SIEMENS

SIMATIC PDM V5.2

Getting Started **Edition 03/2002**

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We have checked the contents of this manual for agreement with the hardware and software described. Since deviations cannot be precluded entirely, we cannot guarantee full agreement. However, the data in this manual are reviewed regularly and any necessary corrections included in subsequent editions. Suggestions for improvement are welcomed.

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1 SIMATIC PDM Getting Started

What are you going to learn?

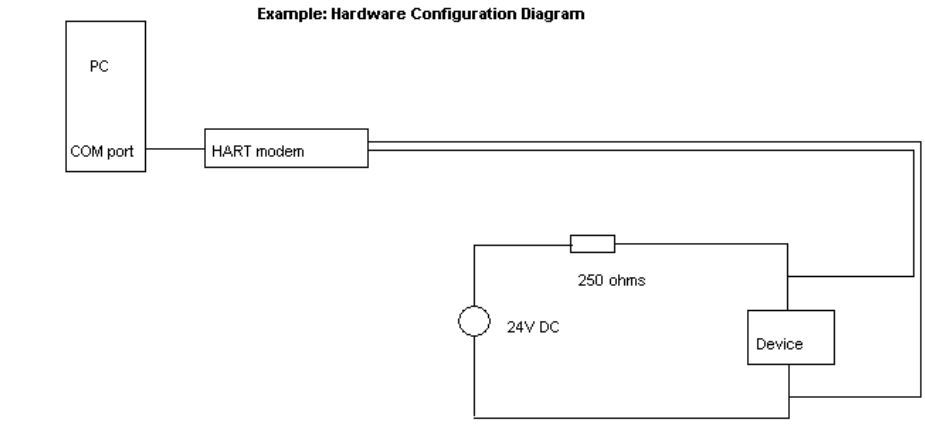
The following practical exercise shows you how simple it is to create a network configuration and subsequently process the devices in SIMATIC PDM.

In this example, you will create a SIMATIC PDM configuration with sensors. Later on, you are going to work with the sensor "SITRANS P DS" from the Siemens **SITRANS P** family.

Detailed instructions will lead you step-by step through the creation of a network and SIMATIC PDM operation.

1.1 Hardware Requirements

The following diagram shows an example of a hardware configuration that can be used to create a project.



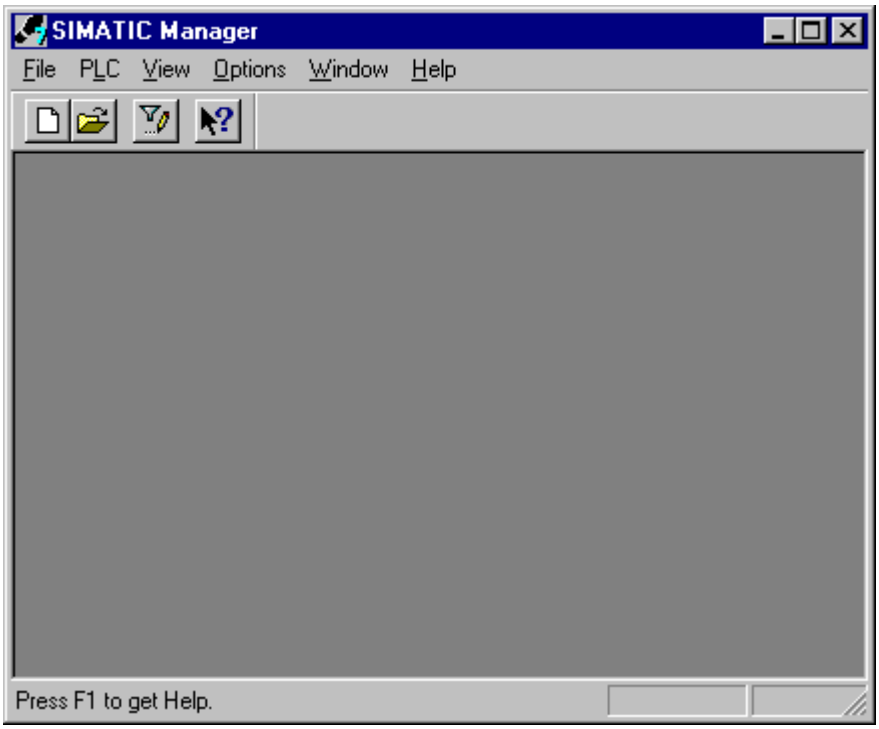
Connect the HART modem to the COM port of the PG/PC and connect it to the power supply (see figure)

1.2 Creating a Project

Starting the Program

Start the program with a click on the "SIMATIC Manager" desktop icon. An almost empty window opens with a toolbar in the upper section (the number of icons in the tool bar depends on whether you are using the integrated version or not).

