Operating Instruction Manual

Generic DTM for PROFINET IO Devices

Configuration of PROFINET IO Devices

Language: English

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Table of Contents

1 Introduction

1.1 About this Manual

This manual describes how to configure PROFINET IO Devices, which are described with GSDML files. These devices can be configured by use of the Generic PROFINET IO Device DTM within a FDT Framework.

Dialog Panes

The table below gives an overview for the individual dialog panes descriptions:

Table 1: Descriptions Dialog Panes

1.1.1 Online Help

The Generic PROFINET IO Device DTM contains an integrated online help facility.

- To open the online help, click on the **Help** button or press the **F1** key.

1.1.2 List of Revisions

Index	Date	Version	Component	Chapter	Revisions
1	07.03.06	0.9.1.1 1.0.0.0	PNIOGenDevDTM.dll PNIOGenDevGUI.ocx	all	created
2	18.10.06	0.9.1.1 1.0.1.0	PNIOGenDevDTM.dll PNIOGenDevGUI.ocx	1.2, 1.4, 1.6.1 1.6.3 3.1 3.2 3.3.4 4.1 6.1 6.2	Section ‚Conventions in this Manual' actualized, Section ‚Support' actualized, Section ‚General Device Information' actualized, Section ‚Dialog Panes' actualized, Section ‚Overview Configuration' actualized, Section ‚General' actualized, Section ‚Submodul Details' actualized, Section ‚Overview Descriptions' actualized, Section ‚User Rights' actualized, Section ‚Contacts' actualized
3	02.04.08	1.0.0.2 1.0.1.2	PNIOGenDevDTM.dll PNIOGenDevGUI.ocx	All	Manufacturer and product names generalized.
4	26.09.08	1.0.2.0 1.0.4.1	PNIOGenDevDTM.dll PNIOGenDevGUI.ocx	Alle 1 2 3 6.2	Manufacturer and product names generalized (completed), Chapter 'Introduction' revised, Chapter 'Getting started' added, Chapter 'Configuration' revised, Section ‚User Rights' revised,
5	02.10.08	1.0.2.0 1.0.4.1	PNIOGenDevDTM.dll PNIOGenDevGUI.ocx	1.1.2	Section ‚List of Revisions' revised.

1.1.3 Conventions in this Manual

Operation instructions, a result of an operation step or notes are marked as follows:

Operation Instructions:

➢ <instruction>

Or

1. <instruction>
2. <instruction>

Results:

➮ <result>

Notes:

Note: <note>

<note were to find further information>

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1.2.1 Copyright

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1.2.6 Registered Trademarks

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1.3 About Generic PROFINET IO Device DTM

You can use the Generic PROFINET IO Device DTM to configure PROFINET IO devices described with GSDML files within a FDT Framework.

1.3.1 Requirements

Requirements Generic PROFINET IO Device DTM

Requirements for working with a Generic PROFINET IO Device DTM are:

- Installed FDT/DTM V 1.2 compliant frame application
- Installed PROFINET IO Controller DTM
- GSDML files of the devices to be configured
- The DTM must be loaded to the device catalog.

Loading GSDML files

To work with the Generic PROFINET IO Device DTM, the GSDML file of the device must be present in the GSDML folder in the installation directory of the DTM.

1.4 Dialog Structure of the Generic PROFINET IO Device DTM

The graphical user interface of the DTM is composed of different areas and elements listed hereafter:

1. A header area containing the **General Device Information**,
2. The **Navigation Area** (area on the left side),
3. The **Dialog Pane** (main area on the right side),
4. The general buttons **OK**, **Cancel**, **Apply**, **Help**,
5. The **Status Line** containing information e. g. the online-state of the DTM.

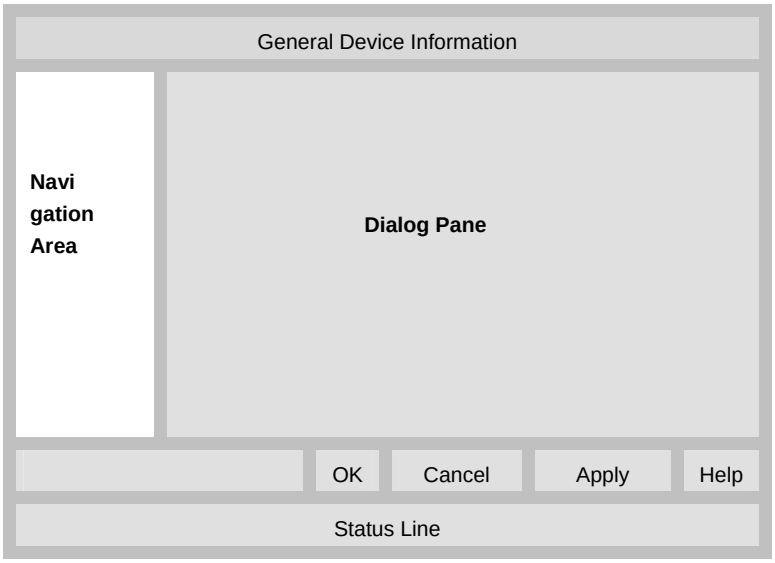

Figure 1: Dialog Structure of Generic PROFINET IO Device DTM

1.4.1 General Device Information

Parameter	Meaning
IO Device	Name of the device
Vendor	Vendor name of the device
Device ID	Identification number of the device
Vendor ID	Identification number of the vendor

Table 2: General Device Information

1.4.2 Navigation Area

The **Navigation Area** at the left side of the dialog provides a tree structure to navigate through the panes of the DTM.

