# Communication-DTM

## Profibus Communication-DTM for FDT

Communication-DTM Profibus Communication-DTM for FDT

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# 1 Introduction

## 1.1 Important indications

The Communication-DTM for the FNL and the DF_Profi was tested in the listet FDT-Container-programms:

- PactWARE of the PactWARE-group
- Fieldcare of Endress & Hauser
- FdtContainer of M&M Software

We don't guarantee at this time a proper operation in other frame applications.

The Communication-DTM operates with FDT-specification 1.2a.

The Communication-DTM of Comsoft supports only DP-Master class 2 operation mode with Profibus DPV1 services.

## 1.2 Installation of software

Log in with administrator rights under Windows NT/2000/XP.

The installation is started by a double-click on Setup.exe.

During the setup of the Communication-DTM all components will be registered. The FDT-Frame-Application identifies the installed DTMs by special keys in the registry.

All upcoming registration errors during installation, if for instance a dll could not be registered, anticipate the proper operation of the Communication-DTM .

### 1.2.1 System requirements

To run the DTM propperly, the following prerequisites have to be fulfilled

- Windows NT 4.0 with Service Pack 2 or better or Windows 2000/XP.
- The Internetexplorer Version 6

Windows 95/98/ME is not supported.

### 1.2.2 Uninstall the software

If you want to use the Commuication-DTM later on, please bring the license back to the disk, before uninstalling.

The DTM can be unistalled by using the uninstall button under Setting \ System Control \ Software. Please do not delete the installation path before uninstalling the software.

## 1.3 Installation of hardware

The hardware installation of the FNLs is described in detail in a separate manual called “FNL (Fieldbus Network Link) installation instructions”. Also for the different versions of the DF_Profi board, separate instruction manuals are available.

The proper installation of the hardware is an important prerequisite for the smoothly operation of the Communication DTM.

### 1.3.1 System requirements

At minimun a computer with Pentium II 200 MHz processor or better, XGA Graphics and a Microsoft compatible mouse or an equivalent pointing device is required.

## 1.4 Co-operation of soft- and hardware

In FDT the hardware is recreated logically in software.

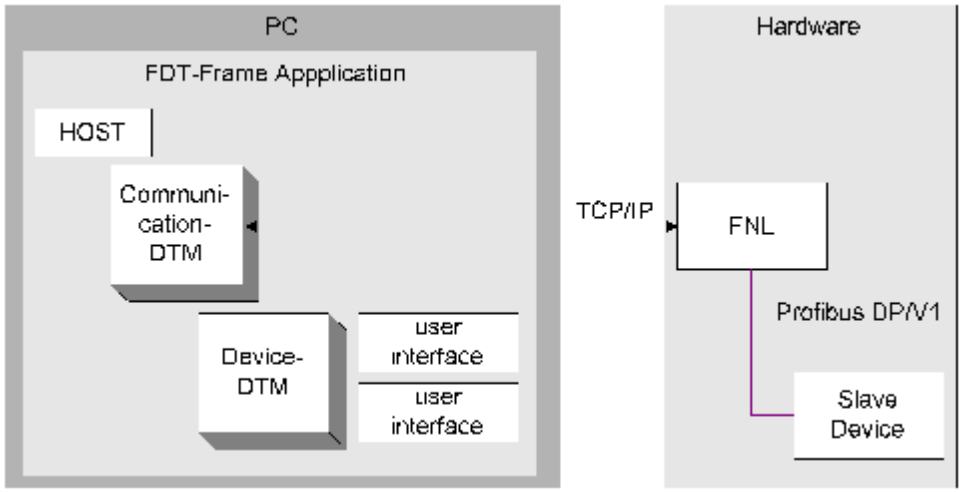


Figure 1: FDT – Communication schema

The data transfer with FDT is not adapted for fast cyclic services. Because of this, the Communication-DTM works as DP-Master class 2 and provides only Profibus DPV1 services to the DP-Slaves. In the frame application it is only possible to use Profibus DP-Slaves with the Communication-DTM, witch also provide acyclic DPV1-services.

The user interface of the DP-Slave-DTMs is on one hand used to configure the DP-Slaves and on the other to observe the parameters and functions of the DP-Slave.

The user interface implemented in the Comsoft Communication-DTM is used to configure the master and to set the bus parameter. There are standard parameter for every Baudrate but they could be changed by the user.

## 1.5 Usage in the frame application

The COMSOFT-Communication-DTM should appear in the Device catalogue after installation. If it does not appear, the Device catalogue must be reinitialized.