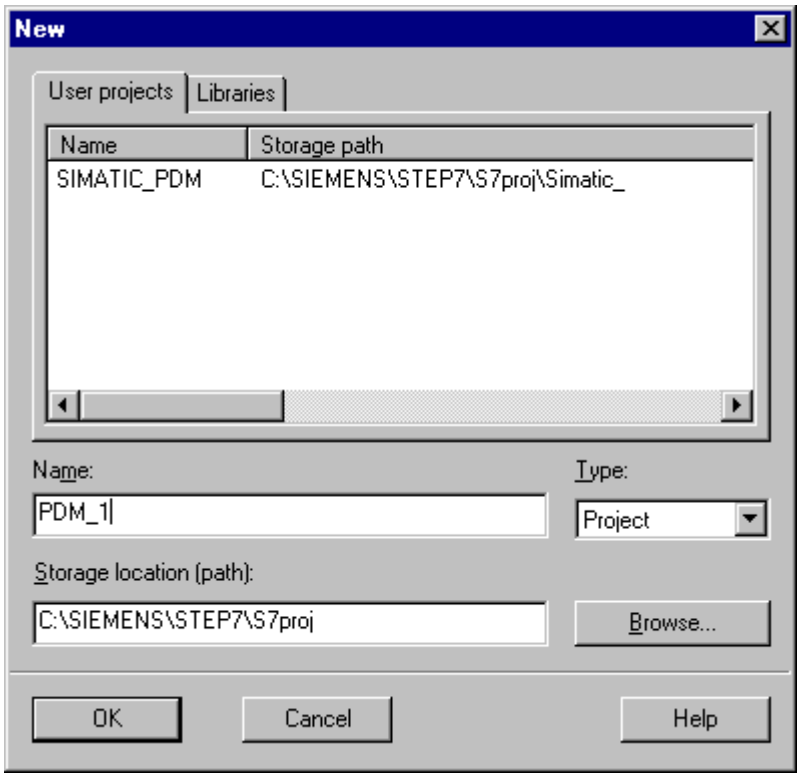
Now select the network view (menu command **View > Process Devices-Network View**). The **Process Devices-Network View** displays the process devices arranged according to the network topology. Here you can configure process devices.



