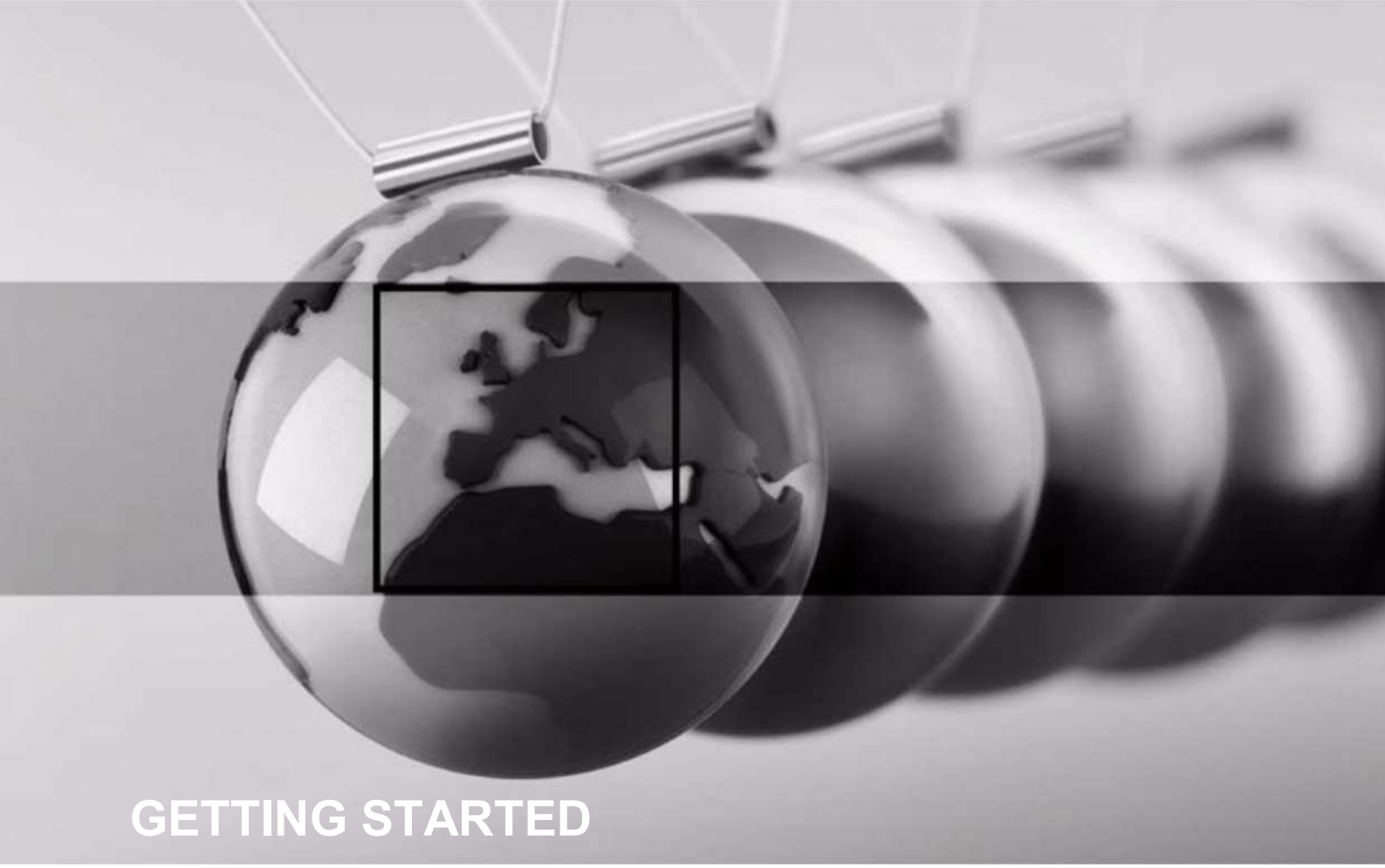


GETTING STARTED

Connecting Remote I/O Stations with Com Unit

LB/FB8X09* / LB/FB8X05*

to Siemens PLC (S7-300) via PROFIBUS

Contents

1. Introduction

This document is intended as an aid for commissioning an LB or FB remote I/O station with **Unicom com unit LB/FB8X09 (≙ LB8109 or FB8209)** or type **LB/FB8X05 (≙ LB8105 or FB8205) com units** that are to be connected to a Siemens PLC via PROFIBUS DP.

Comprehensive documentation can be found in your com unit manual.

Com unit LB/FB8X06 can only be operated with the GSD file. It will not be described further here. Commissioning instructions can be found at http://www.pepperl-fuchs.de/germany/de/classid_259.htm

2. Preparing for Configuration

To enable the smooth integration of the LB/FB remote I/O system, the following preparatory work must first be completed (section 2.1-2.3).

2.1. Downloading the GSD Files

Visit www.pepperl-fuchs.com to download the required GSD files for LB/FB systems. Enter the com unit being used (**LB8109, FB8209, LB8105, or FB8205**) into the search field on the right-hand side of the website and start the search (see Fig. 1).

Figure 1: Searching for GSD files by entering the com unit

Now select the listed com unit. Selecting the "Software" button takes you to the part of the page where the GSD files can be downloaded.

The GSD files for corresponding com units from the LB and FB systems are identical. It is therefore irrelevant whether the GSD files are downloaded from the LB8109 or FB8209 web page.
Unzip the file in a directory of your choice. The "Master Parameterization" section can be accessed in the unzipped .gsd file.

Figure 2: Selecting the software section for com units being used and downloading the GSD file

2.2. Installing PACTware and Microsoft .NET

The **PACTware** FDT container is required for **Unicom com units (LB/FB8X09) and type LB/FB8X05 com units**. The PACTware installation file can be downloaded from www.pepperl-fuchs.com. Search for the term "pactware" using the search field according to the procedure described in chapter 2.1. The current version can then be downloaded by clicking on the green "Download" button (see Fig. 4).

Figure 3: Downloading PACTware

The installation is performed by running the downloaded .exe file.

If a prompt to install the **"Microsoft .NET Framework"** appears during the installation routine, the installer for this can be found by entering "microsoft .net" into the search field at www.pepperl-fuchs.com. This can then be installed once the download has finished (see Fig. 5).

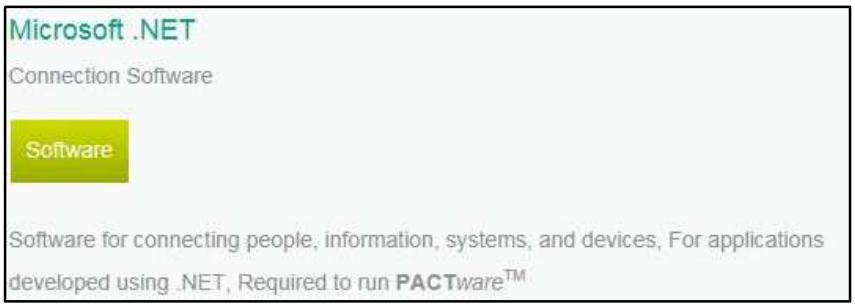


Figure 4: Downloading Microsoft .Net

2.3. Installing the Device Drivers (DTM Collection)

In addition to the PACTware FDT container, LB/FB 8X09 / LB/FB8X05 Com Units require the correct device drivers (DTM). Visit www.pepperl-fuchs.com again and enter the term "dtm lb/fb" in the search field. The DTM Collection can be downloaded by clicking the green "Download" button (see Fig. 6).

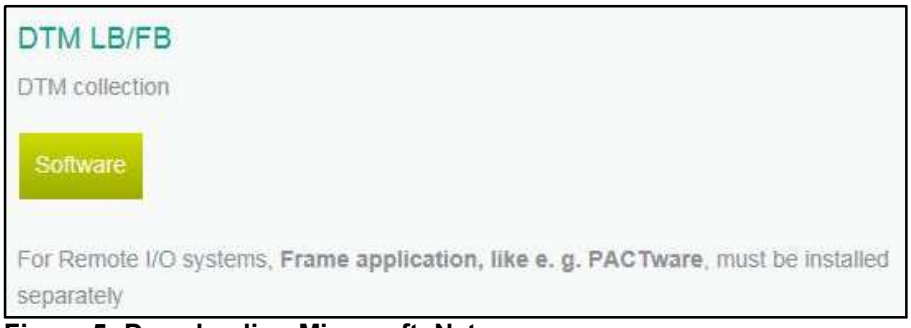


Figure 5: Downloading Microsoft .Net

Once the download is complete, run the application and follow the installation instructions.
If an older version of the DTM is already installed on your computer, select the option "Remove" when prompted during the installation routine and then install the DTM Collection again (see Fig. 7).

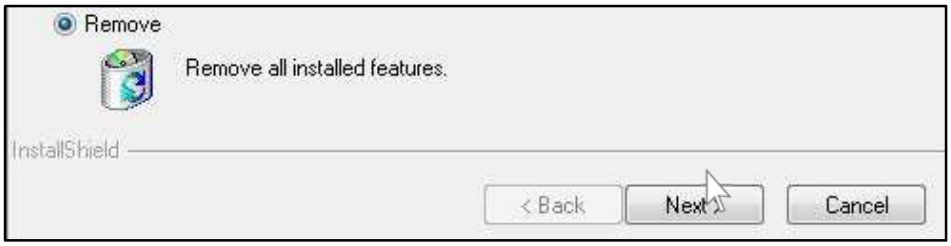


Figure 6: Removing an older version of the DTM prior to installing the new version

Once you have reached the point at which you can select the elements to be installed, select all elements (by checking the appropriate box for each of the elements) and then continue with the installation.

3. Configuration of the PROFIBUS Master

The following sections will describe the parameterization of the PLC, which acts as the master in the current system configuration. The procedure described relates to the use of a Siemens SIMATIC S7-300.
For master parameterization, a connection must be established between the PC and the PLC This can be done using a SIMATIC PC adapter (MPI-USB adapter) (see Fig. 7).

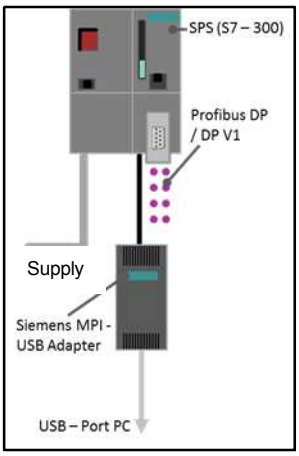
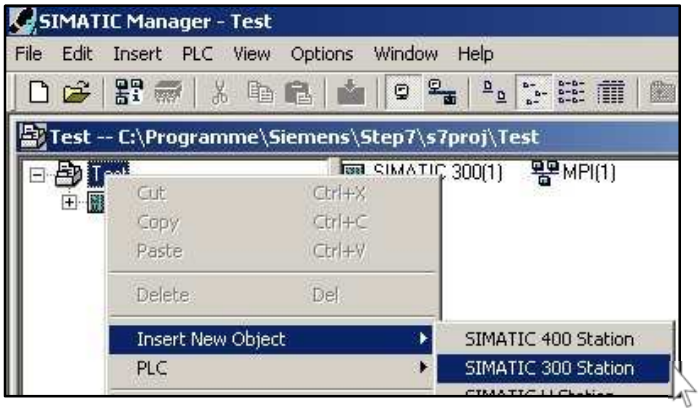


Figure 7: MPI-USB adapter

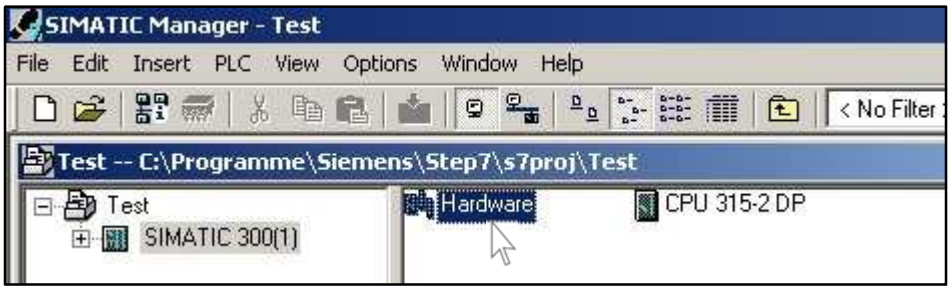
The Simatic Manager is required to perform the following actions.