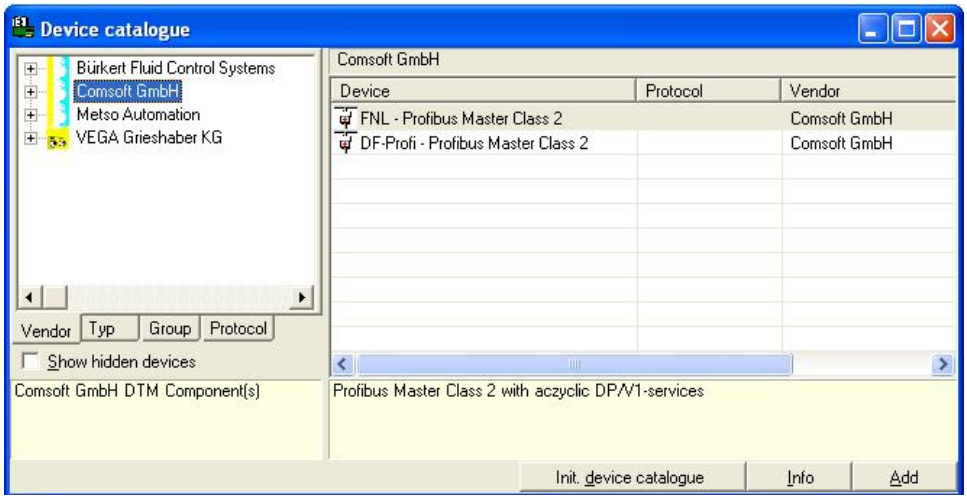


Figure 2: Device catalogue of the PACTWare- Frame Aoolication

The maximum number of FNLs or DF_PROFI boards to be operated on one PC is limited to 8. It is not possible to use FNLs and a DF-PROFI device at the same time in one frame application. For each device a separate Communication-DTM must be opened.

To activate the Communication-DTM it must be inserted below the Host PC symbol in the frame applications project window. In Pactware the Add-Button of the device catalogue, or the “Add device” function of the Host PC’s right mouse button menu can be used. This is normally the easier way, because only suitable devices are listed, e.g. for the Profibus Communication-DTM only Profibus compatible DP-Slave-DTMs are selectable.

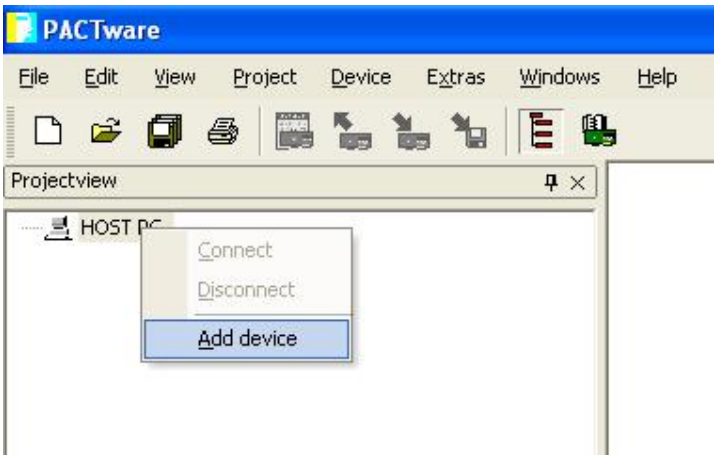


Figure 3: PactWARE: "Add device"

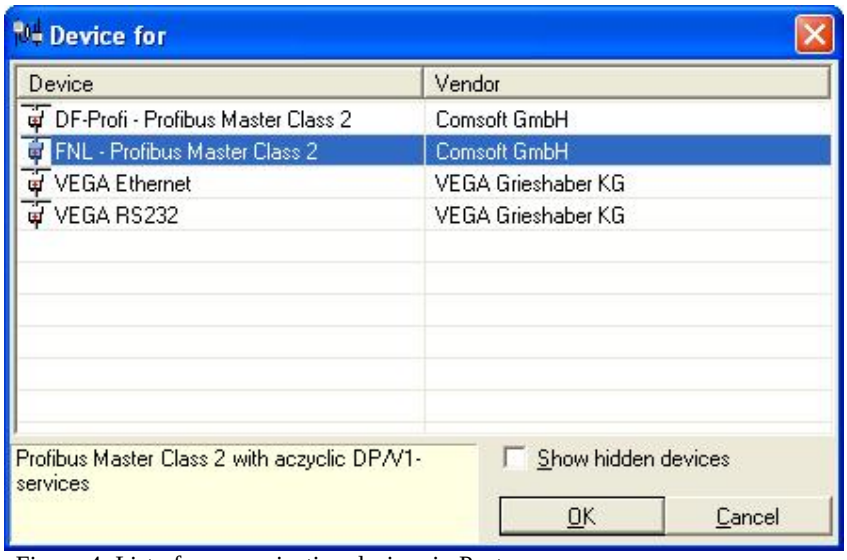


Figure 4: List of communication devices in Pactware

Here the user has to select the Communication DTM for the hardware.

Depending on the type of hardware a list of the installed devices will appear, so the user can select the one he will work with at this moment. If there is only one type of hardware installed this will automatically used and the dialog do not appear.


Figure 5: Selection-Box of FNLs

Is the selected device is already in use, an error message is shown. If this happens the Communication-DTM mast be deleted and loaded once more after closing the other application. In some cases the board itself must get a Reset. This is done by switching off the power supply of the device (FNL).

In the frame application the DP-Slaves to communicate with must be added below the Communication-DTM. This is done in the same way as for the Communication-DTM (via the device catalog or the right mouse button menue). Additional Communication-DTMs can be added directly below the host-PC.

### 1.5.1 Bus Parameter

For a proper communication between DP-Master and DP-Slave, the Profibus must be configured. This is carried out by the window Bus Parameter, which can be activated via the right mouse button menue of the Communication-DTM.

