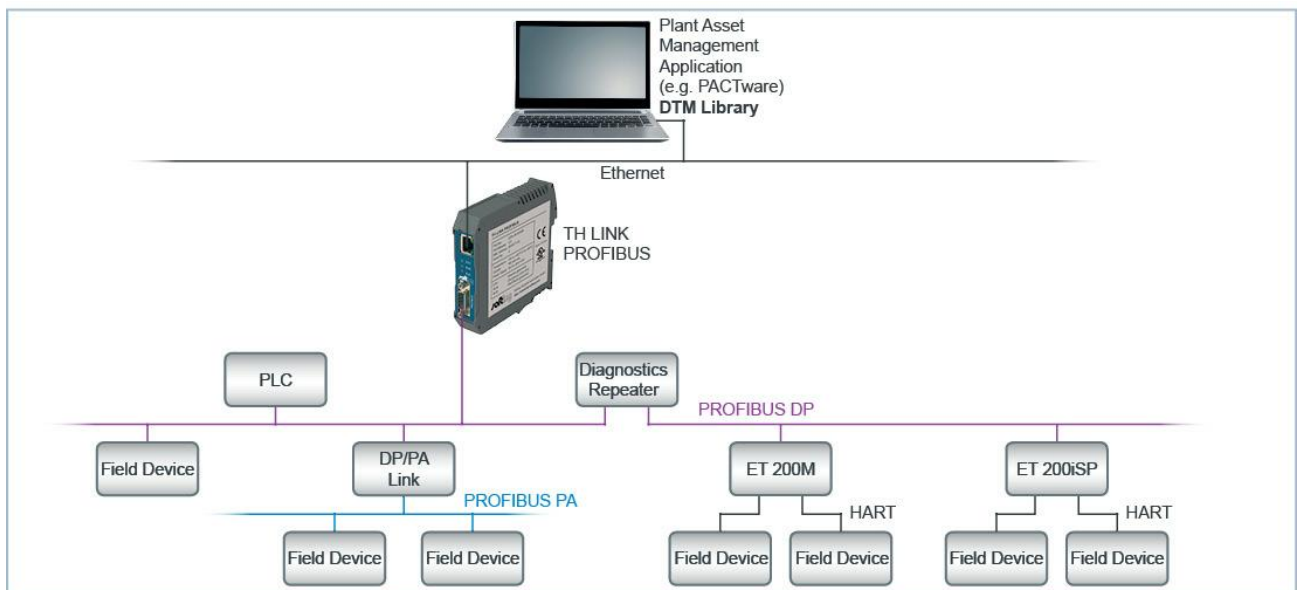


# DTM Library

Extended Field Device Access for Plant Asset Management Applications (FDT/DTM)



Version: EN-012016-1.01

## **Disclaimer of liability**

The information contained in these instructions corresponds to the technical status at the time of printing of it and is passed on with the best of our knowledge. The information in these instructions is in no event a basis for warranty claims or contractual agreements concerning the described products, and may especially not be deemed as warranty concerning the quality and durability pursuant to Sec. 443 German Civil Code. We reserve the right to make any alterations or improvements to these instructions without prior notice. The actual design of products may deviate from the information contained in the instructions if technical alterations and product improvements so require.

It may not, in part or in its entirety, be reproduced, copied, or transferred into electronic media.

### **Softing Industrial Automation GmbH**

Richard-Reitzner-Allee 6  
85540 Haar / Germany  
Tel: + 49 89 4 56 56-0  
Fax: + 49 89 4 56 56-488  
Internet: <http://industrial.softing.com>  
Email: [info.automation@softing.com](mailto:info.automation@softing.com)  
Support: [support.automation@softing.com](mailto:support.automation@softing.com)

The latest version of this manual is available in the Softing download area at: <http://industrial.softing.com>.

# Table of Contents

<b>Chapter 1</b>	<b>About the DTM Library.....</b>	<b>4</b>
<b>Chapter 2</b>	<b>About this manual.....</b>	<b>5</b>
2.1	Document history.....	5
2.2	Conventions.....	5
<b>Chapter 3</b>	<b>DTM Library components.....</b>	<b>6</b>
3.1	CommDTM PROFIBUS DP-V1.....	6
3.2	CommDTM for SIMATIC DP/PA Link.....	6
3.3	CommDTM for SIMATIC ET 200M and ET 200iSP.....	6
<b>Chapter 4</b>	<b>Performance features.....</b>	<b>7</b>
<b>Chapter 5</b>	<b>Delivery scope.....</b>	<b>8</b>
<b>Chapter 6</b>	<b>System requirements.....</b>	<b>9</b>
6.1	Operating system.....	9
6.2	Hardware requirements.....	9
6.3	Software requirements.....	9
<b>Chapter 7</b>	<b>Installing the DTM Library.....</b>	<b>10</b>
<b>Chapter 8</b>	<b>Application in the FDT frame.....</b>	<b>13</b>
<b>Chapter 9</b>	<b>Licensing.....</b>	<b>14</b>
9.1	Licensing on PC.....	14
9.2	Activate license.....	14