3.1. Preparing the Simatic Manager

1. Start the Simatic Manager.
2. In the Simatic Manager, open the project in which the remote I/O station is to be added.
3. If not already available, add a SIMATIC 300 station (due to the use of the SIMATIC **S7-300**):



4. Open the **HW Config** by double-clicking on **"Hardware":**

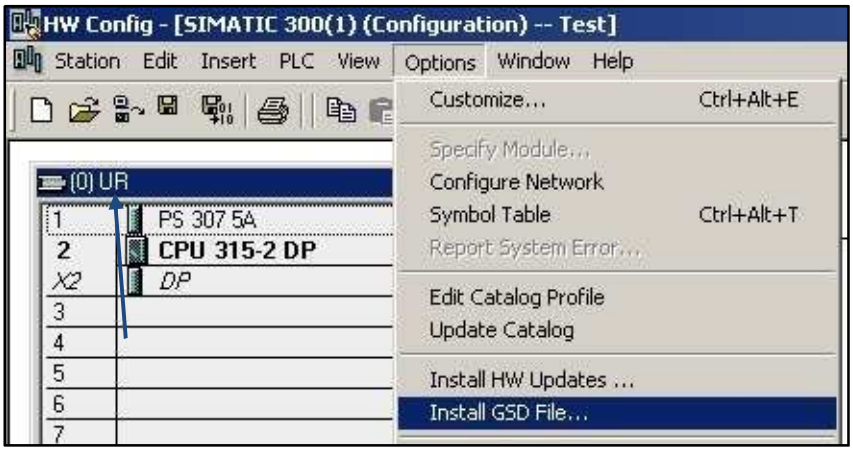


5. In the HW Config, create your control system with the corresponding CPU and a PROFIBUS connection.

3.2. Installing GSD Files

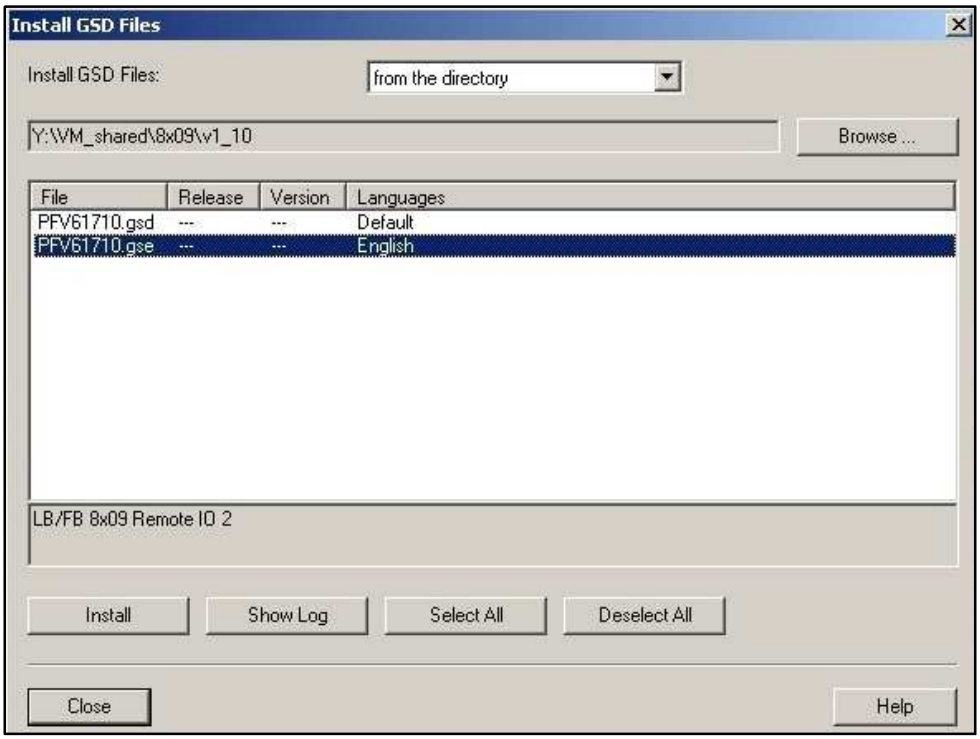
Before starting the installation, close the configuration window of the project within the HW Config (see arrow in the graphic below).

1. To install the GSD files, select **Options** → **Install GSD Files** in HW Config:



Close before starting the installation

2. Select the **"Browse"** button to navigate to the directory in which the files were saved previously (see section 2). Select the .gsd file and start the installation by selecting **"Install":**

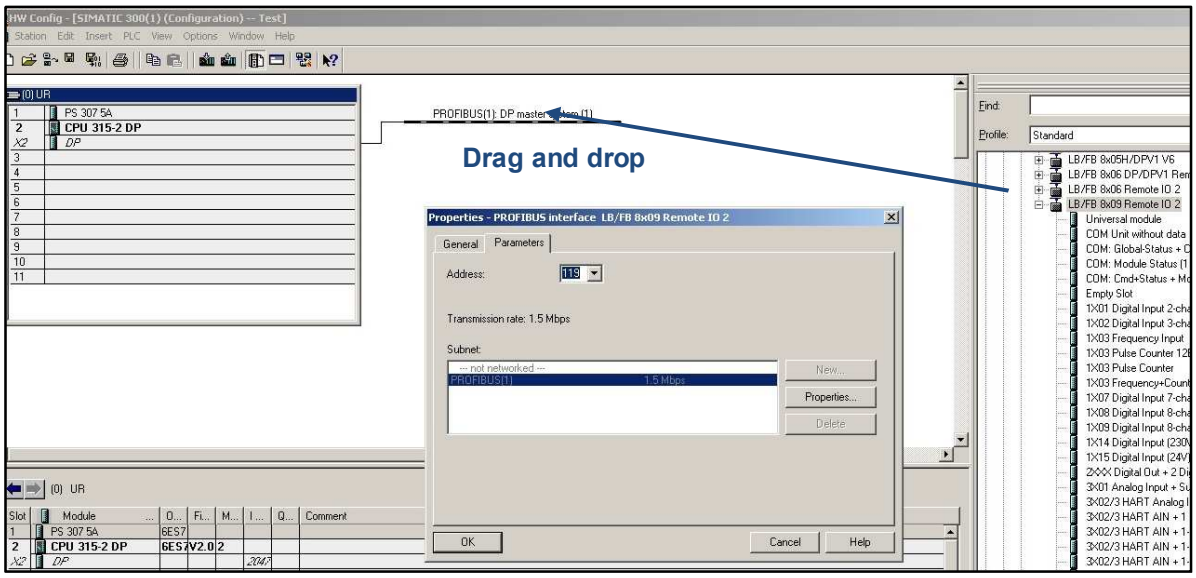


3. Then update the device catalog.

Once the GSD files have been installed, this step can be skipped for future projects.

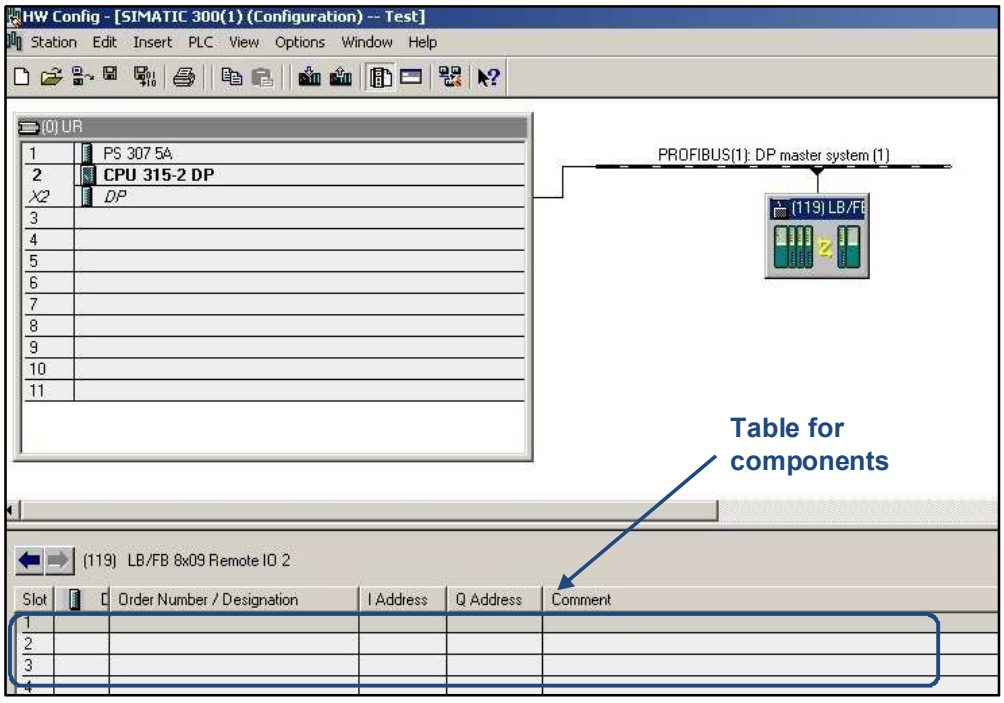
3.3. Configuring the Remote I/O Station

1. In the HW Config, add **your com unit to your project by dragging and dropping it on to the PROFIBUS line**. This is located on the right in the folder structure under **PROFIBUS-DP → Additional FIELD DEVICES → I/O → "LB/FB 8X05H/DPV1 V6"** for **com units LB8105** and **FB8205 or "LB/FB 8X09 Remote I/O 2"** for **com units LB8109** and **FB8209.** Now enter the desired **PROFIBUS address** and confirm this window and the following window with **OK**:

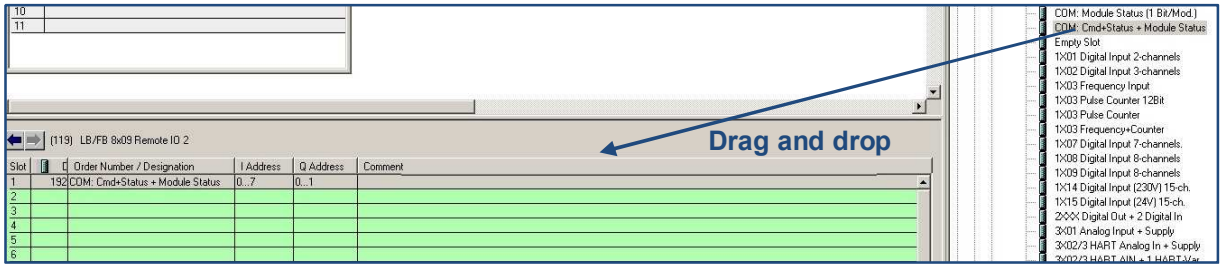


This creates an empty station with the corresponding PROFIBUS address. The modules are now added as follows:

2. Click on the com unit to select it. You will now see a table for the various components of the I/O station underneath the graphic representation of your project:



3. Add the modules located on your remote I/O station to the table using the drag and drop function. The modules can be found on the right-hand side in the folder structure below your com unit. Enter the desired address range for the inserted modules and then confirm with **OK**:



The examples on **pages 11 and 12 illustrate** the arrangement of the modules.