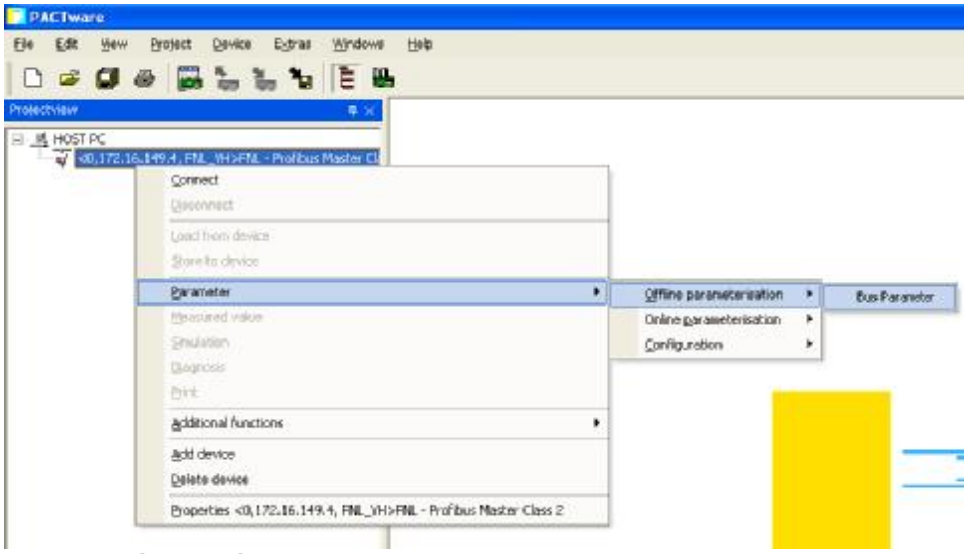


Figure 6: Right mouse button menue in PACTWare

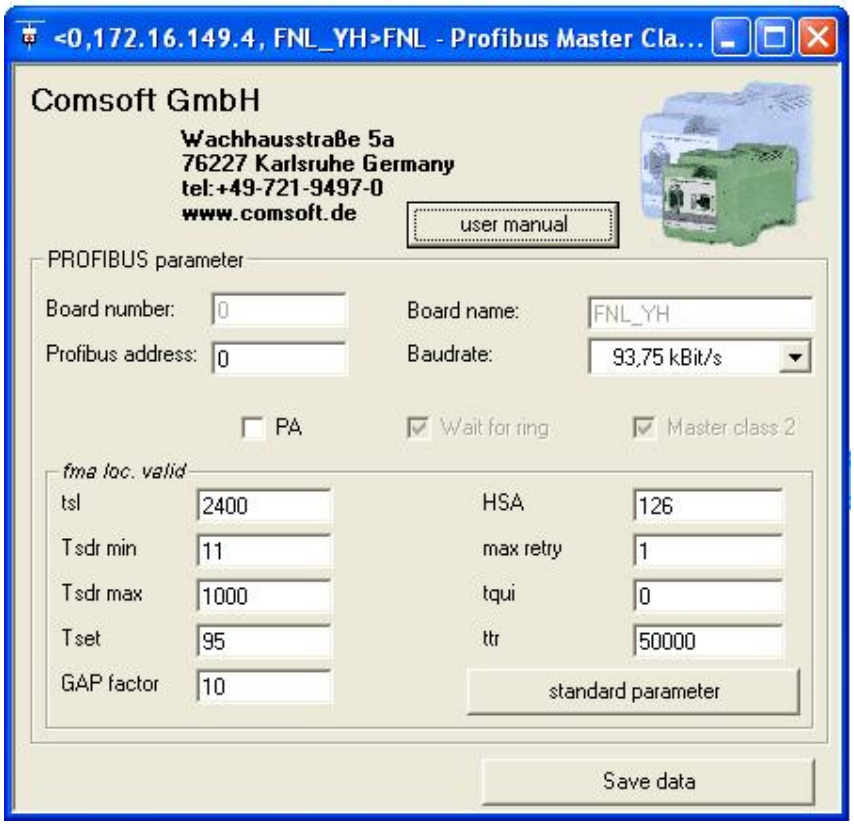


Figure 7: Configurator

Here the user can give a Profibus address to the master an change the baudrate and the parameters. By pressing the “Save data”-button the parameters are set to the DTM.

On connection the bus parameters will set to the Profibus master. If the connection is on, the “Bus Parameter” mask could not be changed.

For initiate the Slaves here are the parameter listed, which are used:

| **Paramters Initiate** | **Wert** |
|---|---|
| Send timeout | 2000 *10ms |
| Feature supported | 0x01 00 |
| Profile feature supported | 0x00 00 |
| Profile ident | 0x0000 |
| S_Add | 0x00 |
| S_len | 0x02 |
| D_Add | 0x00 |
| D_len | 0x02 |

Table 1: Standard parameter for Initiate

| **Paramters Abort** | **Wert** |
|---|---|
| Subnet | 0x00 |
| Reason | 0x32 |
| Additional Detail | 0x00 |

Table 2: Standard parameters for Abort

The c_ref for the slaves is build inside the communication-DTM. The data length of the Profibus READ function is set for every slave to the slave specific parameter MaxDataLen witch were send back to the master on Initiate function. For the Profibus header we differ four bytes.