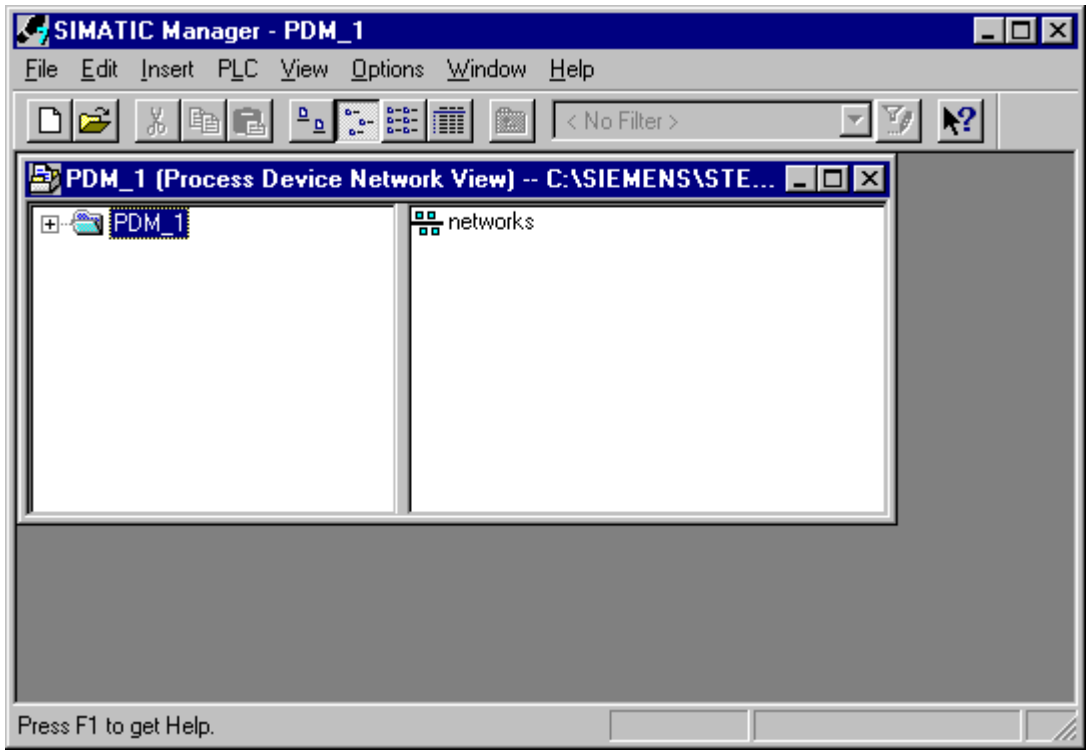
Creating a Project

Proceed as follows in order to create a project:

1. Select the menu command **File > New**.
2. Enter a name for the project (such as "PDM_1") in the displayed dialog box. Verify that the "Project" and not the "Library" option is selected.
3. Confirm by clicking on "OK".

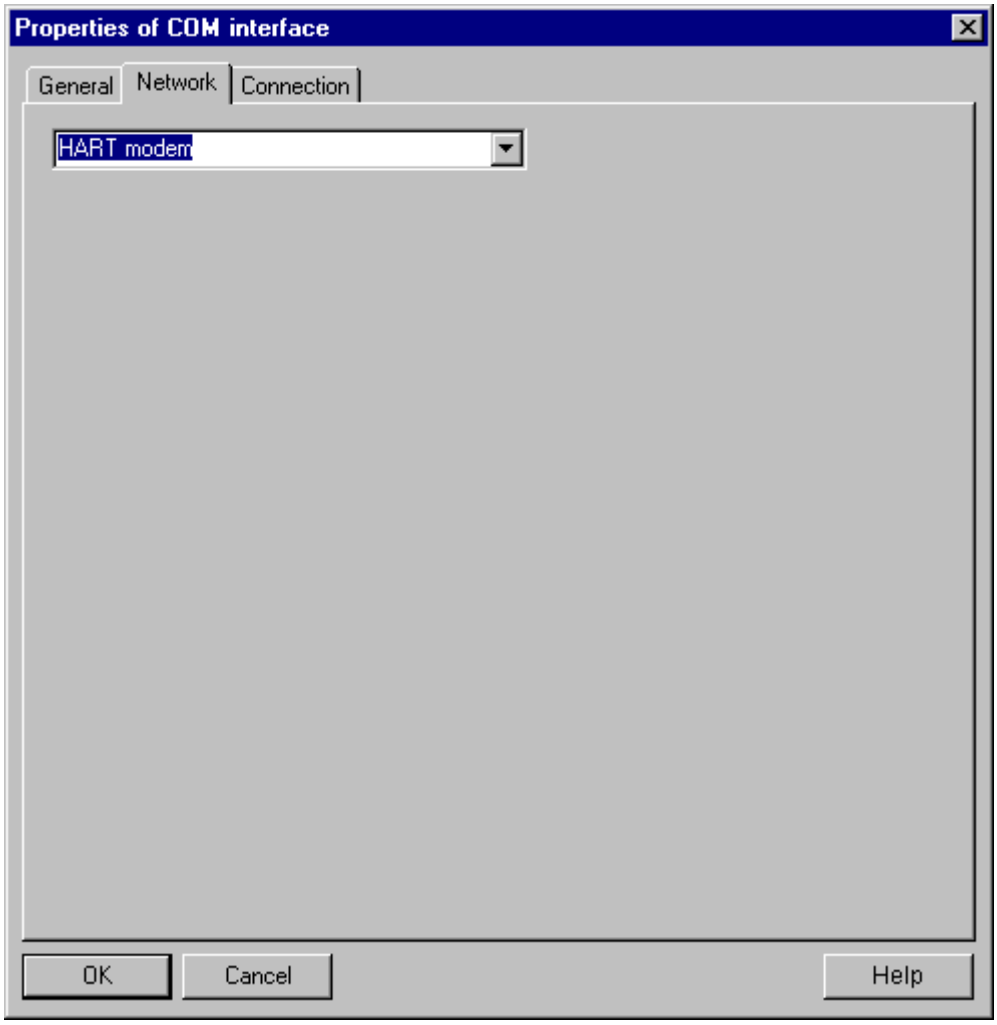


4. The new project task window "PDM_1" is displayed. Double-click on the "Networks" icon in the right-hand screen section.