The following rules must be observed when adding modules:

a) For the com unit, it is recommended that the "**COM: Command + Status+ Module Status**" module is added in slot 1. **Note the overview "Various Com Unit Configurations" on page 10**.

b) Add empty slots ("Empty slot" module):
   - In the case of **redundant LB backplanes**, exactly two empty slots must be added after the com unit (both when the redundancy is used and not used).
   - For **double-width modules**, an empty slot must be added after the module itself.
     Exception: No empty slot is added if the last module in the configuration is a double-width module
   - An empty slot is added for each **unoccupied slot** on the backplane.

c) **No more empty slots** are added **after the last added module**. You can continue with the **"Loading Hardware Data onto the CPU"** section.

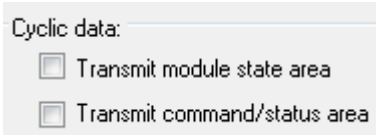
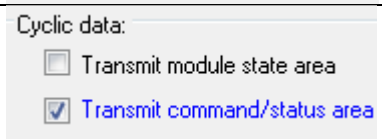
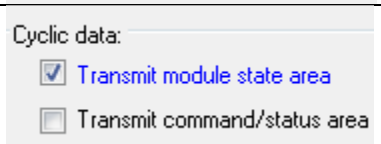
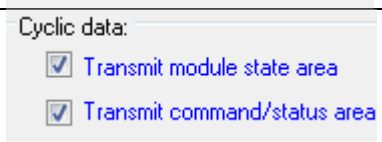
d) **Power supplies** are **not added**. No empty slot is added.

e) **For the FB system: Termination modules** are **not added**. No empty slot is added.

f) In the case of **LB/FB3X02** and **LB/FB3X03** modules, the **"3X02/3 HART isolation amplifier"** module is usually added.
   In the case of the **LB/FB1X03** module, a decision must be made, depending on the present application, as to which of the four modules available in the Simatic Manager is added.

Various Com Unit Configurations

There are various com unit configurations in the Simatic Manager. The selected configuration must correspond with the settings of the cyclic data traffic of the com unit in PACTware. Depending on which com unit configuration has been selected in the Simatic Manager, the appropriate box must be checked in PACTware (see table below):

Simatic Manager	PACTware (cyclic data traffic)
Com unit without data:  COM Unit without data	
COM: Global Status + Command Register:  COM: Global-Status + Command Reg	
COM: Module Status Register:  COM: Module Status (1 Bit/Mod.)	
COM: Command + Status + Module Status:  COM: Cmd+Status + Module Status	

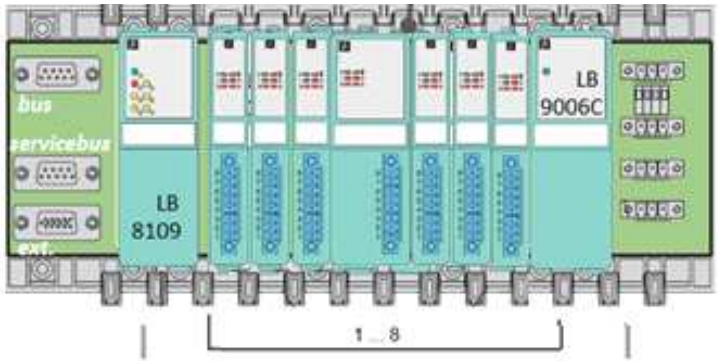
Special Considerations in the Case of Redundancy

In the case of line redundancy
Configuration is performed in the same way as when the redundancy is not used.
Your com unit is added, followed by two empty slots due to the redundant LB backplane (e.g., LB 9022).
The configuration of the I/O modules follows the two empty slots.
No second com unit is added to the configuration list, although it is physically plugged into the backplane.
In the case of line redundancy, no additional configuration is necessary. The line redundant slave is not configured from the master view.

In the case of application redundancy (two masters)
Configuration is performed in the same way as when the redundancy is not used.
Your com unit is added, followed by two empty slots due to the redundant LB backplane (e.g., LB 9022).
The configuration of the I/O modules follows the two empty slots.
No second com unit is added to the configuration list, although it is physically plugged into the backplane.
Another station with the same configuration is then created on your redundant PROFIBUS line.
You can copy the created station and add it to your redundant PROFIBUS line.

An **example of a configuration of an LB backplane populated with non-redundant modules** can be found in the image below.

Example LB station: Basis station with modules



Bus coupler E/A modules Power supply

(119) LB/FB 8x09 Remote IO 2

Slot	D	Order Number / Designation	I Address	Q Address	Comment
1	192	COM: Cmd+Status + Module Status	0...7	0...1	
2	1AI	3X02/3 HART Analog In + Supply	8...9		
3	16D	1X09 Digital Input 8-channels	10...11		
4	192	4X06 HART Analog Output 4Ch	12...13	2...9	
5	16D	6X08 Digital Output 8-channels	14...15	10...11	
6	0	Empty Slot			
7	115	7x04 4-channel UIO	16...23	12...19	
8	1AI	5X01 RTD/Pt100-Transmitter	24...25		
9	8D0	6X01 Relay Output 2-channels		20	

Example of a non-redundant LB remote I/O station in HW Config

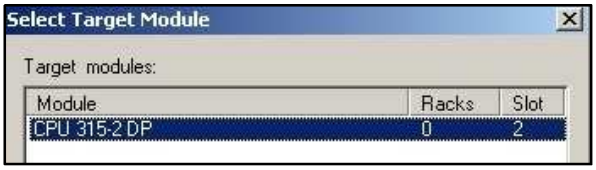
3.4. Loading Hardware Data onto the CPU

Once the appropriate modules have been added to the remote I/O station in the Simatic Manager, data can be loaded onto the CPU of the PLC.

1. Save and compile your project:

2. Load the data onto the CPU of the PLC:

3. Confirm with **OK** and then always click **Yes/OK** so that the PLC restarts and adopts the changes:



4. Configuration of the PROFIBUS Slave

Unicom com units (LB/FB 8X09) and type LB/FB8X05 com units must be parameterized via **PACTware**. Before carrying out the following instructions, ensure that PACTware and the DTM Collection have been installed correctly (see section 2). The following description relates to PACTware version 4.1.

Two different ways to configure the remote I/O station are described below:

- **Via PROFIBUS** using a **PROFIBUS class 2 master (e.g., Softing PROFIusb)**
- **Via the service bus interface** using a **USB-RS485 converter (e.g., ICPCON i-7561)** with a suitable cable set (for LB item no. 541037, for FB item no. 541038)

  Preferably, the configuration should be performed using a PROFIBUS class 2 master, as this offers a high transfer rate.

Depending on which of the two options is chosen, **continue with the corresponding section:**

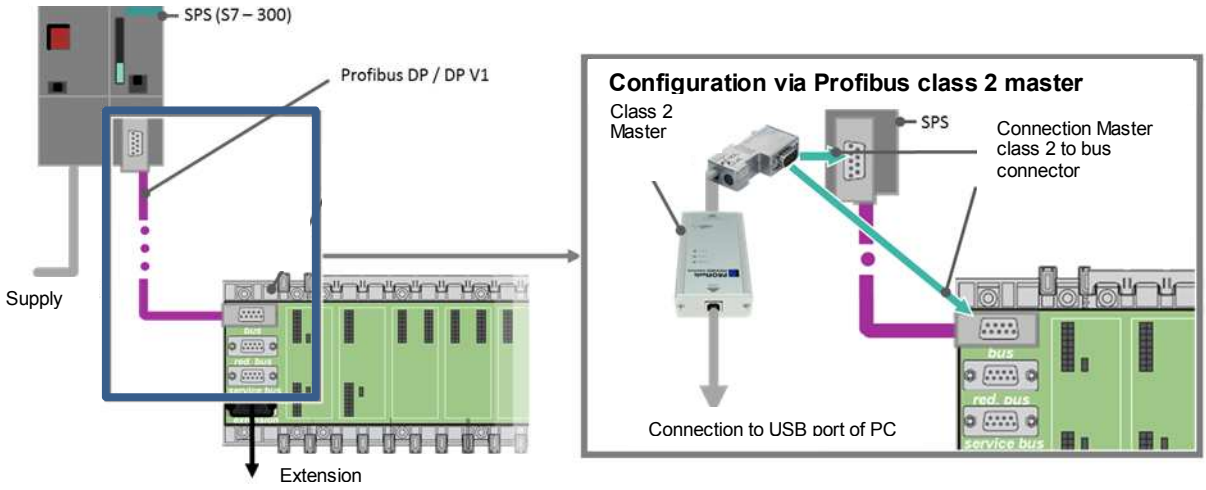
▶ Via **PROFIBUS** using a **PROFIBUS class 2 master:** **Section 4.1**

▶ Via the **service bus interface** using a **USB-RS485 converter:** **Section 4.2**

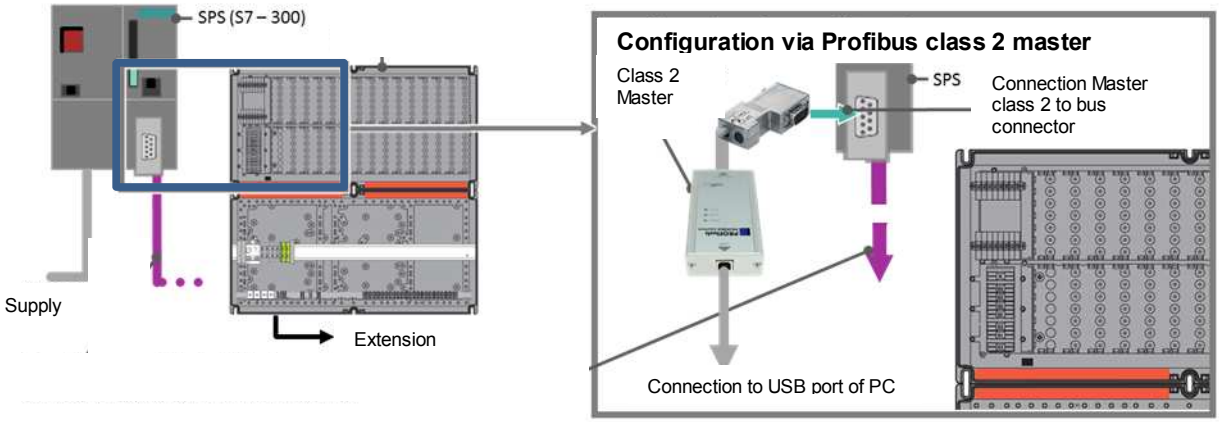
4.1. Configuration via PROFIBUS Using a PROFIBUS Class 2 Master

The following section describes the **connection of the PROFIBUS class 2 master** (e.g., Softing PROFIusb). Note whether your remote I/O station is an LB or FB system:

LB System: Connection Remote I/O System to Siemens SPS via PROFIBUS



FB System: Connection Remote I/O System to Siemens SPS via PROFIBUS



Connect your PC directly to the bus line via the class 2 master (either to the backplane [in the case of an LB system only]—here the interface is marked with X4—or to the PLC).
The class 2 master that is used requires the appropriate driver software. This is usually installed automatically after the class 2 master is connected. In the case of the Softing PROFIusb, this is included in the delivery. If necessary, the driver can be subsequently obtained from the Download Center:

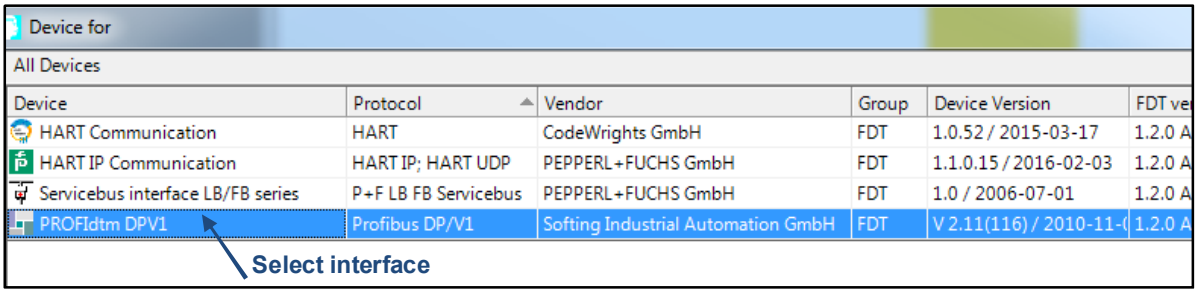
http://industrial.softing.com/en/downloads.html

Once the appropriate driver has been installed and the selected component has been connected, the parameterization of the remote I/O station using PACTware can be continued.