If there is a DP-Master class 1 connected to the bus, the bus parameters for the Communication-DTM must be identical to that of the DP-Master class ,1 except the bus address. Otherwise the Master class 2 can not be accepted on the bus.

### 1.5.2 Select another hardware

Over the menu another hardware can be used, if there are at minimum two different once. The selection mask known from adding the DTM will be shown.

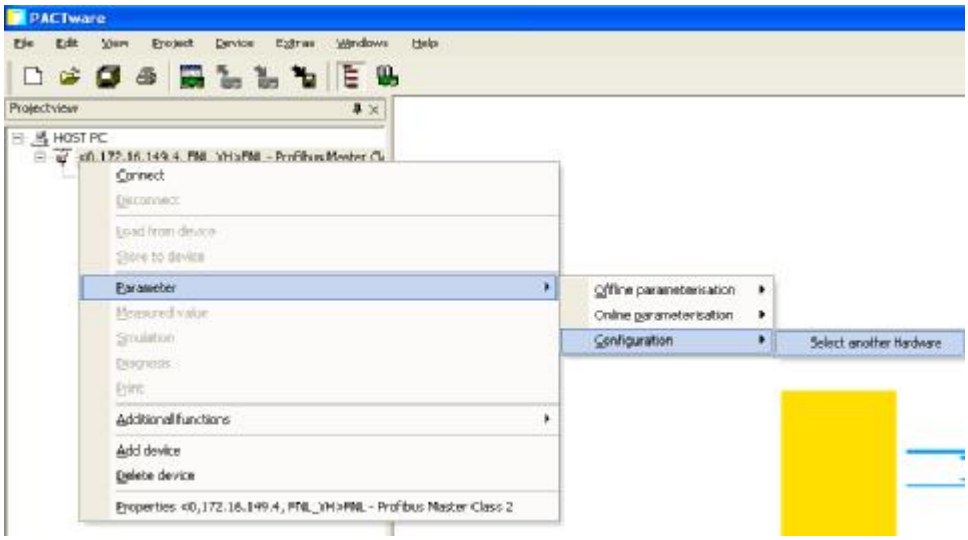


Figure 8: Select another hardware

### 1.5.3 Profibus Service SetSlaveAddress

The Profibus address of a device can set over Profibus as well. To do so the device-DTM must be added to the Communication-DTM and the Connection must exist. Over the menu on “Online parameter – Set Slave Address (profibus sevice)” this function can be started.

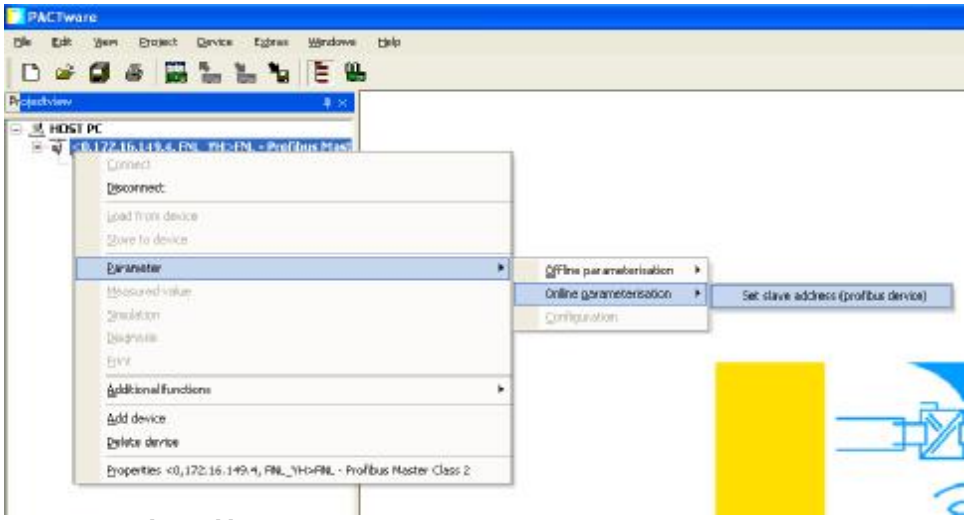


Figure 9: SetSlaveAddress Menu


Figure 10: Profibus service SetSlaveAddress

The dialog shows all Slaves, added on the Communication-DTM in the Container. Now one DTM can be selected. Set the actual address and the new one and press button. There is a possibility, that the slave can afterwards not set the slave address again. Now the Communication-DTM make a SlaveDiag to the actual address to get the right ident-number. This is used in the next Service, SetSlaveAddress. Afterward an SlaveDiag for testing the new address will be made. The status shows, if address could be changed. If it was successful, the device-DTM will get a notification that the slave address was changed. Because of this the Container afterwards has the really slave address.