SIMATIC Manager - PDM_1
File Edit Insert PLC View Options Window Help
< No Filter >
PDM_1 (Process Device Network View) -- C:\SIEMENS\STE...
PDM_1
networks
Press F1 to get Help.

Adding the HART Modem and Linking the COM Interface

1. To add a HART modem, right-click on the "Network" icon and select the menu command **Insert New Object... > HART modem**.
2. Go to Networks > PC > ..., select the COM interface and then right-click on "Object Properties...". In the dialog box displayed, select the "Connection" tab and enter the correct "COM Port" ("2" in our example).
   Note: Be sure that you know which COM port on your computer is free and available for use. Connect your **HART modem** to this port.



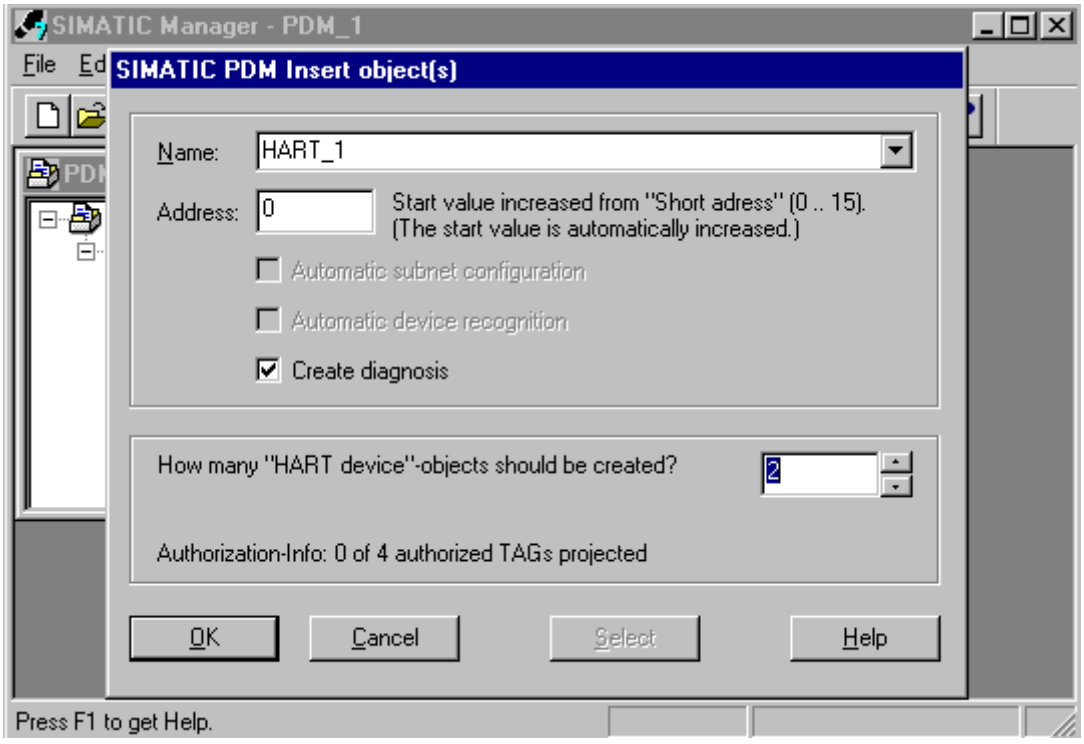
3. Confirm your entries with "OK".

Inserting HART Devices

You can insert up to 4 devices per project using the standard version of SIMATIC PDM. If you need to configure more devices than that for a project, you will have to purchase the expansions required to do this.

To insert the desired HART devices, proceed as follows:

1. Right-click on the HART modem and in the context-sensitive pop-up menu select the command **Insert New Object…**. **> HART Device**.
2. The dialog box "SIMATIC PDM Insert Object(s)" is displayed.