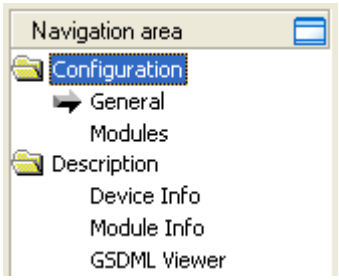

Figure 2: Navigation Area

➢ To access a DTM pane select the respective item of the navigation tree structure.

The **Navigation Area** can be hidden or it can be displayed again.

Control	Meaning
	Window button to hide the navigation area, (at the right side of the navigation title bar).
	**Show navigation area** button to open the navigation area, (at the lower left corner of the dialog pane).

Table 3: Hide / display Navigation

1.4.3 Dialog Panes

At the dialog pane the **Settings** or **Description** panes are opened via the corresponding folder in the navigation area.

Configuration	
General	On the pane **General** PROFINET IO device information is displayed. For further information, refer to section *General* on page 22.
Modules	On the **Modules** pane modules, submodules and parameters can be selected or configured, which are read from the GSDML file. For further information, refer to section *Modules* on page *23.*
Description	
Device	The **Device Info** pane contains the manufacturer information about the device. For further information, refer to section *Device Info* on page 31*.*
Module Info	The **Module Info** pane shows information for the available modules of this device. For further information, refer to section *Module Info* on page 32**.**
GSDML	By use of the **GSDML-Viewer** a GSDML file can be viewed and searched through. For further information, refer to section *GSDML Viewer* on page 33*.*

Table 4: Overview Dialog Panes

1.4.4 Controls and Dialog Buttons

In this section, you will find general information on controls and buttons.

1.4.4.1 General Buttons

The table below explains the general buttons in the DTM user interface.

Button	Meaning
OK	To confirm your latest settings, click on the **OK** button. All changed values will be applied on the frame application database. *The dialog then closes.*
Cancel	To cancel your latest changes, click on the **Cancel** button. Answer to the safety query **Configuration data has been changed. Do you want to save the data?** by **Yes**, **No** or **Cancel**. **Yes**: The changes are saved or the changed values are applied on the frame application database. *The dialog then closes.* **No**: The changes are not saved or the changed values are not applied on the frame application database. *The dialog then closes.* **Cancel**: *Back to the DTM.*
Apply	To confirm your latest settings, click on the **Apply** button. All changed values will be applied on the frame application database. *The dialog remains opened.*
Help	To open the DTM online help, click on the **Help** button.

Table 5: General Buttons

1.4.4.2 Grid Control

Grid controls display table data. The data grid control enables control of multiple columns and rows of varying control types that may be used to capture and track incident properties.

Grid Control Types

Type	Meaning
Static	The grid data is static.
Edit	The grid data can be edited using built-in editors.
IP	The grid data cell to enter IP address
Close /Open (+/-)	Grid data view can be opened/closed via (+/-).
Drop Down	Grid cell contains drop down list.
Drop Down combo (with Edit)	Grid cell contains drop down list with edit control.

Table 6: Grid Control Types

1.4.4.3 Toggling Grid View

	Slot	Subslot	Name	Inherit	Updating Time [ms]	Watchdog Time [...
⊞	0		Device*	☑	1	3
⊞	1		4 Bit Input	☑	1	3
⊞	2		4 Bit Output	☑	1	3

Figure 3: Grid Control (The Name of the device is displayed.)*

- ➢ To open a subset in the grid control and to toggle the grid view, click on the + sign or press the space key.
- ➪ The grid view is toggled.

	Slot	Subslot	Name	Inherit	Updating Time [ms]	Watchdog Time [...
⊟	0		Device*	☑	1	3
	0	1	0x00000000	☑	1	3
⊟	1		4 Bit Input	☑	1	3
	1	1	0x00000002	☑	1	3
⊟	2		4 Bit Output	☑	1	3
	2	1	0x00000101	☑	1	3

Figure 4: Grid Control - opened Subset Grid Control (The Name of the device is displayed.)*

1.4.4.4 Drop-Down Combo Box

- To select an entry from a drop-down combo box list, click on the respective field in the interactive table and select the required entry.