# 1 About the DTM Library

The DTM Library for essential Siemens parts contains all relevant DTMs for communication with PROFIBUS DP, PA and HART devices in the PROFIBUS network. Users of Siemens infrastructure components can use these device drivers in all FDT frame applications (e.g. PACTware, FieldCare) according to FDT Specification 1.2 + Addendum.

These include the CommDTM PROFIBUS DP-V1, the CommDTM for SIMATIC DP/PA Link and the CommDTM for SIMATIC ET 200M and ET 200iSP.

The CommDTM PROFIBUS DP-V1 as device driver for the xEPI 2 provides the connection to the PROFIBUS network. It allows communication between PROFIBUS DP, PA devices, HART devices – connected to the PROFIBUS via Remote I/O (RIO) with HART functionality. Communication with devices at the SIMATIC DP/PA Link and with HART devices at the SIMATIC ET 200M and ET 200iSP is enabled by the respective DTMs (DeviceDTM – from field device manufacturer or generic DTM – standard DTM).

The DTMs considerably facilitate planning, projecting, configuration, parameterization and commissioning as well as diagnosis and maintenance of a variety of field devices. Even in already existing plants and equipment, this modern form of device configuration and diagnosis, independent from the control system, provides substantial improvement and facilitation. Settings and modifications do no longer have to be done directly at the field device.

## 2 About this manual



### Read this manual before starting

For damages due to improper connection, implementation or operation Softing refuses any liability according to our existing guarantee obligations.

### 2.1 Document history

Document version	Modifications compared to previous version
1.00	None - initial version.
1.01	<ul style="list-style-type: none"><li>▪ License Manager version added.</li><li>▪ Licensing procedure updated.</li></ul>

### 2.2 Conventions

The following conventions are used throughout Softing customer documentation:

Keys, buttons, menu items, commands and other elements involving user interaction are set in bold font and menu sequences are separated by an arrow

Open **Start** → **Control Panel** → **Programs**

Buttons from the user interface are enclosed in brackets and set to bold typeface

Press **[Start]** to start the application

Coding samples, file extracts and screen output is set in Courier font type

MaxDlsapAddressSupported=23

Filenames and directories are written in italic

Device description files are located in *C:\<product name>\delivery\software\Device Description files*



#### CAUTION

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



#### Note

This symbol is used to call attention to notable information that should be followed during installation, use, or servicing of this device.



#### Hint

This symbol is used when providing you with helpful user hints.

## **3 DTM Library components**

### **3.1 CommDTM PROFIBUS DP-V1**

The CommDTM PROFIBUS DP-V1 can be used in all FDT frame applications according to FDT Specification 1.2 + Addendum (e.g. PACTware, FieldCare). It allows communication between PROFIBUS DP, PA devices, HART devices – connected to the PROFIBUS via Remote I/O (RIO) with HART functionality – and their DeviceDTMs. Access can be realized centrally via the xEPI 2. The PROFIBUS communicates acyclically (DP-V1) and parallel to the class 1 master (MCL1) as a configuration master MCL2. For communication with the field device, the respective field device DTM has to be integrated into the project of the FDT frame application.

### **3.2 CommDTM for SIMATIC DP/PA Link**

The SIMATIC DP/PA Link is an essential structural element for the transfer from PROFIBUS DP to PA in complex network structures. The available CommDTM can be implemented into all FDT frame applications according to FDT Specification 1.2 + Addendum. In this role the DTM acts as a device driver enabling DP-V1 communication with the devices at the DP/PA Link and their field device DTMs. Scanning for connected PA devices is supported. These are displayed in a list.

### **3.3 CommDTM for SIMATIC ET 200M and ET 200iSP**

The SIMATIC ET 200 Remote I/O is an essential element for the connection of HART devices to PROFIBUS. The available CommDTM can be implemented into all FDT frame applications according to FDT Specification 1.2 + Addendum. In this role the DTM acts as a device driver enabling DP-V1 communication with HART devices at ET 200 peripheral devices and their DeviceDTMs. Scanning for connected HART devices is supported. These are displayed in a list.