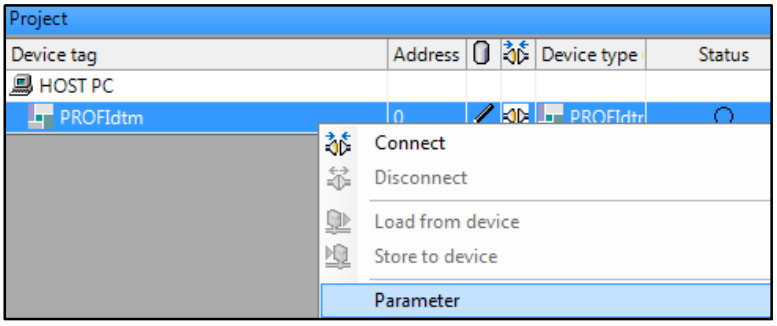
4.1.1. Adding an Interface

1. **Start PACTware** and update the device catalog via F3 → U**pdate Device Catalog**. The device catalog may only be updated after the DTM has been installed.
2. on HOST PC to add another device:

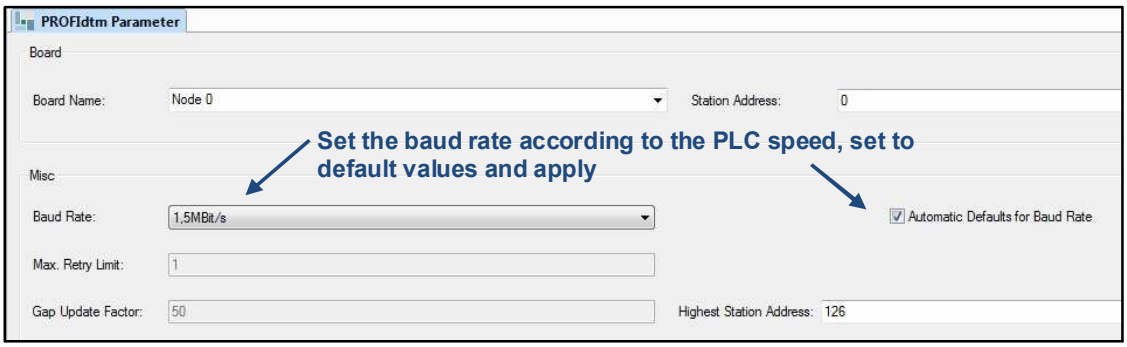
3. Select the PROFIBUS communication interface:



4. on your **interface** to parameterize it:

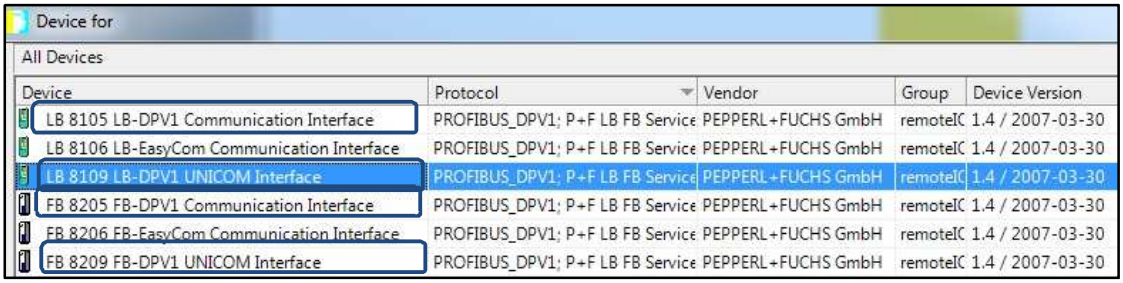


5. Adjust the baud rate to the speed of your PLC:

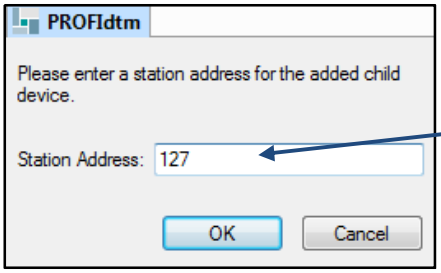


4.1.2. Add a Com Unit

1. on **Interface** → **Disconnect** to ensure that the connection to the previously added interface is disconnected.
2. on the Interface and select Add device to add the com unit being used:



3. When prompted, enter the "Station Address". This is the **PROFIBUS address of the com unit. This must match the specification in the PLC**. The PROFIBUS address of the com unit is preconfigured to 126 for delivery.



In this case, the PROFIBUS address of the com unit was previously changed from 126 to 117. 117 must therefore also be specified in the PLC and PACTware.

(Determining/Changing PROFIBUS Address ->

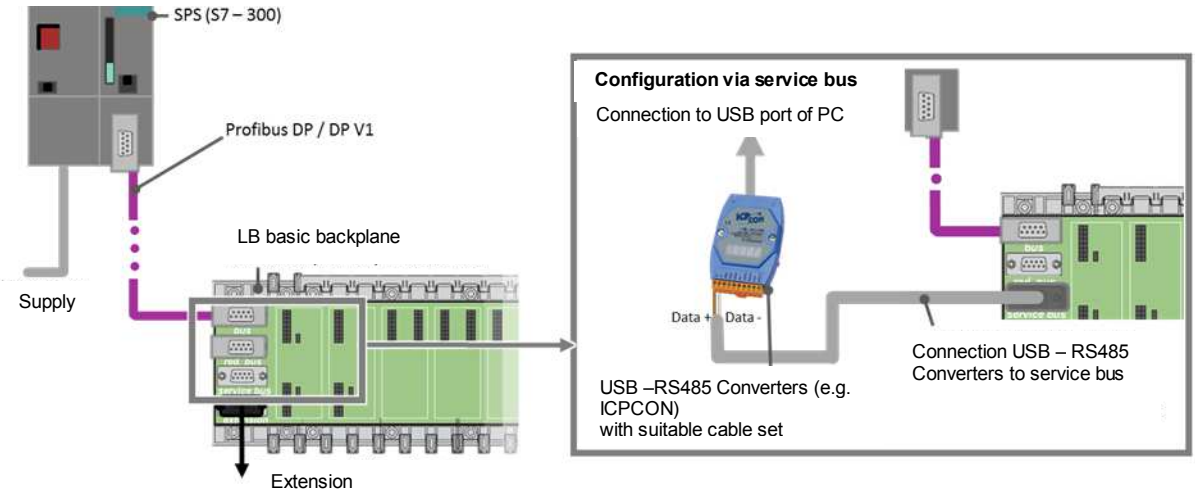
How to determine and change the PROFIBUS address of the com unit is described in the FAQs (section 6.3).

Please skip the following section and continue with section "4.3 Parameterizing Com Units".

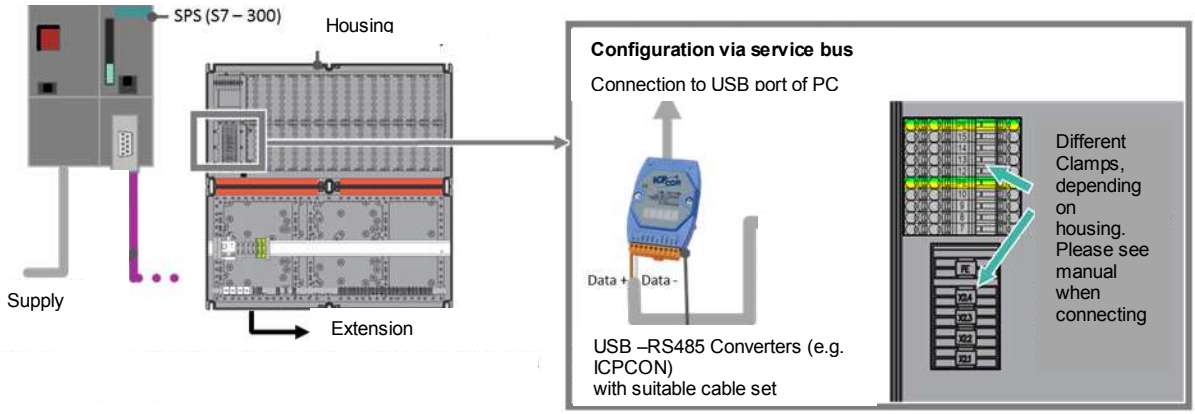
4.2. Configuration via Service Bus Using a USB-RS485 Converter

The **connection of the USB-RS485 converter** (e.g. ICPCON i-7561) is shown below. Note whether your remote I/O station is an LB or FB system:

LB System: Connection Remote I/O System to Siemens SPS via PROFIBUS



FB System: Connection Remote I/O System to Siemens SPS via PROFIBUS



Connect your PC to the service bus interface on the backplane via the USB-RS485 converter. This interface is marked with X6 on **LB** backplanes. In the case of **FB** backplanes, the cable set should be connected to the backplane using terminals X2.3 (Data -) and X2.4 (Data +) or terminals 12/13 and 7/8. When connecting, note the information from the housing guide for your FB system.
The USB-RS485 converter that is used requires the appropriate driver software. This is usually installed automatically after the USB-RS485 converter is connected. For the ICPCON I-7561, this is included in the delivery. If necessary, the driver can be subsequently obtained from http://www.icpdas.com/products/Remote_IO/i-7000/i-7561.htm.