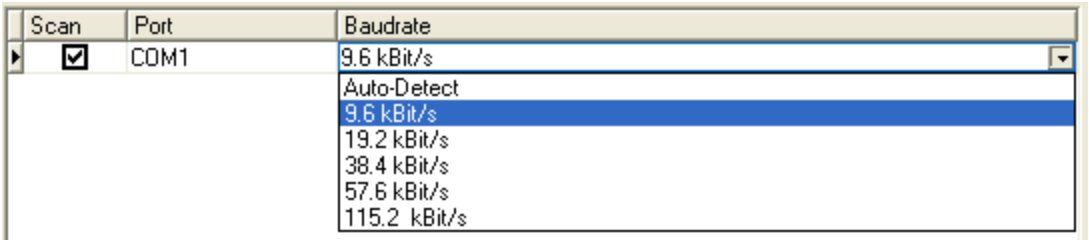

Figure 5: Drop-down Combo Box

1.4.5 Status Bar

The **Status Bar** displays information about the current state of the DTM. The current activity e.g. download is signaled graphically via icons in the status bar.

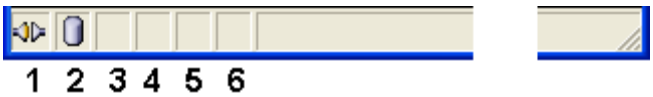

Figure 6: Status Bar – Status Fields 1 to 6

Status Field	Icon / Meaning
1	**DTM Connection States**
	Connecting: Icon going closed = Device is going online
	Connected: Icon closed = Device is online
	Disconnecting: Icon going opened = Device is going offline
	Disconnected: Icon opened = Device is offline
	Disconnected – disturbed: Icon with lightening = Device communication disturbed
2	**Data Source States**
	Data set: The displayed data are read out from the instance data set (database).
	Data set locked: The displayed data are read out from the instance data set (database). Database is locked with password.
	Device: The displayed data are read out from the device.
	Device locked: The displayed data are read out from the device. Device is locked with password.
3	**States of the instance Date Set**
	- **All data loaded**
	Valid Modified: Parameter is changed (not equal to data source).
	Invalid Modified: Invalid value (e. g. not plausible).
	- **Initial data set**: Parameter value is equal to data source value (data base or field device).
4	**Changes directly made on the Device**
	Changes have only an impact on the device and not on the instance data set. Instance data set and the device may not be consistent any more.
	Load/configure diagnosis parameters: Diagnosis is activated.
5	**Direct Mode active**
	Direct Mode active

More see next page

Status Field	Icon / Meaning	
6	**Device Diagnosis Status**	
		**Device Failure**: Incorrect communication due to malfunction in the field device or its peripherals.
		**Maintenance required**: Although the communication is error-free, the wear reserve is nearly exhausted or a function will soon be restricted due to operational conditions.
		**Off-specification**: The device is operating outside its specified range or internal diagnosis indicates deviations from measured or set values due to internal problems in the device or process characteristics.
		**Device OK**: Communication is error-free.
		**Functional Check**: Communication temporarily incorrect (e.g. frozen) due to on-going work on the device.
		Diagnosis deactivated

Table 7: Status Bar Icons [1]

2 Getting Started

2.1 Configuration Steps

The following table describes the steps to configure a device with the Generic PROFINET IO Device DTM as it is typical for many cases. At this time it is presupposed that the PROFINET IO Controller DTM installation was already done.

#	Step	Short Description	For detailed information see section	Page
1	Add PROFINET IO Device in the Device Catalog	Add the Device in the Device Catalog by importing the device description file to the Device Catalog. Depending of the FDT Container. For netDevice: - **Network > Import Device Descriptions**.	*(See User Manual netDevice and netProject)*	-
2	Load device catalog	Depending of the FDT Container: For netDevice: - select **Network > Device Catalog**, - select button **Reload Catalog**.	*(See User Manual netDevice and netProject)*	-
3	Create new project / Open existing project	Depending of the frame application. For the configuration software: - select **File > New** or **File > Open**.	*(See User Manual of the Frame Application)*	-
4	Insert Controller or Device into configuration	Depending of the FDT Container: For netDevice: - in the Device Catalog click to the Controller, - and insert the device via drag and drop **to the line** in the network view, - in the Device Catalog click to the Device, - and insert the device via drag and drop **to the Controller bus line** in the network view.	-	-
5	Configure Device	Configure the Device. - Double click to the device symbol of the Device. - The Generic Device DTM configuration dialog is displayed. In the Generic Device DTM configuration dialog: - select **Configuration > Modules**, - configure the PROFINET IO device modules. - close the Generic Device DTM configuration dialog via the button **OK**.	*Configuring Device Parameters* *Modules*	20 23
6	Configuration Steps Controller device	Configure the Controller device via PROFINET IO-Controller DTM. Important: Enter the name of station and the IP settings of the PROFINET IO Device station.	*(See User Manual DTM for PROFINET IO-Controller devices)*	-
7	Save project	Depending of the frame application. For the configuration software: - select **File > Save**.	*(See User Manual of the Frame Application)*	-

Table 8: Getting Started - Configuration Steps

For information to further steps as **Download Configuration** or **Diagnosis**, refer to the user manual *DTM for PROFINET IO-Controller devices*.