### 1.5.4 Additional functions

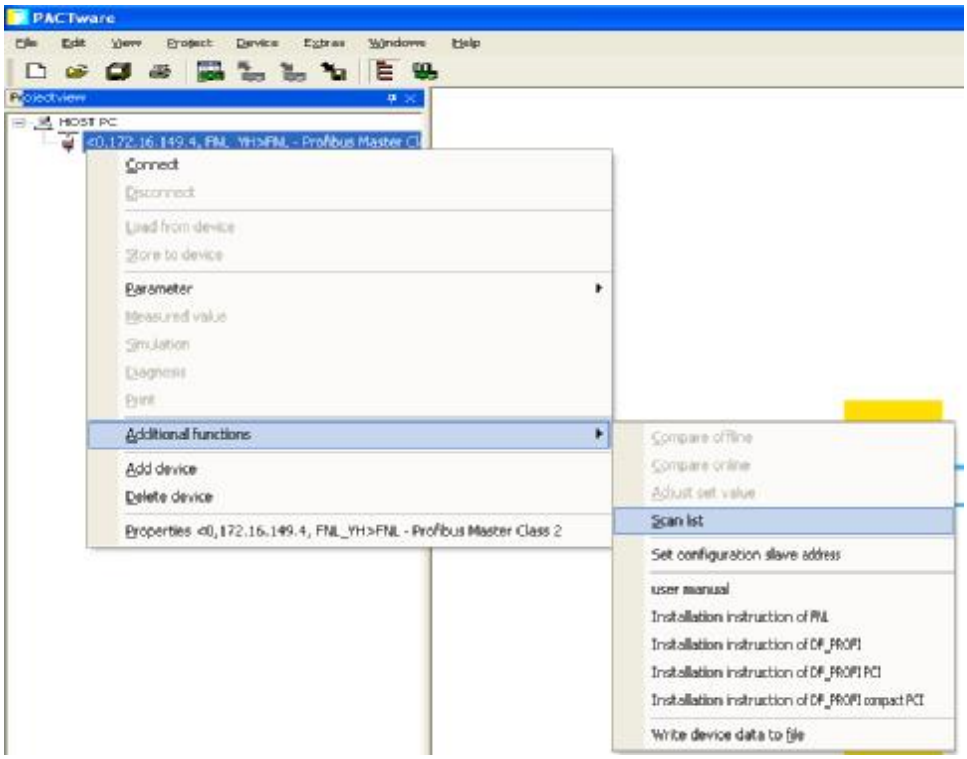


Figure 11: Right mause button menu in PACTWare

#### 1.5.4.1 Installation Instructions

The installation instructions for the hardware can be found either in the installation directory of the Communication-DTM or in the frame application in the right mouse button menu within the additional functions.

### 1.5.4.2 Bus Scan

In some containers the user can find there a Bus Scan. With this function you can look for the bus addresses of the slaves which are set on the hardware.

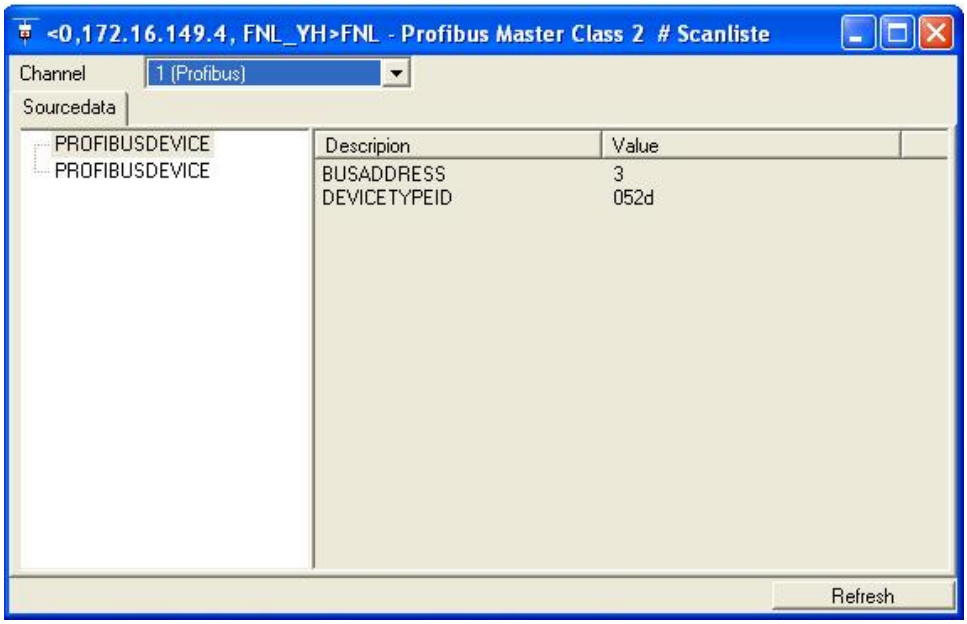


Figure 12: Bus Scan Result

### 1.5.4.3 Set Profibus Address for a Slave in Container

With the entry “Set slave address” you can set a new Profibus address to a slave. In the Windows there is a choicebox with all slaves depending on the Communication-DTM and there actual address.


Figure 13: Set Profibus Slave Address

## 1.6 Data exchange with the Communication DTM

If a DP-Slave-DTM wants to exchange data with its appropriate DP-Slave hardware it must be connected to a Communication-DTM. In some frame applications this is done by setting the DP-Slave online.