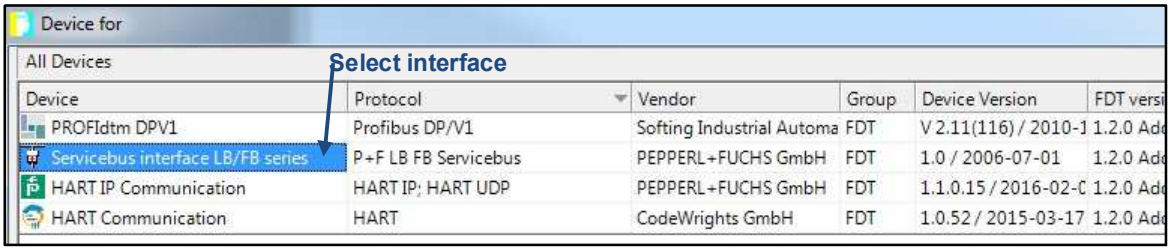
Once the appropriate driver has been installed and the selected component has been connected, the parameterization of the remote I/O station using PACTware can be continued.

4.2.1. Adding an Interface

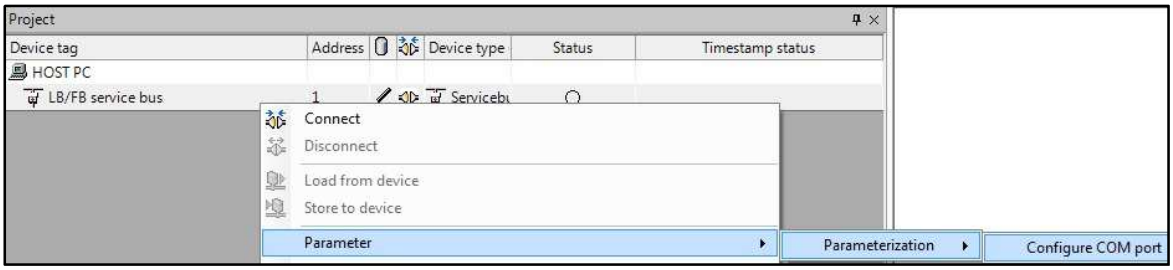
1. Start **PACTware** and update the device catalog via **F3** → **Update Device Catalog.** The device catalog may only be updated after the DTM has been installed.

   on HOST PC to add another device:

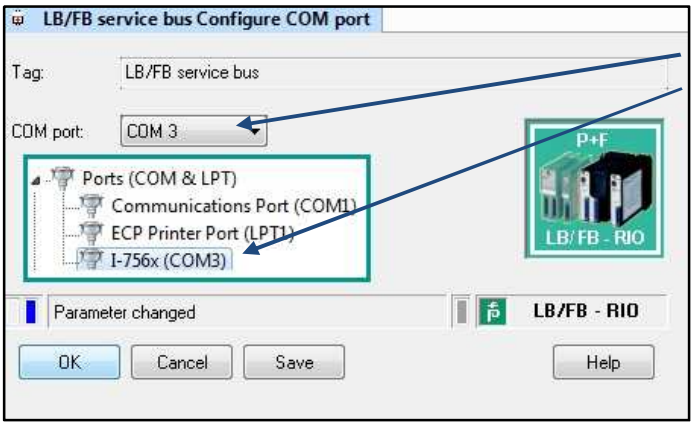
2. Select the service bus communication interface:



3. on your **LB/FB service bus** interface to parameterize it:



4. Set the correct COM port:

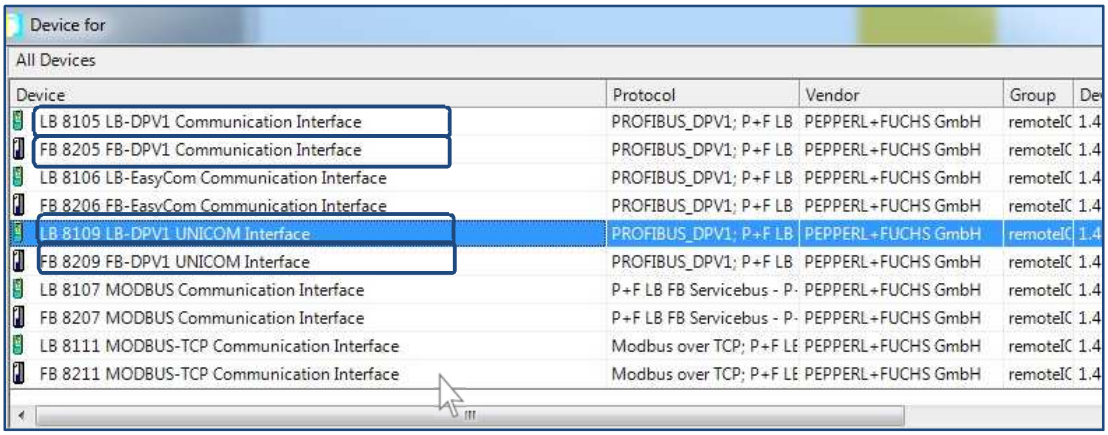


Set the COM port in accordance with the port from the "Device Manager" and click Save/OK

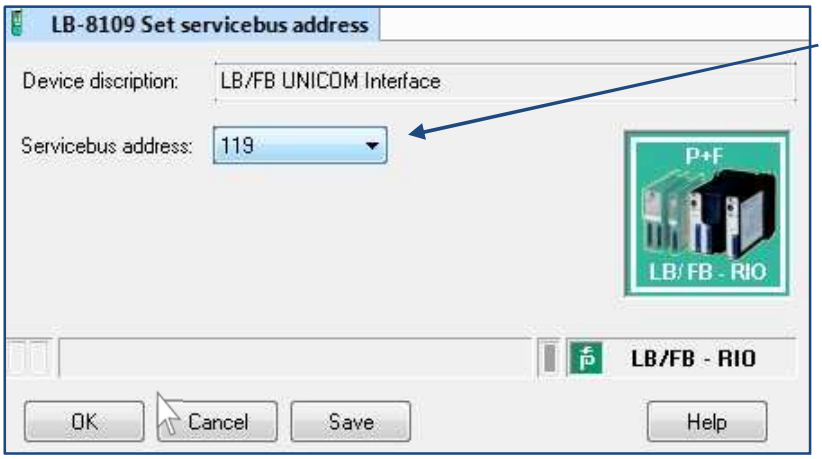
The Device Manager can be opened in Windows via **Run** → **"devmgmt.msc"** or alternatively via the control panel. Which COM port has been assigned to the USB-RS485 converter (e.g., ICPCON) can then be checked under the menu point Device **Manager**.

4.2.2. Add a Com Unit

1. on **LB/FB service bus** → **Disconnect** to ensure that the connection to the previously added interface is disconnected.
2. on the **LB/FB service bus** and select **Add device** to add the com unit being used:



3. Enter the **servicebus address** of the com unit. Upon delivery, the preset service bus address of the com unit is 1.



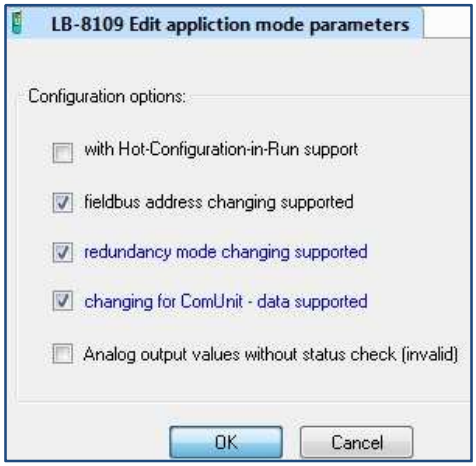
In this case, the service bus address of the com unit was previously changed from 1 to 119 and must therefore also be specified here with 119 (Determining/Changing Service Bus Address -> FAQs).

How to determine and change the service bus address of the com unit is described in the FAQs (section 6.3).

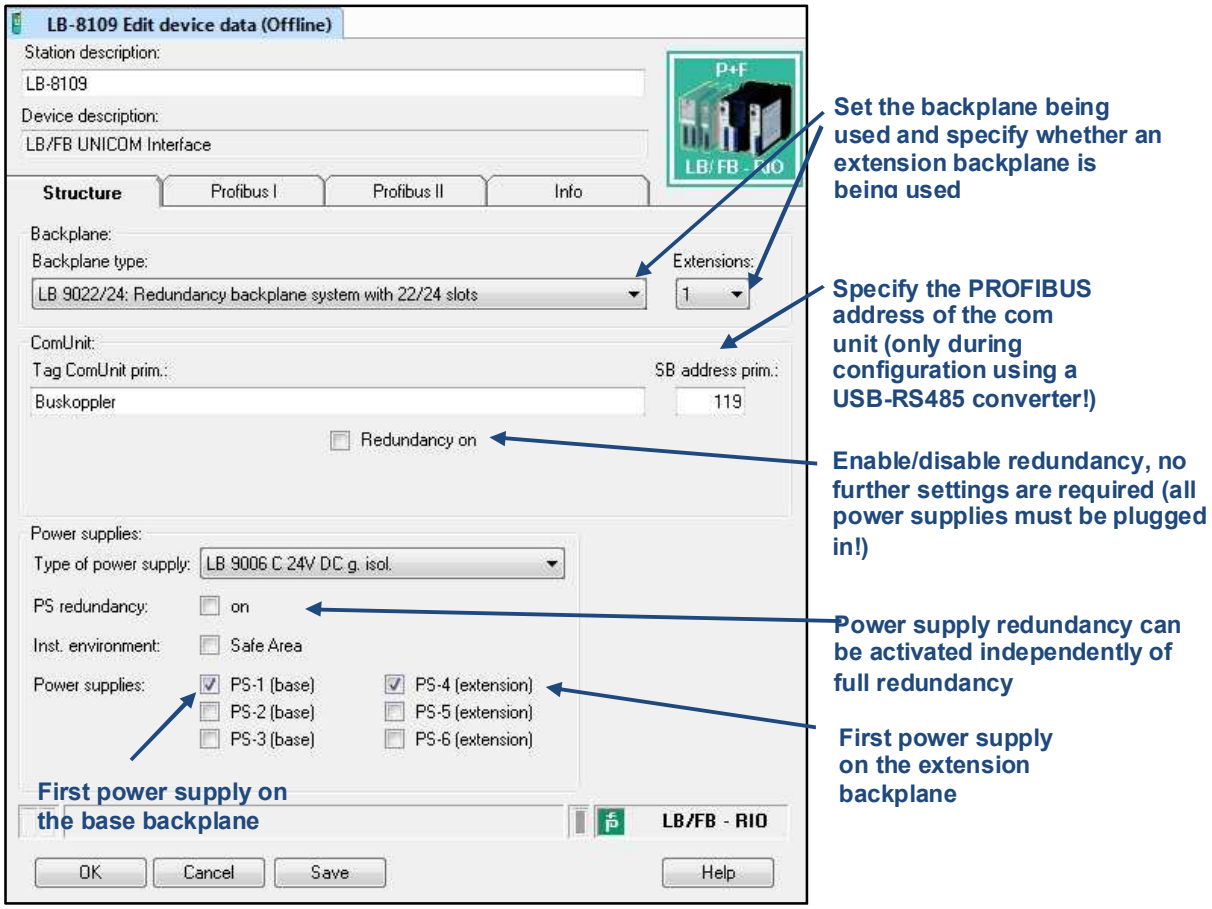
Please continue with the following section "4.3 Parameterizing Com Units".