2.1.1 Configuring Device Parameters

The following steps are needed to configure the device parameters using the Generic PROFINET IO Device DTM:

1. In the PROFINET IO-Controller DTM enter the name of station and the IP settings of the PROFINET IO Device station.

2. Configure the modules of the PROFINET IO device.

Therefore you can add either modules or submodules to the configuration or you can change modules. Furthermore you can assign or change slot numbers.

For more information refer to the user manual *DTM for PROFINET IO-Controller devices* or to section *Modules* on page 23.

3 Configuration

3.1 Overview Configuration

Configuration Dialog Panes

The table below gives an overview for the Configuration dialog panes descriptions:

Section	Page
General	*22*
Modules	*23*

Table 9: Descriptions of the Configuration Dialog Panes

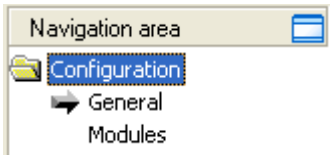

Figure 7: Navigation Area - Configuration

3.2 General

The **General** dialog pane shows the **Name of Station** of the PROFINET IO device and its IP settings. These values are set in the PROFINET IO Controller.

To access to the **General** dialog pane:

- Select **Configuration > General** in the navigation area.

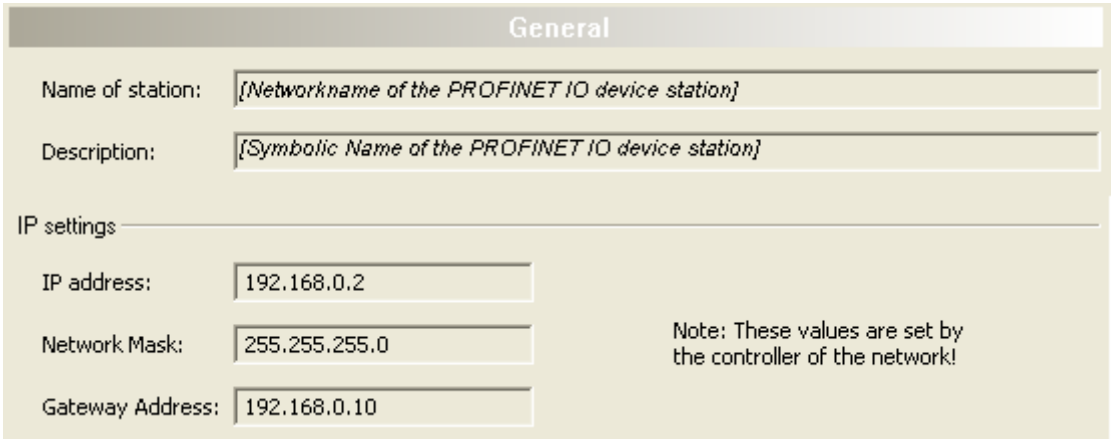

Figure 8: Configuration > General

Parameter	Meaning
Name of Station	Network name of the PROFINET IO device station. (1 - 240 characters). The name of station is set in the PROFINET IO Controller DTM. Here it is only displayed. The PROFINET IO Controller uses the name of station to identify the PROFINET IO Device via the PROFINET network and to build up communication. The name of station displayed here must match with the name of station set in the PROFINET IO Device. The name of station must be explicit in the PROFINET network.
Description	Symbolic Name of the PROFINET IO Device station.
IP Settings of the PROFINET IO Device station	
IP Address	The IP address of the PROFINET IO Device station is set in the PROFINET IO Controller DTM. Here it is only displayed. The PROFINET IO Controller device transmits the IP address of the PROFINET IO Device during startup via the PROFINET network to the PROFINET IO Device and thereby configures the PROFINET IO Device.
Network Mask	The Network mask of the PROFINET IO Device station is set in the PROFINET IO Controller DTM. Here it is only displayed. The PROFINET IO Controller device transmits the Network mask of the PROFINET IO Device during startup via the PROFINET network to the PROFINET IO Device and thereby configures the PROFINET IO Device.
Gateway Address	The Gateway address of the PROFINET IO Device station is set in the PROFINET IO Controller DTM. Here it is only displayed. The PROFINET IO Controller device transmits the Gateway address of the PROFINET IO Device during startup via the PROFINET network to the PROFINET IO Device and thereby configures the PROFINET IO Device.

Table 10: General Pane Parameters

3.3 Modules

On the **Modules** pane the configured modules of a PROFINET IO device are displayed. To configure the modules:

➢ Select **Configuration > Modules** in the navigation area.