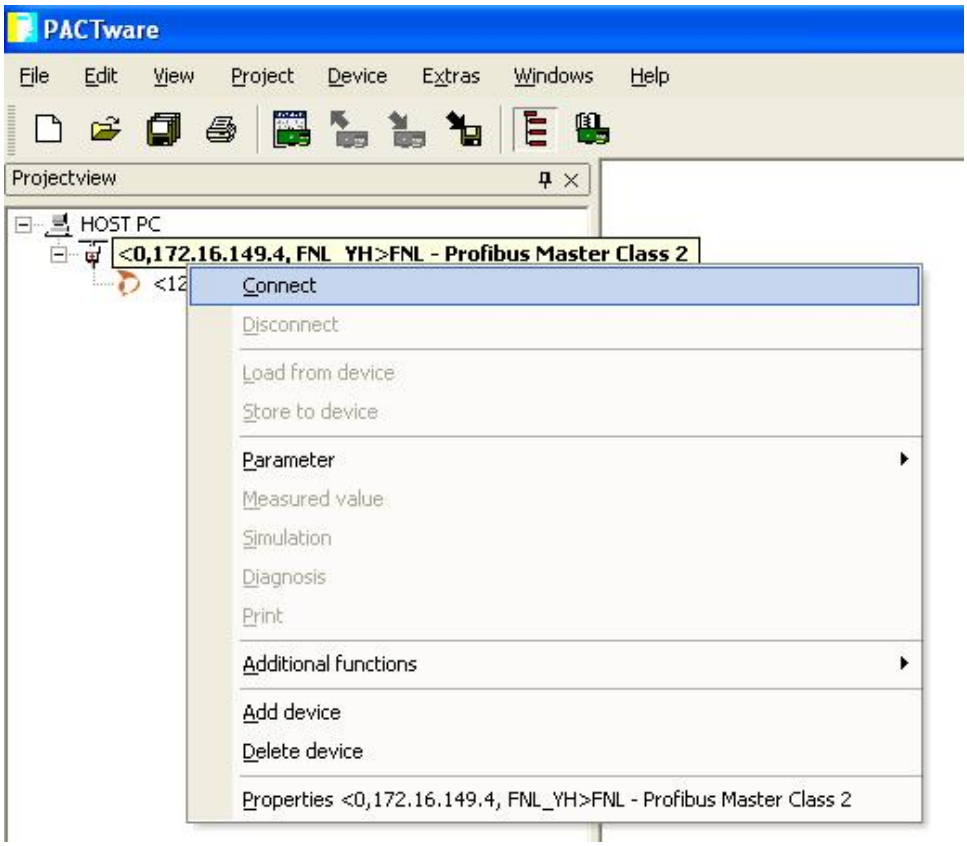


Figure 14: PactWARE: Connection between the DTMs

Now the DTMs can communicate via FTD. During a parameter download or upload data are directly exchanged with the hardware device. In this case the Communication-DTM will work as a translator between Profibus data services and the FDT-communication.

If errors appear in the Profibus communication, they will be indicated to the user in the frame application.

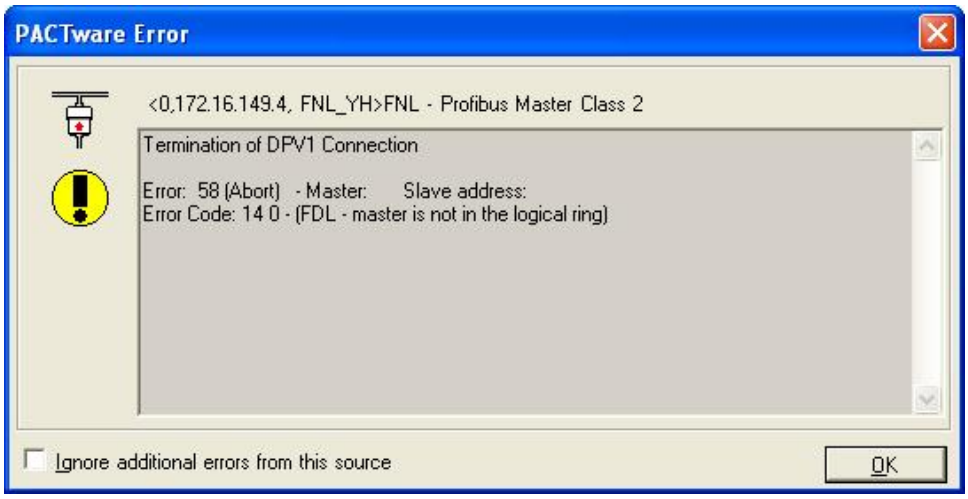


Figure 15: Example of an error message

The proceeding parameter download is indicated by a progress bar. The displaying of the progress bar depends on the amount of parameters . If there is only a little amount of parameters the progress bar does not appear. How much and which parameters are exchanged depends on the device-DTM, the parameters changed by the user etc.. Some DP-Slave-DTMs support an online user interface which is updated automatically in online mode. In this case the data exchange is carried out continuously as long as the online mode is active.