4.3. Parameterizing Com Units

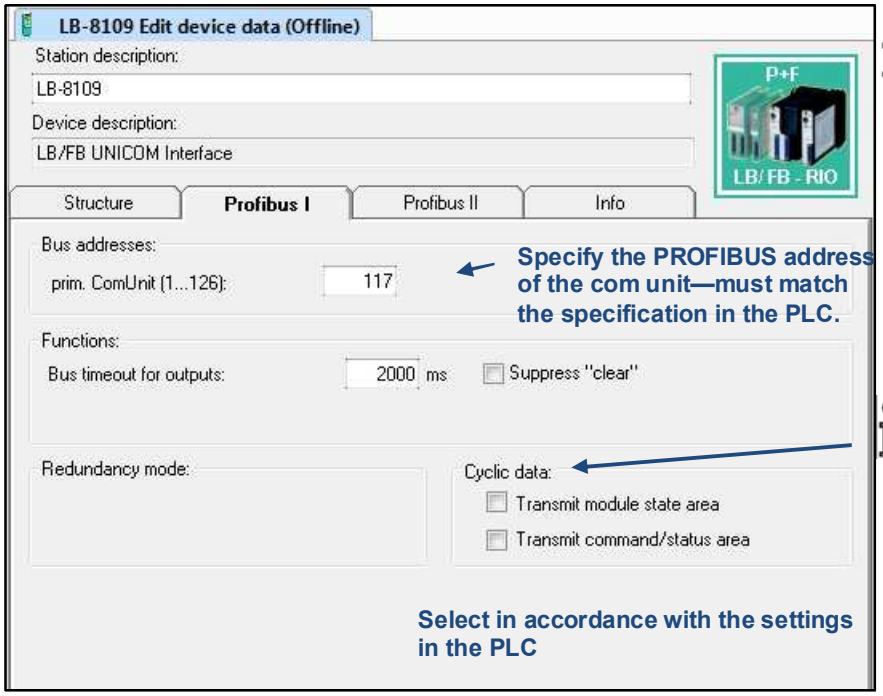
1. on the **com unit** to select **Additional Functions → Edit application mode parameters.**
   If necessary, uncheck boxes that are already checked and check the **"fieldbus address changing supported"**, **"redundancy mode changing supported"** and **"changing for COMUnit – data supported"** check boxes:



2. on the **com unit** to select **Parameter → Parameterization → Edit Device Data (Offline).**
   Set the backplane, extensions, redundancy, and power supplies being used:



Specify the PROFIBUS address of the com unit in the **PROFIBUS I** tab. In addition, the cyclic data should also be activated in accordance with the functionality of the com unit selected in the PLC:



For information on how to determine and change the PROFIBUS address, refer to the FAQs (section 6.3)

Check the boxes according to the com unit configuration in the PLC

3. on the **interface** to establish the connection:

If communication problems arise (e.g., "Unknown board name"), check whether the drivers for the class 2 master / USB-RS485 converter have been installed properly.

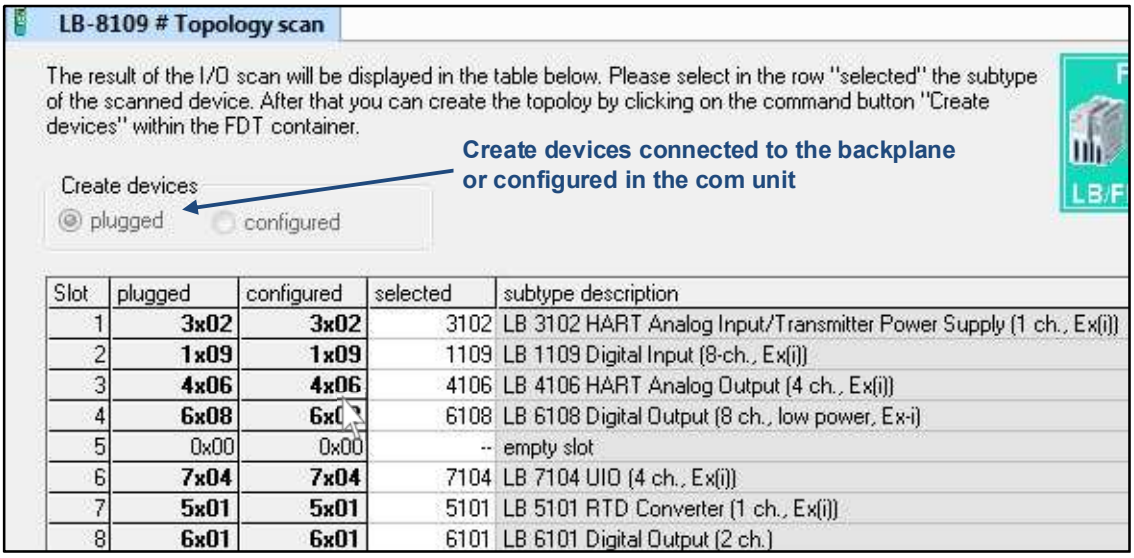
4. on the **com unit** to establish the connection to the com unit. A symbol appears next to the interface once the connection has been successfully established:

If communication problems arise (e.g., "Unknown board name"), check whether the drivers for the class 2 master / USB-RS485 converter have been installed properly.

4.4. Adding and Configuring I/O Modules

Once the **connection** to the com unit has been successfully **established**, the I/O modules of the remote I/O station can be added in PACTware.

on the **com unit** to select **Additional Functions → Topology Scan.** This function examines whether modules in the com unit are configured and what modules are plugged into the backplane. The **"plugged"** column lists the I/O modules that are actually plugged into the backplane. The last configuration loaded in the com unit is displayed in the **"Configured"** column. Finally, the desired module can be selected in the **"Selected"** column (if necessary, Ex i or Ex e). Selecting the **"Create devices"** button adds the devices to the project tree:



Slot	plugged	configured	selected	subtype description
1	**3x02**	**3x02**	3102	LB 3102 HART Analog Input/Transmitter Power Supply (1 ch., Ex(i))
2	**1x09**	**1x09**	1109	LB 1109 Digital Input (8-ch., Ex(i))
3	**4x06**	**4x06**	4106	LB 4106 HART Analog Output (4 ch., Ex(i))
4	**6x08**	**6x0**	6108	LB 6108 Digital Output (8 ch., low power, Ex-i)
5	0x00	0x00	--	empty slot
6	**7x04**	**7x04**	7104	LB 7104 UIO (4 ch., Ex(i))
7	**5x01**	**5x01**	5101	LB 5101 RTD Converter (1 ch., Ex(i))
8	**6x01**	**6x01**	6101	LB 6101 Digital Output (2 ch.)

When creating the devices, a message may appear to indicate the required **subversion of the com unit**. This can be noted without further attention.

Alternatively, I/O modules can be added manually.

To do this, select **Com unit → Add device.** The devices from the list can then be assigned to the respective slot into which they are to be inserted on your remote I/O station.

4.5. Configuring I/O Modules (PACTware)

At this point, the application-dependent parameters of the I/O modules can already be set. However, it is recommended to first continue with section 4.6. to ensure that the integration was successful.

1. on **Module → Parameter → Parametrization → Edit Device Data (Offline).**
   Various parameters can be set (e.g., line monitoring).

   Consult the com unit manual for more information.
2. Now save your changes with **Save** and **OK**.

At this point, line fault detection (LFD) should be deactivated to prevent line fault messages appearing for unoccupied channels of the I/O modules: **Com unit → Disconnect.**
Then: **Com unit → Additional Functions → LFD of All Channels OFF.** This can be reactivated at a later point in time.

3. To apply the changes, on **Com unit → Store to Device** to load the data in the com unit.

4.6. Store Data in the Com Unit

When first commissioning the remote I/O station, it is recommended that the line fault detection (LFD) is deactivated to prevent line faults from being displayed for unoccupied channels of the I/O modules. This can be activated again at a later point in time (see section 4.6). Select:

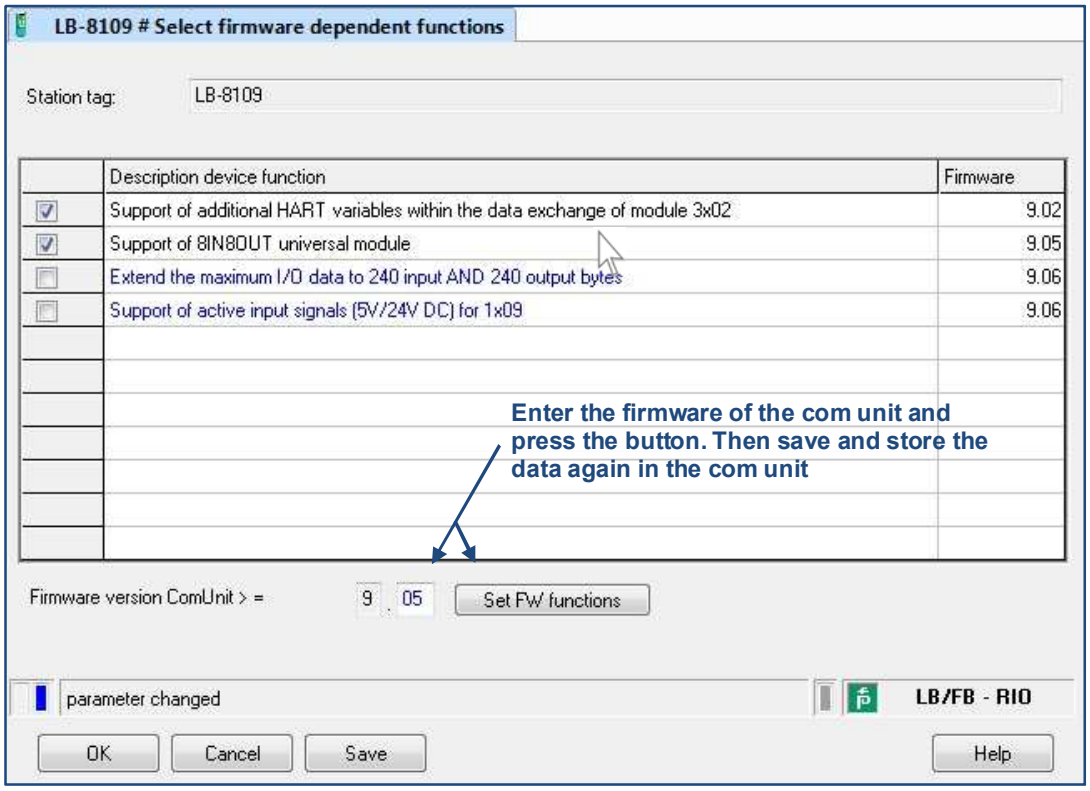
1. **Com unit → Disconnect.**
2. **Com unit → Additional functions → LFD of All Channels OFF.**

Finally, store the current configuration data in the com unit:

1. on the **com unit** to establish the connection to the com unit.
2. Select **Com unit → Store to Device:**

If a **communication error** appears at this point due to the firmware used on the com unit, then **unsupported functions** can be disabled:

Com unit → Parameter → Parameterization → Select firmware-dependent functions:



The firmware of your com unit is printed on the type plate.
E.g.,: LB8109 h*0905* ≙ Firmware 09.05
The last four digits of the type designation correspond to the firmware of the supplied com unit.

At this point the integration of the remote I/O station is complete.
If the integration was successful, then this is indicated by the fault indication LEDs on all modules of the remote I/O station and the PLC lighting up green.

In the event of a fault (red LED) section "**5.5. Why is the Configuration Faulty? —Diagnostics via PACTware/Simatic Manager"** should be consulted.

5. Troubleshooting

5.1. Why Does the Plug Icon Not Have a Green Background Even Though the Device Is Connected Properly?

The plug icon is green when data is exchanged.
As soon as you view the measured value, the plug will have a green background, provided the connection is error-free.
( **Module → Measured Value → Show Measured Value)**

5.2. Why Does the Error Message "No available space to add the module" Appear?

Check that the correct backplane has been set.
In the case of redundant LB backplanes (e.g., LB 9022), I/O modules may only be added from slot 03 onward (if the numbering begins with 0).
Slot 01 and slot 02 must be configured as empty slots.