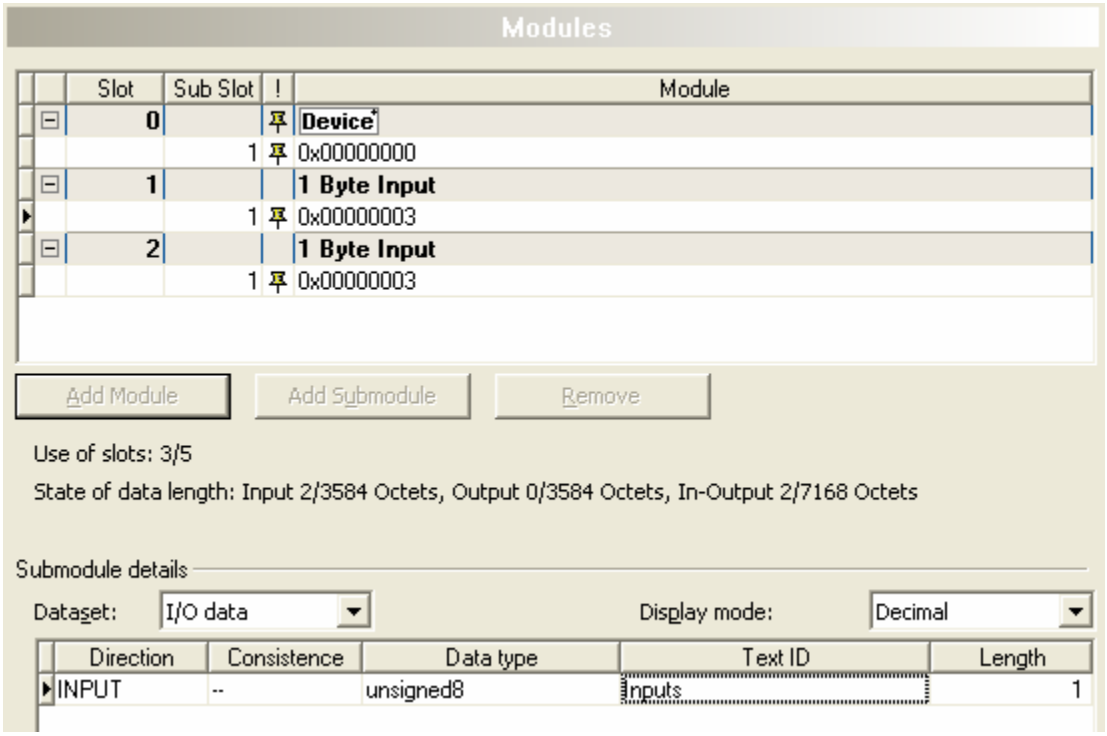

Figure 9: Configuration > Modules Pane (The Name of the device is displayed.)*

3.3.1 Modules Table

The modules table allows to configure the modules of a PROFINET IO device. I. e., modules or submodules can be added, changed or removed.

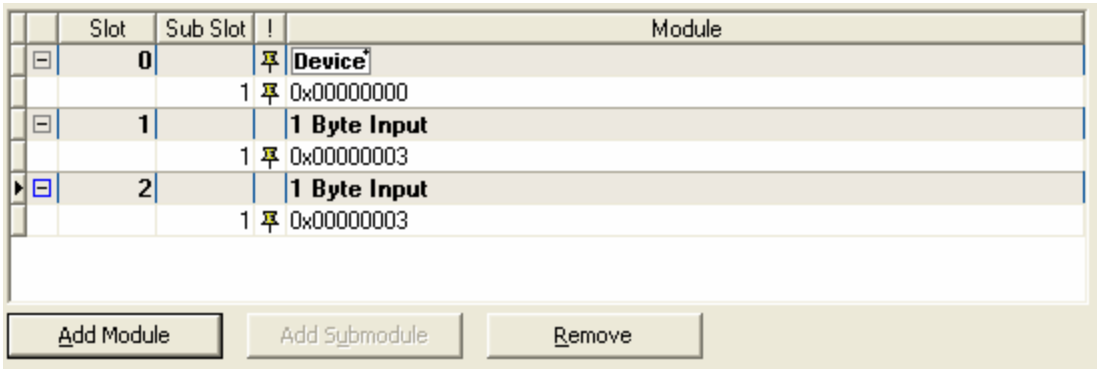

Figure 10: Configuration > Modules Table (The Name of the device is displayed.)*

Parameter	Meaning
Slot	Shows the current **Slot** number assigned to a module. When clicking the slot field, the automatically updated drop-down-list of the free and allowed **Slot** numbers is displayed. By changing the slot number, the sequence of the modules can be changed.
Sub Slot	Shows the current **Sub Slot** assigned to a submodule. When clicking the sub slot field, the automatically updated drop-down-list of the free and allowed **Sub Slot** numbers is displayed. By changing the slot number, the sequence of the modules can be changed.
!	Slot icon tag: indicates the usage of the (sub-)module.
	: Slot number, subslot number and module name are not changeable.
	no icon: Slot number, subslot number and module name are changeable.
Module	Module name as defined in the GSDML file.
'Add Module' Button	Use the **Add Module** button to add a module to the device configuration below the current line .
'Add Submodule' Button	Use the **Add Submodule** button to add a submodule to the selected module of the device configuration below the current line .
'Remove' Button	Use the **Remove** button to remove the selected (sub-)module from the configuration below the current line .
	The arrow symbol shows the current line in the table. This line is the reference for the buttons **Add Module**, **Add Submodule** and **Remove**.