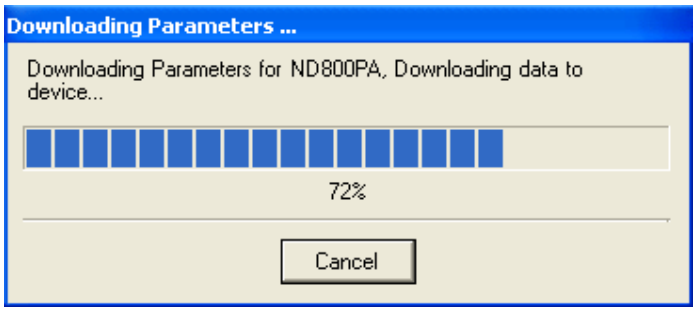


Figure 16: Progress bar

The more DP-Slaves are connected to one Communication-DTM the slower the communication is processed in the frame application. We would therefore recommend, especially for the upload or download mode of parameters, to reduce the amount of DP-Slaves which are in online mode to a minimum. If there are several instances of the Comsoft Communication-DTM running simultaneously in one frame application the manual disconnection of a single DP-Slave will need a longer time.

# 2 : FAQ

# 3 Status- and Error message

## 3.1 Profibus-Errors

### 3.1.1 DPV1-Error message

| Functions-number | Meaning | Answer | Meaning |
|---|---|---|---|
| 0x57 | Initiate | 0xD7 | Error Initiate |
| 0x58 | Abort | | |
| 0x5E | Read | 0xDE | Error Read |
| 0x5F | Write | 0xDF | Error Write |
| 0x51 | Data Transport | 0xD1 | Error Data Transfer |

Table 1: Function- and Errorcode of DPV1

#### 3.1.1.1 Error Decode

| Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 | |
|---|---|---|---|---|---|---|---|---|
| _____ | | | | | | | | Meaning Error Code |

Table 2: Error Decode

**Acception:**

| **Error code** | **Meaning** |
|---|---|
| 0 to 127 | Reserved |
| 128 | DPV1 |
| 129 to 253 | Reserved |
| 254 | PROFIBUS FMS |
| 255 | HART |

Table 3: Acception of Error Decode

### 3.1.1.2 Error Code 1 and 2

| Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Meaning Error Code |
| Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 | |
| | | | | | | | | Meaning Error Class 2 |

Table 4: Error Decode 1 and 2

**Acception:**

| Error Class | Meaning | Error Code | Meaning |
|---|---|---|---|
| 0 to 9 | Reserved | | |
| 10 | Applikation | 0 | Read error |
| | | 1 | Write error |
| | | 2 | Module failure |
| | | 3 to 7 | Reserved |
| | | 8 | Version conflict |
| | | 9 | Feature not supported |
| | | 10 to 15 | User specific |
| 11 | Access | 0 | Invalid index |
| | | 1 | Write length error |
| | | 2 | Invalid slot |
| | | 3 | Type conflict |
| | | 4 | Invalid area |
| | | 5 | State conflict |
| | | 6 | Access Denied |
| | | 7 | Invalid range |
| | | 8 | Invalid parameter |
| | | 9 | Invalid type |
| | | 10 to 15 | User specific |
| 12 | Resource | 0 | Read contain conflict |
| | | 1 | Write contain conflict |
| | | 2 | Resource busy |
| | | 3 | Resource unavailable |
| | | 4 to 7 | Reserved |
| | | 8 to 15 | User Specific |
| 13 to 15 | User specific | | |

Table 5: Error Code DPV1

### 3.1.1.3 Instance und Reason Code of Abort (1.Byte)

| Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 | Meaning |
|---|---|---|---|---|---|---|---|---|
| ---------- | | | | | | | | Reason Code |
| ---------- | | | | | | | | Instance: |
| ---------- | | | | | | | | Reserved default 0 |

Table 6: Instance- and Reason-Code of ABORT

**Instance**

| Code | Meaning |
|---|---|
| 00 | FDL |
| 01 | MSAC_C2 |
| 10 | USER |
| 11 | Reserved |

Table 7: Instance

**ReasonCode für MSAC_C2 (1.Byte)**

| Reason Code | Name | Meaning |
|---|---|---|
| 1 | ABT_SE | Sequence error<br>service not allowed in this state |
| 2 | ABT_FE | Invalid request PDU received |
| 3 | ABT_TO | Timeout of connection |
| 4 | ABT_RE | Invalid response PDU receiped |
| 5 | ABT_IV | Invalid service from USER |
| 6 | ABT_STO | Send timeout requested was to small |
| 7 | ABT_IA | Invalid additional address information |
| 8 | ABT_OC | Wait for FDL_DATA_Reply.con |

Table 8: ReasonCode for MSAC_C2

**2.Byte: Additional Detail:**

If Instance-Code is MASC2 and Reason-Code is ABT_STO, then the Send-Timeout will be set in RM_REQ_PDU.

## 3.2 FNL-Error message

| Code | Identifier | Meaning |
|---|---|---|
| 1 | NOT_SYN | The firmware tried futile to find a correct beginning of a telegram. Perhaps the baudrate is not set correctly. |
| 2 | TIME_OUT | The firmware didn't detect a token telegram from the other DP-Master, so it will send a token to itself. |
| 3 | DUPLICATE_ADDRESS | The firmware recognized another DP-Master at the same busadress by reading token telegrams. It meight be give another DP-Master with the identical station address. |
| 4 | IN_RING | The DP-Master is set to the logical token communication and received from now an regular token telegrams. |
| 5 | OUT_OF_RING | The DP-Master was unexpectedly ignored from the token transduction of its logical predecessor |
| 7 | FAULTY_TRANSCEIVER | By sending and receiving the token telegram at the same time the telegram wasn't received correctly. Probably some parts of the send/receive hardware are defect.. |