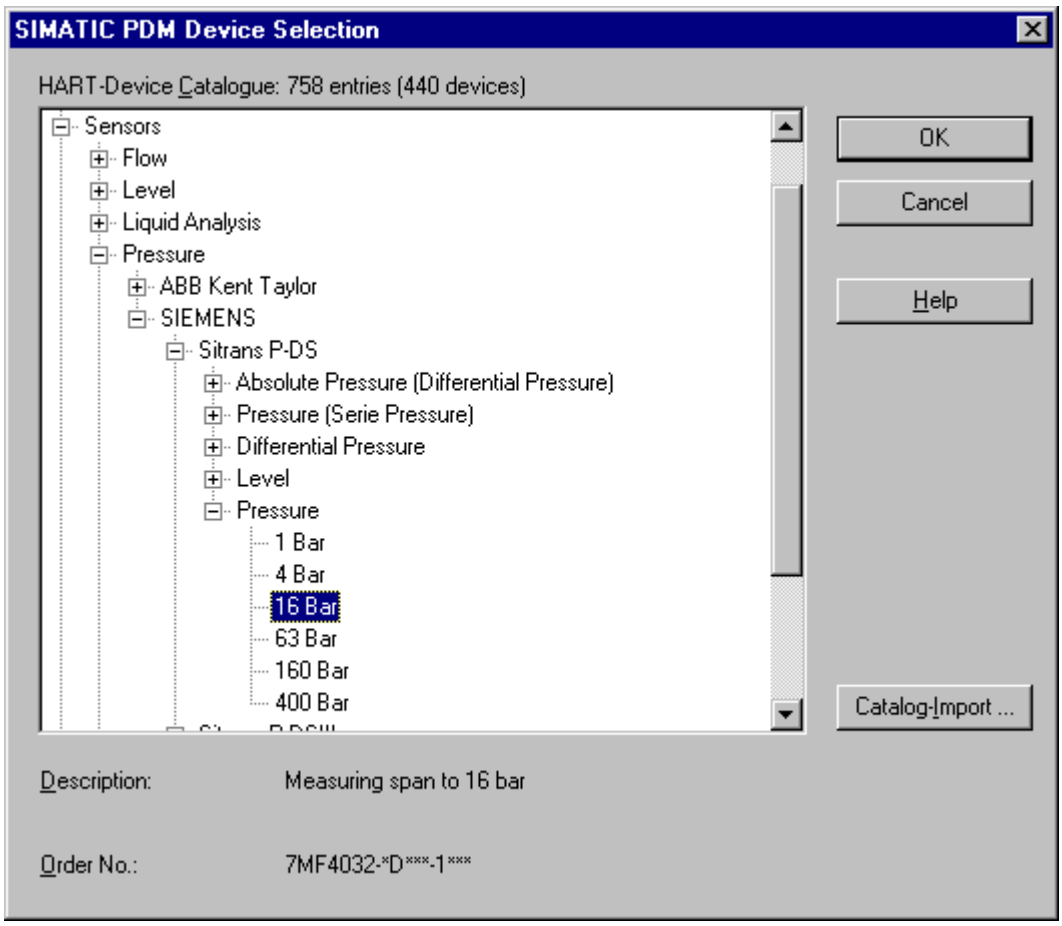


3. In the "Name" field, enter the desired name (maximum 8 characters) for the HART device (in our example HART_1). Enter "2" in the field "How many 'HART device' objects should be created". You do not need to make any entries in the field "Start value increased from 'Short address'" because the program automatically enters this value.
4. Confirm your entries with "OK". The program inserts two sensors named "HART_1 0" and "HART_1 1" into the project (in the right-hand) column. Their name numbers are automatically incremented by one count.

Selecting a Sensor

To select a sensor, proceed as follows:

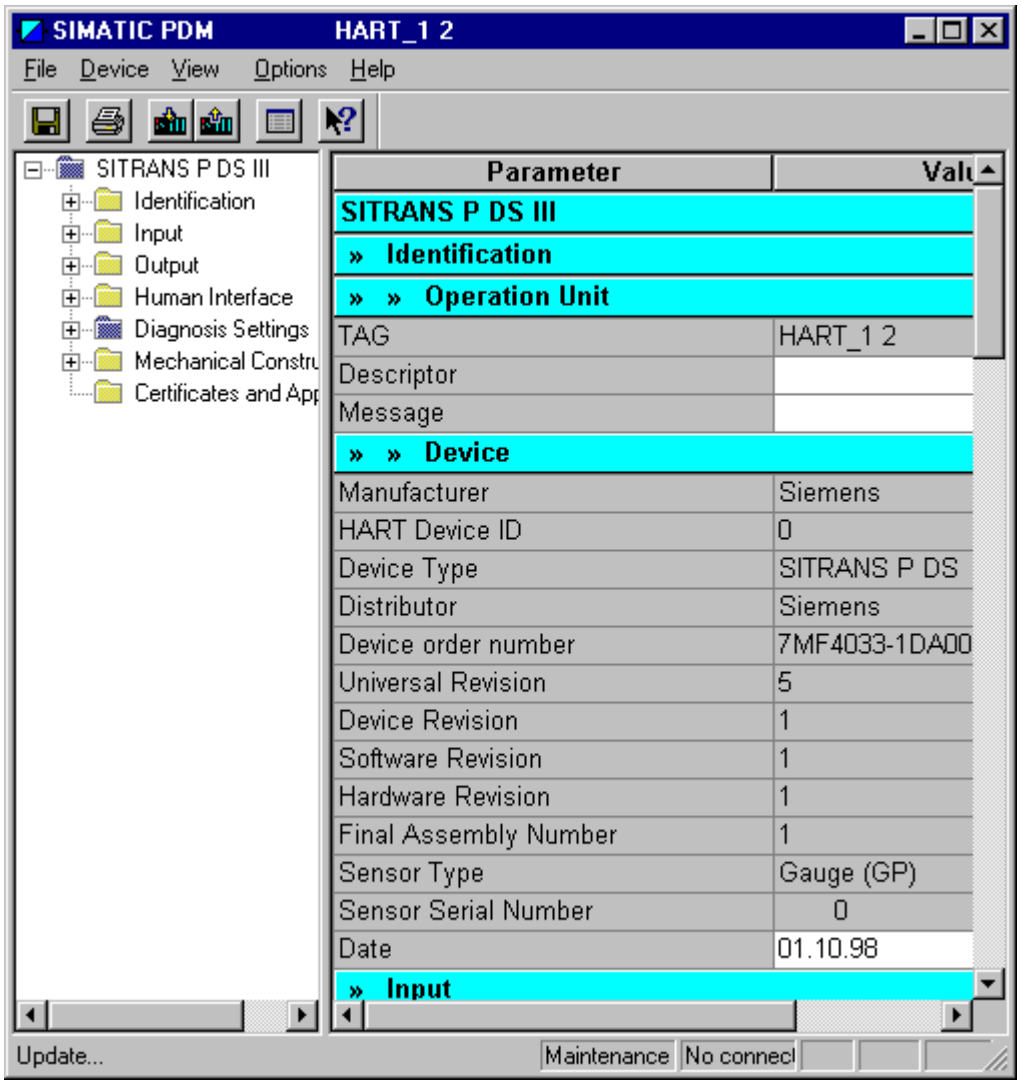
1. Double-click on one of the sensors which you have inserted (such as on HART_1 0).
2. Select **Sensors > Pressure > SIEMENS > SITRANS P-DS > Pressure > 16 Bar** to choose the appropriate sensor. Configure any other devices you have selected for your project in the same manner.



3. Confirm all entries with "OK".

1.3 Configuring a Device

To familiarize yourself with the complete functionality available in SIMATIC PDM, select the "Specialist" option in the displayed dialog box. Confirm your entries with "OK". The SIMATIC PDM logo is now displayed, and SIMATIC PDM is opened for the HART device that you selected.



The values displayed on the right-hand side are offline values that come from the DD that you selected.

Downloading to a Programming Device (PG)/PC, Downloading to a Device

To avoid possible loss of device data, you should first download this data from the device to the PC.

1. To do this, select the menu command **Device > Download to PG/PC** or click on the corresponding toolbar icon .

The on-screen values are replaced by the real values for the device. In the status bar, the status changes from "Not connection" to "Connected".

2. Now you can change the data in the table (such as the "installation date") as appropriate. If you edit these values, their status changes from "Initial value" to "Changed".
3. To transfer data to the sensor, select the menu command **Device > Download to device** or click on the corresponding toolbar icon. All previous sensor data is overwritten with your edited data. Therefore, be sure to verify the correctness of all data before you transfer it to the device.

Congratulations! You now have worked through this "Getting Started" and become acquainted with important terms, procedures and functionalities of SIMATIC PDM. You are now ready to create your first project.

If you encounter problems finding information on certain functions or operating sequences for SIMATIC PDM, you are welcome to take advantage of our extensive Help on SIMATIC PDM.

You can also take a look at sample projects for DP/PA, HART and Multiplexer. To view them, select the menu command **File > Open**, go to the "Open" dialog box and select the "Sample projects" tab.

We wish you a lot of success with your future projects!

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