5.3. Why Does the Error Message "Base unit overloaded" Appear?

Check the settings of the power supplies.
Additional power supplies may be required to power the I/O modules.
Alternatively, the position of the modules in the station can be changed or your system can be expanded with another station.

5.4. Why Does the Topology Scan Not Run Successfully?

Check the PROFIBUS address of the com unit and the physical connection. The topology scan is only possible when no modules are scheduled. Therefore, no more modules may be added to the module tree below the com unit in PACTware.
Also ensure the backplane is configured correctly.

5.5. Why is the Configuration Faulty? - Diagnostics via PACTware/Simatic Manager

Check your configuration for typical errors before carrying out fault diagnostics via PACTware or the Simatic Manager. Typical errors include:

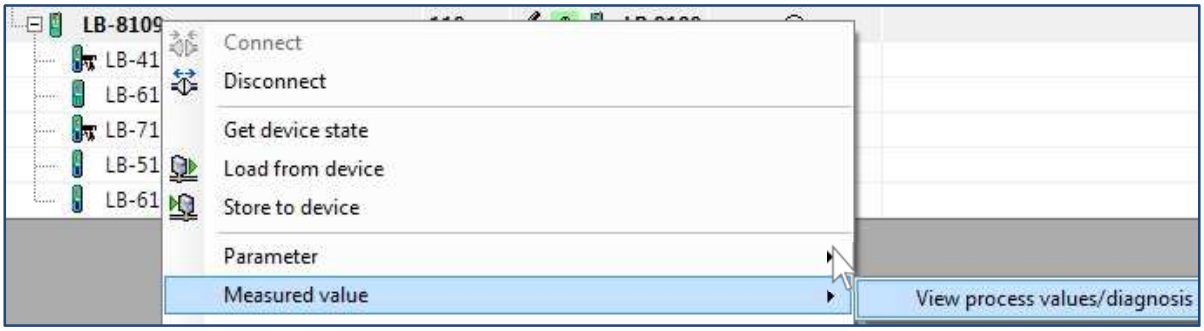
- **Modules configured in the wrong place** → Check the positioning of the modules in the table in HW Config in the Simatic Manager (see p.9 and following pages).
- **Empty slots are missing or empty slots in the wrong place** → Check whether the empty slots are set in accordance with the rules when making additions (see p.9)
- **Com unit data set incorrectly** → Check whether the com unit data is set consistently in the Simatic Manager and PACTware (see table on p.10)
- **Terminators set incorrectly** → Check whether the terminators in your bus topology are set correctly
- **PROFIBUS address set incorrectly** → Check whether the PROFIBUS address is set consistently in the Simatic Manager and PACTware
- **Physical connection faulty** → Check the physical connections in your topology

5.5.1. PACTware Diagnostics Function

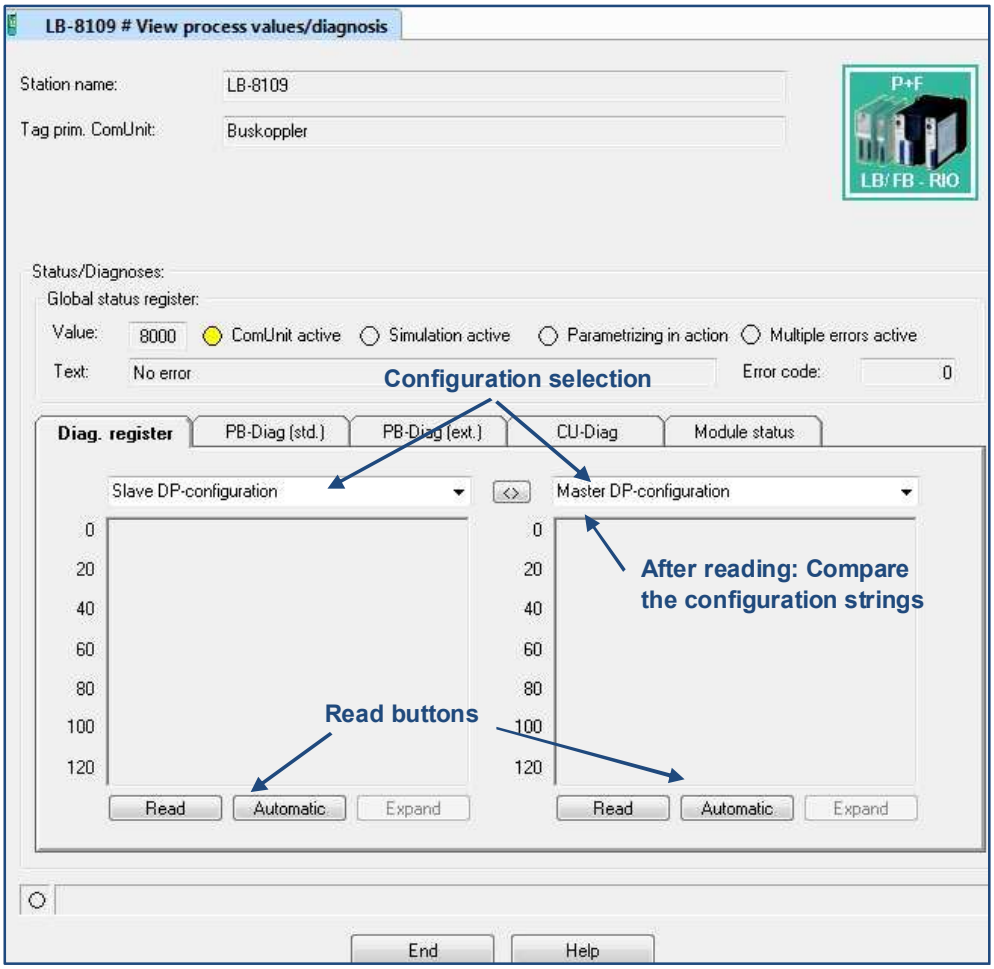
In the following, you will find explanations of how the **diagnostic functions of PACTware** can be used to check what errors can be found in your configuration.

The com unit must be connected to be able to select the correct context menu.

1. on **Com unit → Measured Value > View progress values/diagnosis**.

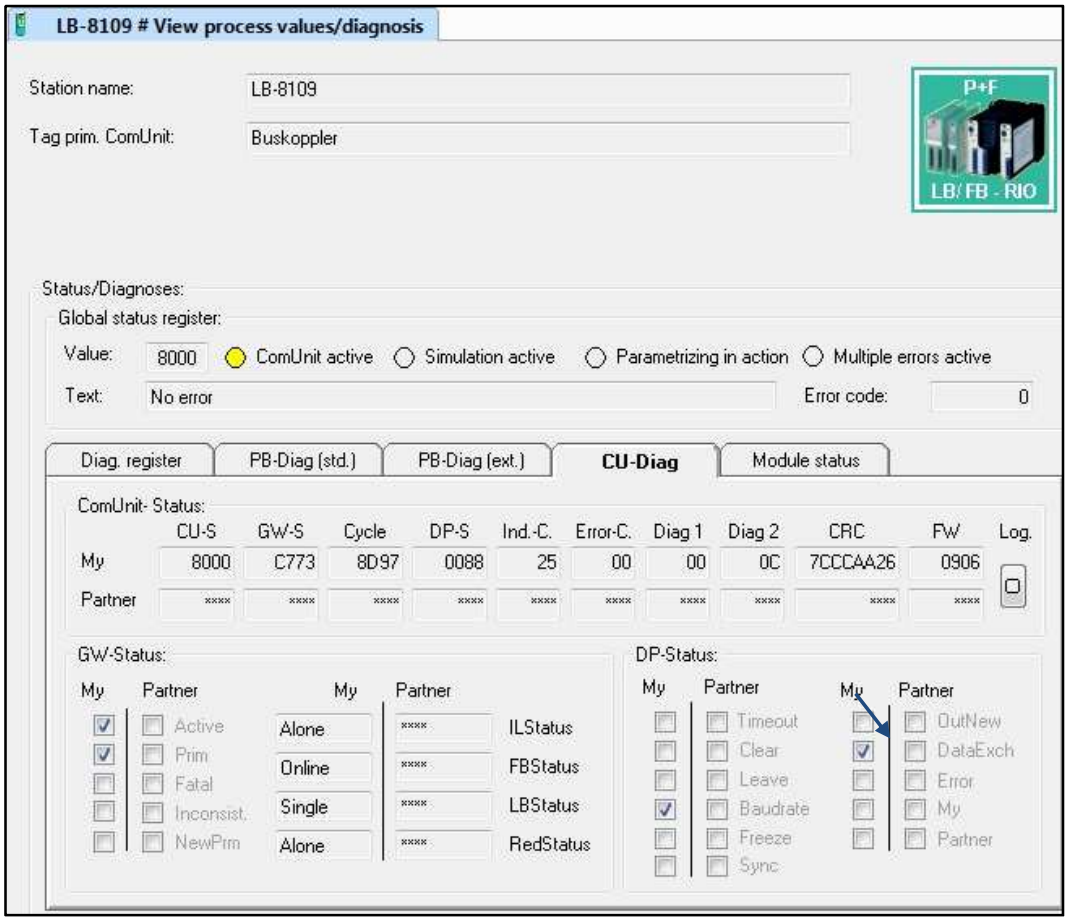


2. Select the slave DP configuration (≙ Remote I/O station) and the master DP configuration (≙ PLC) in the diagnostics tab and click on the two read buttons. Selecting the **"<>"** button to compare the respective configuration strings:



In the event of a deviation (this is then shown in red), check the station configuration in the HW Config (PLC) and in PACTware. In addition, consult the com unit manual for help.

The **"Data Exch"** box in the "**Com Unit Diag.**" tab should be checked. This signals that data is being exchanged between the com unit and the master and indicates the successful integration of the remote I/O station:



If there is no checkmark, check the station configuration in the HW Config (PLC) and in PACTware. In addition, consult the com unit manual for help.

5.5.2. Diagnostics via the Online View in the Simatic Manager

In order to be able to make good use of the following online view, **the PROFIBUS slave must first be configured** (see section 4. Configuration of the PROFIBUS Slave).

The  button can be used to switch between the **online** and the **offline view**.

1. Switch to the online view to detect any errors.
   The following error images frequently appear here:

    **Module not available:**
   Check whether the PROFIBUS address in the HW Config matches the PROFIBUS address of the com unit and the specification of the PROFIBUS address in PACTware.

    **Error:**
   If nothing is connected and the line fault detection is not disabled, this error could indicate a line breakage.

2.  on **Node** → **Module Status** to open the diagnostics page.
3. Open the 2nd tab **"DP slave diagnostics"**, where a more detailed error message is displayed.

6. FAQs

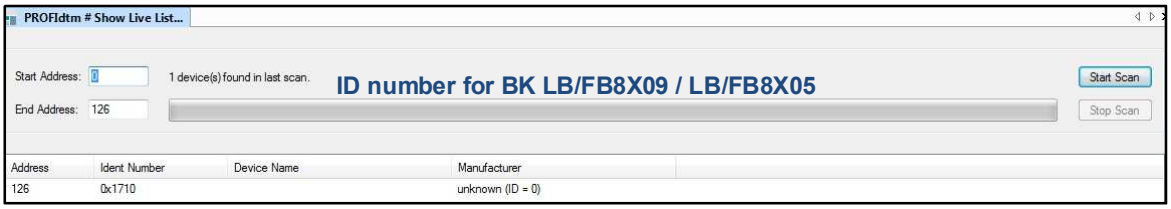
6.1. How Do I Determine the PROFIBUS Address of the Com Unit?