## 4 Performance features

The DTM Library includes the following performance features:

- DTMs according to FDT Specification 1.2 + Addendum,
- Configuration and parametrization of PROFIBUS PA devices,
- Configuration and parametrization of HART devices via PROFIBUS Remote I/O with HART functionality,
- DTM integration through PACTware, FieldCare, FieldMate and other FDT frame applications,
- Support of Condition Monitoring in FieldCare,

## 5 Delivery scope

The DTM Library is available for download at <http://industrial.softing.com/en/downloads.html>. After installation the following components are available:

- CommDTM PROFIBUS DP-V1
- CommDTM DP/PA Link
- CommDTM ET 200M
- CommDTM ET 200iSP
- Installation Manual
- User Manuals of the different DTMs
- License Manager V4



### 30-days demo license

Please contact our support ([support.automation@softing.com](mailto:support.automation@softing.com)) to use the DTM Library with a 30-day trial license. Thus you obtain a test license key allowing you to use DTM Library up to 30 days with complete functionality after activation. After expiry of the 30-days-demo version you will no longer be able to establish an online connection. Online connections existing at the time of expiration will be terminated.



## 6 System requirements

### 6.1 Operating system

The following operating systems are supported in English and German:

Operating system	Bit version
Windows 7	32 Bit and 64 Bit
Windows 8.1	32 Bit and 64 Bit
Windows Server 2012 R2	64 Bit only

### 6.2 Hardware requirements

In order to allow an installation of the additional software, your PC must have a free disk space of 40 MB and must be equipped with a network interface card with 100 MBit/s. Communication through xEPI 2 requires high-capacity Ethernet infrastructure (network card, switch, etc.). For further hardware requirements please refer to the information from your PC and operating system manufacturer.

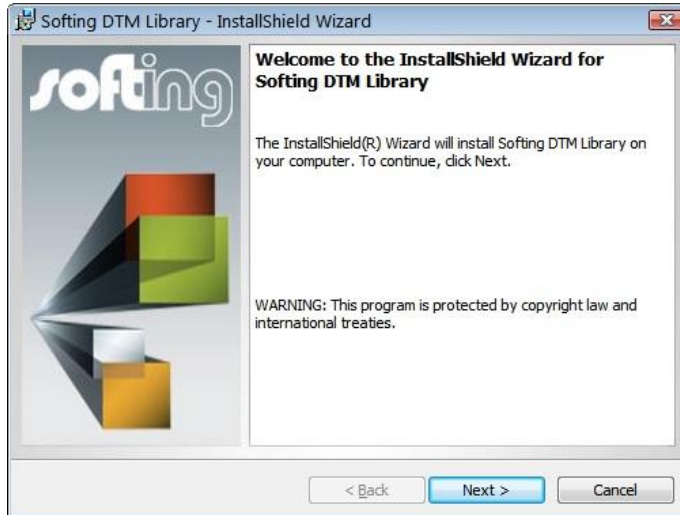
### 6.3 Software requirements

The following preconditions must be fulfilled:

- FDT Frame Application according to FDT Specification 1.2 + Addendum,
- Adobe Acrobat Reader 6.0 or higher for reading documentation,
- Web Browser (Microsoft Internet Explorer 8 or higher) for configuring the Ethernet and the PROFIBUS diagnosis.

## 7 Installing the DTM Library

1. Double-click the file *setup.exe* to start the installation and follow the instructions from the wizard. Select your installation language and confirm with **[OK]**. The installation is started:



2. Click **[Next]**, to install the DTM Library on your system. The license agreement appears:



3. Carefully read the license agreement, click **[I accept the terms in the license agreement]** and then click **[Next]**. The default installation directory appears:



4. Confirm with **[Next]** or modify the installation directory if required with **[Change]**. The program is being installed:



5. Click **[Install]** if all settings are correct.
6. The progress bar of the installation procedure is displayed.



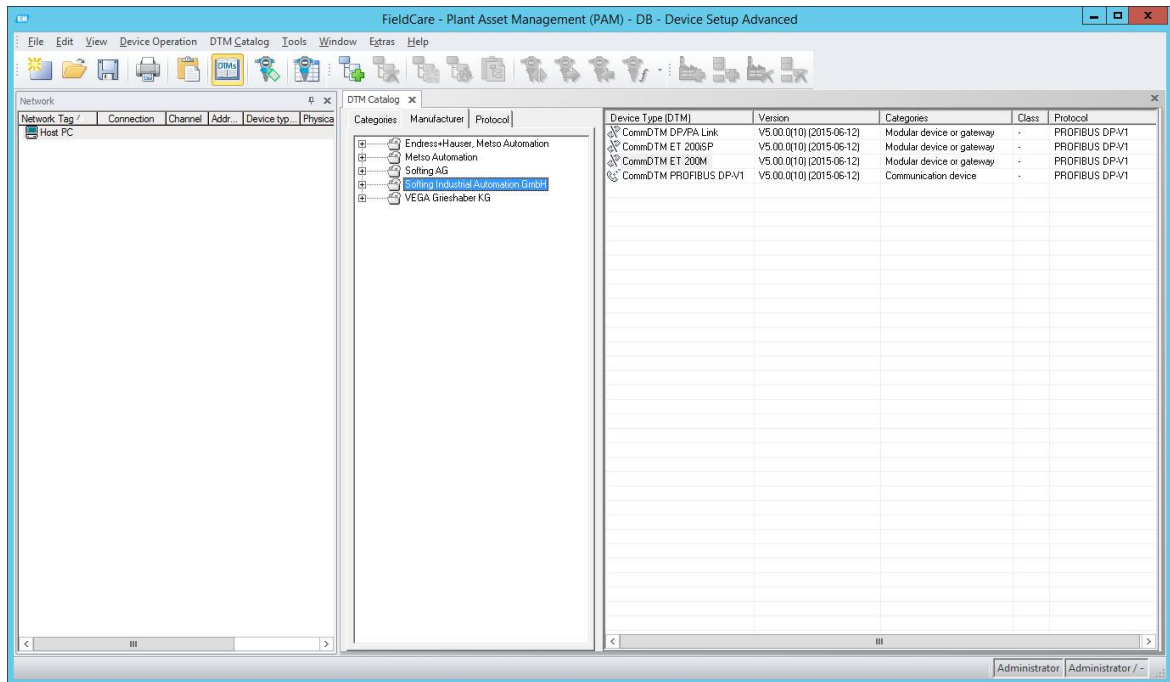
7. After installing the DTM Library click **[Finish]** to exit the installation wizard.



## 8 Application in the FDT frame

After installation you can use the components of the DTM Library in an FDT frame.

To do so, open the FDT frame application and update the device catalog. For information refer to the frame application's online help. The DTMs of the Softing DTM Library are displayed.



## 9 Licensing

The DTM Library is protected with a software key. You need to license the software for unlimited use.



### 30-days demo license

Please contact our support to use the DTM Library with a 30-day trial license. Thus you obtain a test license key allowing you to use DTM Library up to 30 days with complete functionality after activation. After expiry of the 30-days-demo version you will no longer be able to establish an online connection. Online connections existing at the time of expiration will be terminated.



### License state

The license is generated for the current system only. A transfer to another system is not possible. You can find the current license state in the **About DTM Library** window (context menu: → **Additional functions** → **About DTM Library**).



### Automatic licensing with Endress+Hauser frame application

If you are using an Endress+Hauser frame application, DTM Library is automatically licensed and activated and you can skip the following sections.

## 9.1 Licensing on PC

The licensing on PC consists of a runtime license which activates the complete software functionality on a PC.

## 9.2 Activate license



### Online help

The License Manager includes an online help which gives you detailed information about the licensing procedure and helps you to solve possible problems. Click in the left part of the License Manager user interface on **[Help]** and select the corresponding topic.

### Activate license on PC - with internet access

1. Start the License Manager V4 with **Start → All Programs → Softing → License Manager → License Manager V4**.
2. Select **Activate for this PC**.
3. Enter the license key in the following format XXXXX-XXXXX-XXXXX-XXXXX into the field **License Key**.
4. Click **[Activate license]**.
5. After a successful activation your license is displayed in the field **Available licenses on this PC**.

### Activate license on PC - without internet access

1. Start the License Manager V4 on the PC where you want to use the license. Select **Start → All Programs → Softing License Manager → License Manager V4**.

2. Select **Activate for this PC**.
3. Click **Export PC-IDs...**
4. Select your PC and click **[OK]** in order to save the file.
5. Transfer this file to a PC with internet access and License Manager installed in the current version.
6. Start the License Manager. Switch to **Generate license file for remote PC**. Enter the license key. Click **Import PC-Id from remote PC**.
7. Select **Generate and export license file...**
8. Save this file and transfer the file to the original PC.
9. Select **Activate for this PC**.
10. Click **[Import license file]** and import the file.
11. Then click **[Activate license]**.
12. After a successful activation your license is displayed in the field **Available licenses on this PC**.

**Softing Industrial Automation GmbH**

Richard-Reitzner-Allee 6  
85540 Haar / Germany  
Tel: + 49 89 4 56 56-0  
Fax: + 49 89 4 56 56-488  
Internet: <http://industrial.softing.com>  
Email: [info.automation@softing.com](mailto:info.automation@softing.com)  
Support: [support.automation@softing.com](mailto:support.automation@softing.com)