Table 11: Modules Pane Parameters

3.3.2 Configure Modules

To configure the modules of a PROFINET IO device, first consider the following description on how to proceed:

Note: For devices with GSDML XML schema version = 1.0, every module has one submodule assigned. No additional submodules can be added, and the assigned submodule can not be removed. For devices with GSDML XML version = 2.0, you can configure the submodules, and these submodules can be added or removed from the corresponding module.

Modules description in GSDML file differentiates between *fixed in slot, used in slot* and *allowed in slot* modules. *Fixed in slot* and *used in slot* modules are automatically configured, *allowed in slot* modules can be configured.

3.3.2.1 1. Adding Modules or Submodules to the Configuration

To add additional available modules or submodules:

1. Select the line to insert a module or submodule.
2. Click the **Add Module** or **Add Submodule** button.

↳ Starting from the selected line, additional modules or submodules are added at the next free slot or sub slot.

3. Click the **Apply** or **OK** button to confirm your changes, or cancel to skip.

3.3.2.2 2. Changing Modules Configuration / remove Module

If you want to change the configuration, follow these steps.

1. Select the line of the module or submodule.
2. Open the modules' drop-down list.

➪ The modules' drop-down list shows all available modules or submodules for the respective slot.

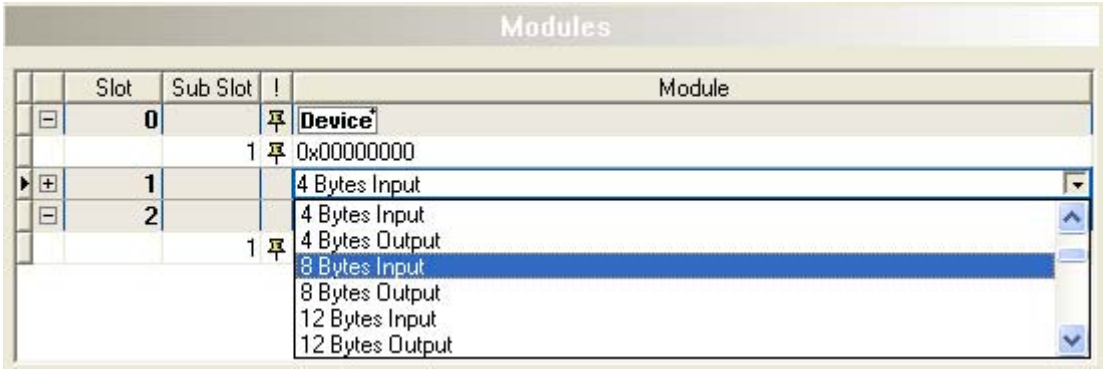

Figure 11: Changing Modules using Drop-Down Control (The Name of the device is displayed.)*

Note: If no appropriate and allowed modules or submodules are displayed in the modules' drop-down list of a slot, then only to the following next free slot modules or submodules can be added .

3. Select the next available and allowed module or submodule.
4. Click on the **Apply** or **OK** button to confirm your changes, or cancel to skip.

To remove modules or submodules:

➢ Use the Remove button or **DELETE** key to remove the selected module or submodule from the configuration.

Fixed in slot modules can not be removed.

3.3.2.3 3. Changing Slots

Note: Slot or sub slot numbers for *fixed in slot* modules or submodules can not be changed.

To change the **Slot** or **SubSlot** numbers of a configured module or submodule:

1. Select the cell of the available slot/sub slot to be changed.

➪ The drop-down list shows all free and allowed slots or sub slots of the module or submodule.

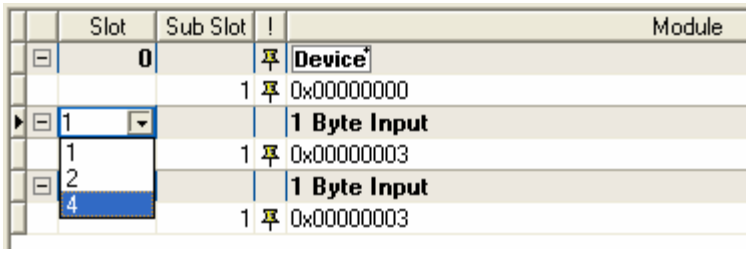

Figure 12: Assigning (Sub) Slots to Modules using Drop-Down Control (The Name of the device is displayed.)*

2. Select the desired slot/sub slot number.
3. Click on the **Apply** or **OK** button to confirm your changes, or cancel to skip.

3.3.3 Configuration Info

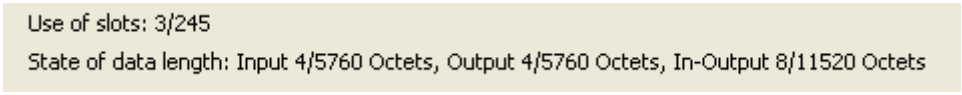

Figure 13: Configuration > Modules - Configuration Info

The configuration is validated regarding the maximum number of input/output bytes and modules.

