” menu item from the context menu (right mouse button) or the command line using the icon.
- In the “User” area, enter “Administrator” in the name field and confirm with “Login”.

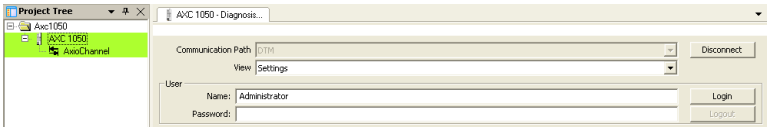

Figure 6-1 Diagnostics: Login

- After you have successfully logged in, switch to the “Axioline Diagnostic” view.

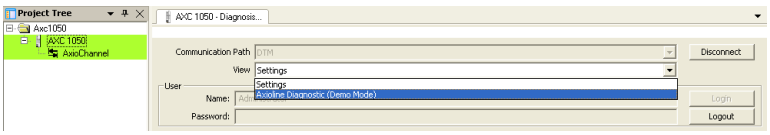

Figure 6-2 View: Axioline Diagnostic

- Select the “Create configuration” command from the context menu (right mouse button) for the controller.

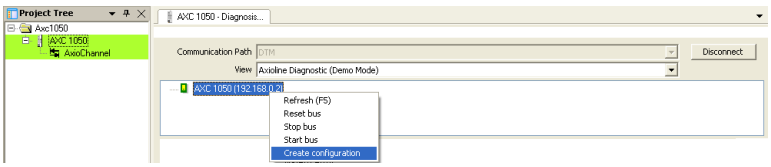

Figure 6-3 Create configuration frame

If a configuration frame has already been saved on the controller that does not correspond to the connected bus configuration, first select “Reset bus” and then “Create configuration”.

- The configuration frame will be created and saved on the controller.

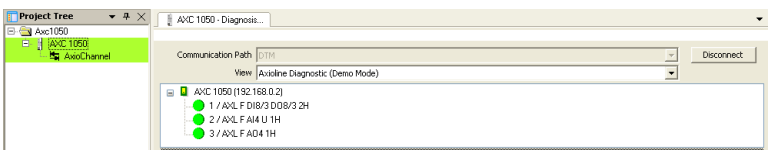

Figure 6-4 Configuration frame

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- In the diagnostics window, disconnect the controller by clicking on the “Disconnect” button.
- Close the window.
- In the project tree, select the “Scan Topology...” command from the context menu (right mouse button) for the “AxioChannel” entry.

This opens step 5 of 5 in the Axioline assistant, see Section “Step 5 of 5: Determining the connected bus” on page 20.

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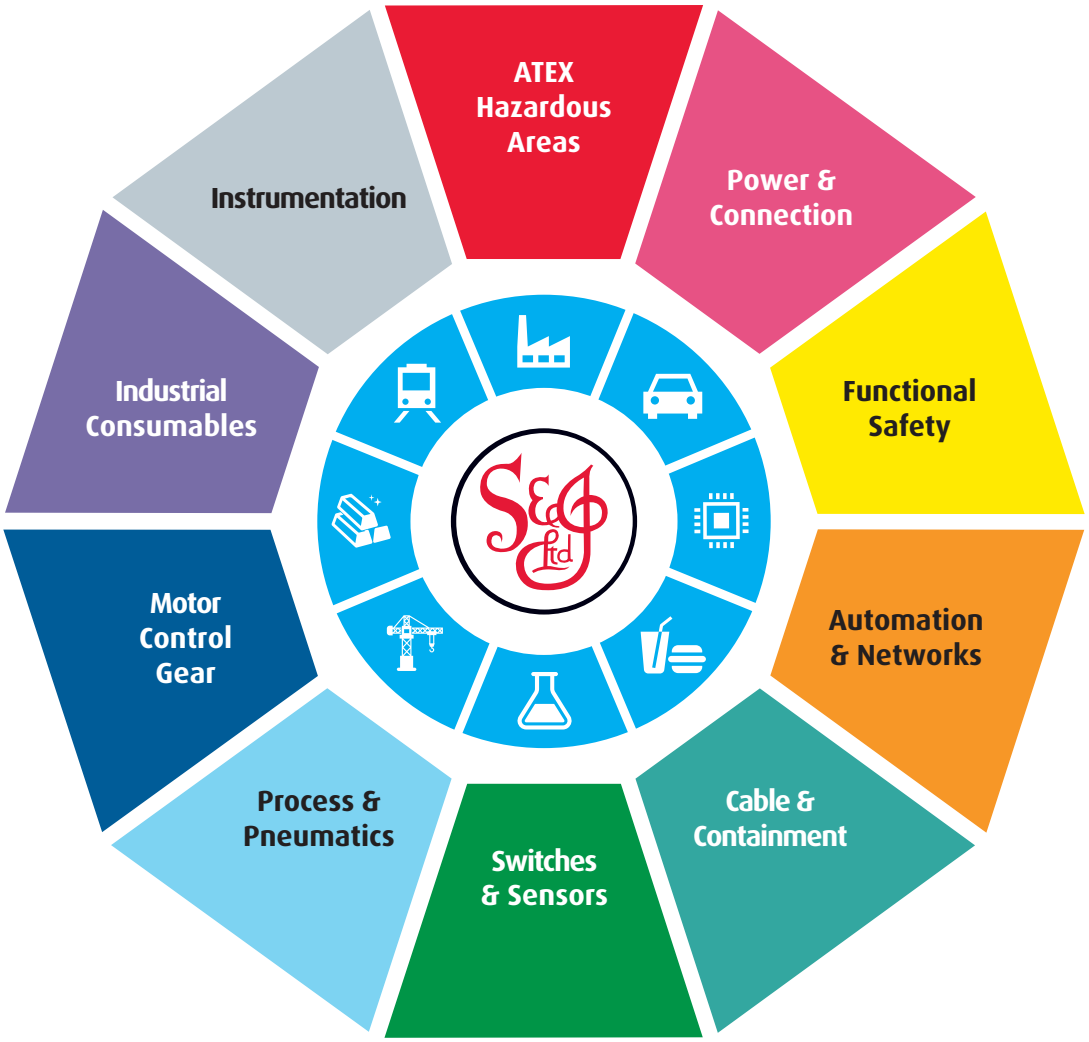

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