When **configuring via the service bus interface** (e.g., with ICPCON), determination of the PROFIBUS address is generally not relevant.
When **configuring via PROFIBUS** (e.g., with Softing PROFIusb), proceed as follows:

1. on the **PROFIdtm DPV1 Interface** to establish the connection:

If communication problems arise (e.g., "Unknown board name"), check whether the drivers for the class 2 master / USB-RS485 converter have been installed properly.

2. on **Interface → Additional Functions → Show Live List → Start Scan** to search for the com unit:



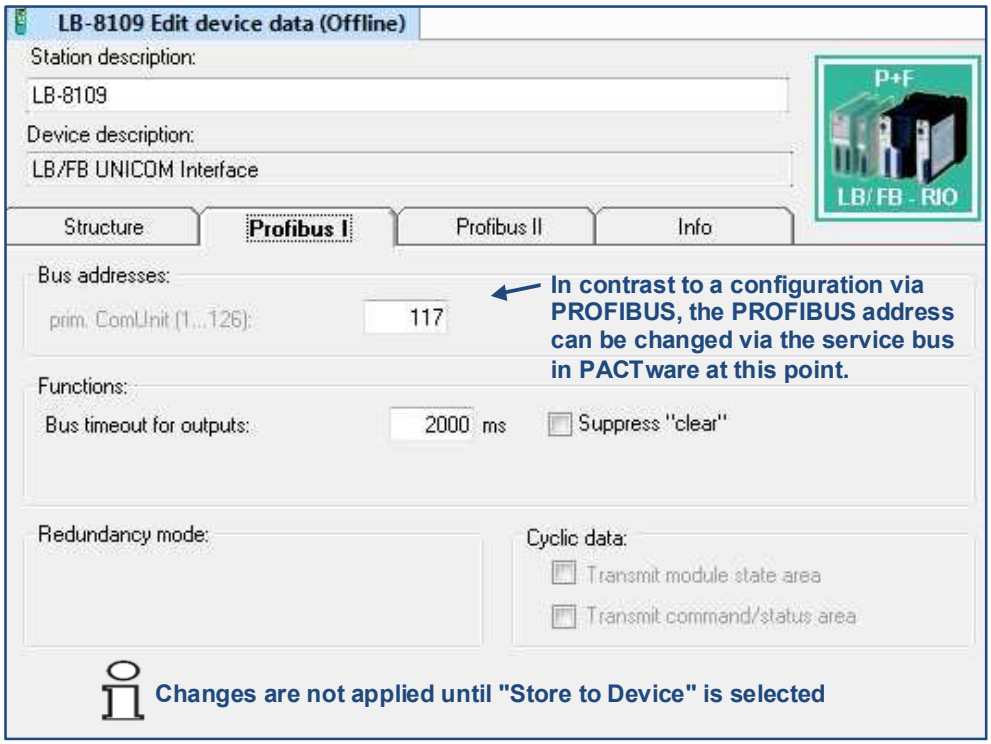
6.2. How Do I Change the PROFIBUS Address of the Com Unit?

The current PROFIBUS address must be known to be able to change the PROFIBUS address of the com unit when **configuring via PROFIBUS** (e.g., with Softing PROFIusb). First, determine the PROFIBUS address of the com unit (section 6.1.). Then change the PROFIBUS address as follows:

1. on the **PROFIdtm DPV1 Interface** to establish a connection.
2. on **Interface → Additional Functions → Set Device Station Address** to change the PROFIBUS address**:**

When **configuring via the service bus interface** (e.g., with ICPCON), the PROFIBUS address can be changed directly via:

Com unit → Parameter → Parameterization → Edit Device Data (Offline):

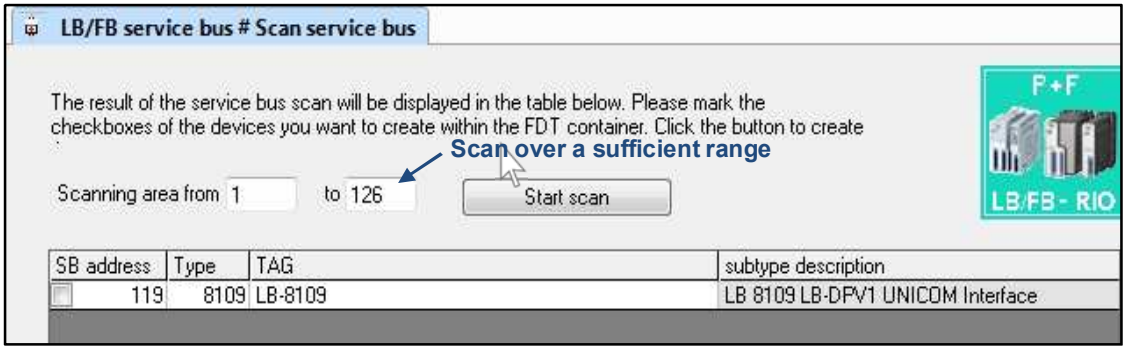


6.3. How Do I Determine the Service Bus Address of the Com Unit?

When **configuring via PROFIBUS** (e.g., with Softing PROFIusb), determination of the service bus address is generally not relevant.
When **configuring via the service bus interface** (e.g., with ICPCON), this is performed as follows:

1. on **Service Bus Interface LB/FB Series → Connect** to connect.
2. The service bus address can then be determined via:

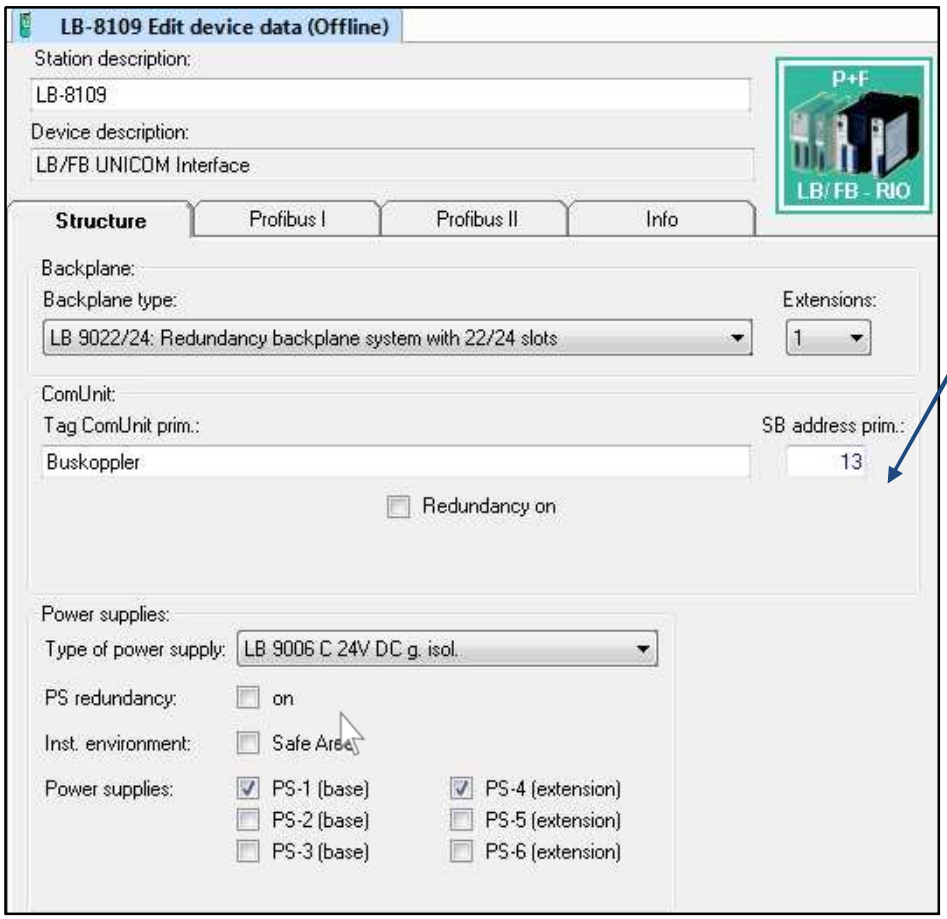
   Service Bus Interface LB/FB Series → Additional Functions → Scan Service Bus:



6.4. How Do I Change the Service Bus Address of the Com Unit?

When **configuring via PROFIBUS** (e.g., with PROFIusb from Softing), the service bus address is changed as follows:

on **Com unit → Parameter → Parameterization → Edit Device Data (Offline)** to connect:



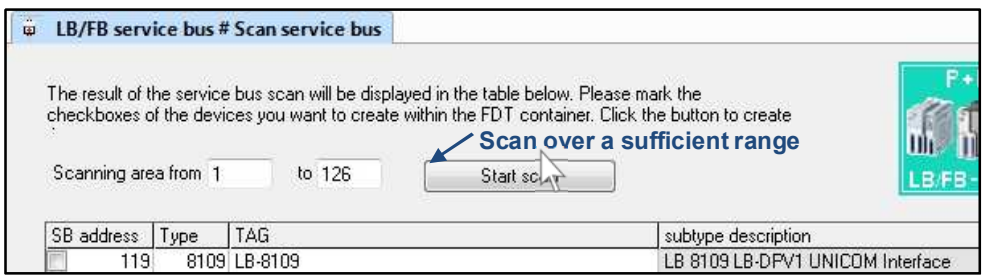
In contrast to a configuration via the service bus, the service bus address can be changed via PROFIBUS in PACTware at this point. When configuring via the service bus, the service bus address is only specified here to ensure communication with the com unit.

Changes are not applied until "Store to Device" is selected

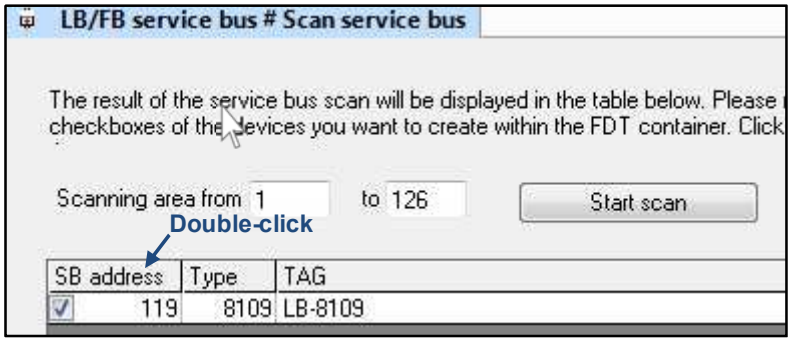
When **configuring via the service bus interface** (e.g., with ICPCON), the service bus address is changed as follows:

1. on **Service Bus Interface LB/FB Series → Connect** to connect.
2. Scan the service bus:

   Service Bus Interface LB/FB Series → Additional Functions → Scan Service Bus:



3. Double-click on the service bus address of the com unit to set the desired service bus address.



6.5. How Can Values be Simulated?

The module must be connected, since the online menu differs from the offline menu.

1. **Module → Connect device.**
2. **Module → Parameter > Online Parameterization > Edit Device Data (Online).**
3. Select the desired channel in the **Channel X** tab.
4. Select the **Simulation** operating mode. Special analog values can be set using the **Expanded** button.