Parameter	Meaning
Use of slots:	Number of configured modules / max. allowed modules.
State of date length:	Indicates state of data. Input: Current number of input data / max. allowed number of input data. Output: Current number of output data / max. allowed number of output data. In-/Output: Current number of input/output data / max. allowed number of input/output data.

Table 12: Modules Pane Parameters - Configuration Info

3.3.4 Submodules Details

The **Submodule details** configuration area displays the details of the current selected module.

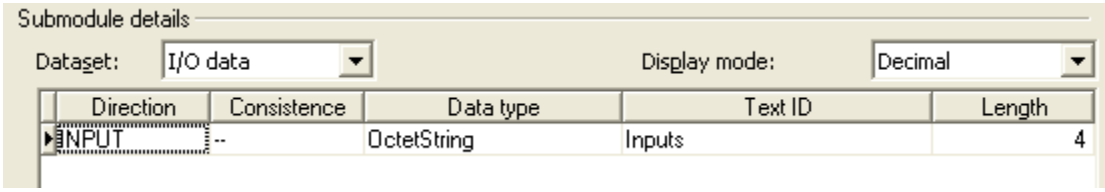

Figure 14: Configuration > Modules - Submodules Details > Dataset: I/O data

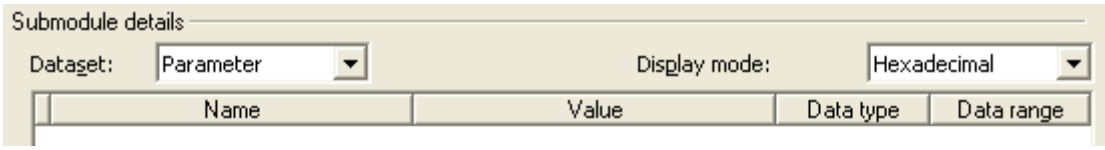

Figure 15: Configuration > Modules - Submodules Details > Dataset: Parameter

Parameter	Meaning
Dataset	Displayed dataset: I/O data or Parameter
Display mode	Under **Display Mode** the display mode of the module configuration data is predefined decimally or hex decimally.
Dataset: I/O data	
Direction	Input/output direction of the PROFINET IO-Data
Consistence	Specifies the input characteristics of a submodule. By default the data are transmitted coherently. [2]
Data type	Defines the data type of the data signal. [2]
Text ID	Text ID of the submodule from the GSDML file.
Length	Length of IO-Data.
Dataset: Parameter	
Name	Defines the name of the parameter.
Value	Indicates the value of the parameter.
Datatype	Defines the data type of the parameter.
Data range	Defines the range of the parameter value.

Table 13: Modules Pane Parameters - Submodules Details

4 Description

4.1 Overview Description

Description Dialog Panes

The table below gives an overview for the individual **Description** dialog panes descriptions:

Subsection	Page
Device Info	31
Module Info	32
GSDML Viewer	33

Table 14:Descriptions of the Description Panes

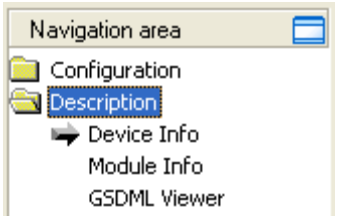

Figure 16: Navigation Area - Description

4.2 Device Info

The **Device Info** pane displays manufacturer information about the device, which is defined in the GSDML file.

Name	Value
Main family	Attribute of the GSDML family element. It contains the assignment of the device to a function class. One of the following values are allowed: General Drives, Switching devices, I/O, Valves, Controllers, HMI, Encoders, NC/RC, Gateway, Programmable Logic Controllers, Ident systems, PROFIBUS PA Profile, Network Components Sensors.
Product family	Attribute of the GSDML family element. It contains the vendor specific assignment of the device to a product family. In addition to the main family a device can be assigned to a vendor specific product family.
DAP vendor name	Attribute of the GSDML ModuleInfo/VendorName element. The VendorName element contains the name of the device vendor. The device access point (DAP) is a module of the GSDML to describe the device parameters device specific. The device access point object contains most of the device related keywords.
DAP hardware release	Attribute of the GSDML ModuleInfo/HardwareRelease element. The HardwareRelease element contains the hardware release of the DAP.
DAP software release	Attribute of the GSDML ModuleInfo/SoftwareRelease element. element The SoftwareRelease element contains the software release of the DAP.
Extended address assignment	Attribute of the GSDML DeviceAccessPointItem element. It depends from the protocol for the assignment of the IP addresses supported by the DAP. Default: “false”, for the Discovery and Configuration (DCP), “true” for the Dynamic Host Configuration Protocol (DHCP)
Physical slots	Attribute of the GSDML DeviceAccessPointItem element. This list describes which slots are supported by the DAP. The Slot number of the DAP itself shall be part of the list.
Max. IO data length	Attribute of the GSDML DeviceAccessPointItem IOConfigData element. It contains the maximum length of the output and input data in octets. MaxDataLength shall not be less than the highest value of MaxInputLength or MaxOutputLength. It shall not be greater than the sum of MaxInputLength and MaxOutputLength. If this keyword is not provided, the maximum length is the sum of MaxInputLength and MaxOutputLength.
Max. input data length	Attribute of the GSDML DeviceAccessPointItem IOConfigData element. It contains the maximum length of the data in octets which can be transferred from the IO Device to the IO Controller. This length is defined by the sum of the input data of all used submodules, the corresponding IO producer status and the IO consumer status of the used output submodules.
Max. output data length	Attribute of the GSDML DeviceAccessPointItem IOConfigData element. It contains the maximum length of the data in octets which can be transferred from the IO Controller to the IO Device. This length is defined by the sum of the output data of all used submodules, the corresponding IO producer status and the IO consumer status of the used input submodules.
Info text	GSDML ModuleInfo/InfoText element. This element contains human readable additional text information about the device.

Table 15: Device Info

4.3 Module Info

On the **Module Info** pane the **Select module** drop-down list displays all available modules described in the GSDML file.

In the table below the corresponding information for the current selection (Vendor ID, Main family, …) is displayed.

Control	Meaning
Select module	Drop-down list, displays all available modules described in the GSDML file. In the table below the corresponding information for the current selection is displayed.

Name	Value
Vendor ID	Identification number of the vendor.
Main family	Attribute of the GSDML family element. It contains the assignment of the device to a function class. One of the following values are allowed: General Drives, Switching devices, I/O, Valves, Controllers, HMI, Encoders, NC/RC, Gateway, Programmable Logic Controllers, Ident systems, PROFIBUS PA Profile, Network Components Sensors.
Product family	Attribute of the GSDML family element. It contains the vendor specific assignment of the device to a product family. In addition to the main family a device can be assigned to a vendor specific product family.
Modules identifier	Identification number of the module.
Order number	GSDML ModuleInfo/OrderNumber element. It contains the order number of a module.
Hardware release	GSDML ModuleInfo/HardwareRelease element. It contains the hardware release of a module.
Software release	GSDML ModuleInfo/SoftwareRelease element. It contains the software release of a module.
Info text	GSDML ModuleInfo/InfoText element. This element contains human readable additional text information about the module.

Table 16: Module Information

4.4 GSDML Viewer

The **GSDML Viewer** displays the content of the GSDML file of the device in HTML style in a text view.

Under **Filename** the absolute file directory path and the file name of the displayed GSDML file is displayed. **Find what** offers a search feature to search for text contents within the text of the GSDML file.

In the GSDML Viewer window the entries show the GSDML file in text format.

Parameter	Meaning
FIlename	File directory path and the file name of the displayed GSDML file.
Find what	Search feature to search for text contents within the text of the GSDML file.
Match case	Search option
Match whole word	Search option

Table 17: Device Description – GSDML Viewer

5 Lists

5.1 List of Figures

5.2 List of Tables

6 Glossary

DCP

Discovery and Configuration Protocol.

DNS

Domain Name Service.

DTM

Device Type Manager.

The Device Type Manager (DTM) is a software module with graphical user interface for the configuration or for diagnosis of device.

FDT

Field Device Tool

FDT specifies an interface, in order to be able to use DTM (Device Type Manager) in different applications of different manufacturers.

GSDML

GSDML = General Station Description Markup Language.

Module

Hardware or logical component of a physical device.

Name of Station

The **Name of Station** is defined by the DNS compatible device name in the GSDML file. It can be modified according to the DNS name specification. If the PROFINET IO device does use the name baptism the **Name of Station** is set by the PROFINET IO device.

PROFINET IO-Controller

A PROFINET control unit responsible for the defined run-up of an I/O subsystem and the cyclic or acyclic data exchange.

PROFINET IO Device

A PROFINET field device that cyclically receives output data from its IO-Controller and responds with its input data.

Slot

Address of a structural unit within a PROFINET IO device.

Subslot

Subslot address of a structural unit within a slot.

Submodule

Hardware or logical component of a module.

7 Appendix

7.1 User Rights

User-rights are set within the FDT-container. Depending on the level the configuration is accessible by the user or read-only.

To access the **Configuration** and **Description** panes of the Generic PROFINET IO Device DTM you do not need special user rights.

Note: To edit, set or configure the parameters of the **Configuration** panes, you need user rights for *Maintenance,* for *Planning Engineer* or for *Administrator*.

The following tables give an overview of the user right groups and which user rights you need to configure the single parameters.

7.1.1 Configuration

	Observer	Operator	Maintenance	Planning Engineer	Adminis-trator
General	D	D	X	X	X
Modules	D	D	X	X	X

Table 18: Configuration (D = Displaying, X = Editing, Configuring)

7.2 References

[1] Device Type Manager (DTM) Style Guide, Version 1.0 ; FDT-JIG - Order No. <0001-0008-000>

[2] GSDML Specification for PROFINET IO, Version 2.10 August 2006, Order No: 2.352, PROFIBUS Nutzerorganisation e.V., Karlsruhe

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