Table 9: Event-Codes FNL

| **Code** | **Meaning** |
|---|---|
| 0x9000 0000 | TMG_DF_E_BASE |
| 0x20 | TMG_DATA_LOW_RECEIVED |
| 0x30 | TMG_DATA_HIGH_RECEIVED |
| 0x9100 0000 | NO_GETSENDBOX_M |
| 0x9200 0000 | NO_WAITSENDBOX_M |
| 0x9001 0000 | FKT_GET_FNL_NAMES |
| 0x9002 0000 | FKT_TEST_TMG_BOARD |
| 0x9003 0000 | FKT_LOAD_TMG |
| 0x9004 0000 | FKT_DISPATCH_TMG |
| 0x9005 0000 | FKT_LOADBUSPARAM |

| Code | Meaning |
|---|---|
| 0x9006 0000 | FKT_INITDPMASTER |
| 0x9007 0000 | FKT_SLAVEDIAG |
| 0x9008 0000 | FKT_SETPRM |
| 0x9009 0000 | FKT_GETCFG |
| 0x900A 0000 | FKT_CHKCFG |
| 0x900B 0000 | FKT_SETSLAVEADDRESS |
| 0x900C 0000 | FKT_LOADSLAVEPARAM |
| 0x900D 0000 | FKT_STARTDPPOLLLIST |
| 0x900E 0000 | FKT_STOPPOLLLIST |
| 0x900F 0000 | FKT_INITOUTPUTS |
| 0x9010 0000 | FKT_CHECKOUTPUTS |
| 0x9011 0000 | FKT_GETSLAVESTATI |
| 0x9012 0000 | FKT_DATAEXCHANGEREQ |
| 0x9013 0000 | FKT_GLOBALCONTROL |
| 0x9014 0000 | FKT_GETLIVELIST |
| 0x9015 0000 | FKT_TRANSFERPOLLDATAT |
| 0x9016 0000 | FKT_RECONNECT |
| 0x9017 0000 | FKT_READINPREQ |
| 0x9018 0000 | FKT_READOUTPREQ |
| 0x9020 0000 | FKT_XINITIATE |
| 0x9021 0000 | FKT_XABORT |
| 0x9022 0000 | FKT_XREAD |
| 0x9023 0000 | FKT_XWRITE |
| 0x9024 0000 | FKT_XDATATRANSPORT |
| 0x9000 0100 | TMG_GETTMGDEVICENAMES |
| 0x9000 0200 | TMG_CONNECTBOARDEX |
| 0x9000 0300 | TMG_RESETBOARDEX |
| 0x9000 0400 | TMG_DISCONNECTBOARDEX |
| 0x9000 0500 | TMG_GETPROCESSIMAGEPOINTEREX |
| 0x9000 0600 | TMG_BOARDHANDLE_IS:INVALID |
| 0x9000 0700 | TMG_DPR_POINTER_IS_NULL |
| 0x9000 0800 | TMG_PA_BAUD_WRONG |
| 0x9000 0900 | TMG_GETPROCESSDATAEX |
| 0x9000 0A00 | TMG_PUTPROCESSDATAEX |
| 0x9000 0B00 | TMG_GETSTATUSEX |
| 0x9000 C100 | CS_CONNECT |
| 0x9000 0001 | NO_FNL_DEFINED |

Table 10: Error identifier FNL

## 3.3 Error- and Status message DF PROFI-Baugruppe

| Code | Meaning |
|---|---|
| 0x8000 0000 | DF_E_BASE |
| 0x8000 0001 | DF_E_NO_BOARD |
| 0x8000 0002 | DF_E_LOG_INDEX_NULL |
| 0x8000 0003 | DF_E_NO_RESPONSE |
| 0x8000 0004 | DF_E_UNIT_OUT_OF_RANGE |
| 0x8000 0010 | DF_OS_LOADED |
| 0x8000 0011 | DF_OS_INSTALLED |
| 0x8000 0012 | DF_E_LOAD_OS |
| 0x8000 0013 | DF_E_NO_OS |
| 0x8000 0014 | DF_E_SERIAL |
| 0x8000 0015 | DF_E_OS:LENGTH_NULL |
| 0x8000 0016 | DF_E_OS_BUFFER_LEN |
| 0x8000 0017 | DF_E_RETURN_INFO_NULL |
| 0x8000 0018 | DF_E_BLOCK_TIMEOUT |
| 0x8000 0020 | DF_DRV_LOAD |
| 0x8000 0021 | DF_DRV_INSTALLED |
| 0x8000 0022 | DF_E_LOAD_DRV |
| 0x8000 0023 | DF_E_NO_DRIVER |
| 0x8000 0024 | DF_E_LIST |
| 0x8000 0025 | DF_E_SUB_UNIT |
| 0x8000 0026 | DF_E_LOG_UNIT |
| 0x8000 0027 | DF_E_LOG_OVERRUN |
| 0x8000 0028 | DF_E_DRV_LENGTH |
| 0x8000 0029 | DF_E_DRV_BUFFER_NULL |
| 0x8000 002A | DF_E_OLD_VERSION |
| 0x8000 002B | DF_E_LOG_ERROR |
| 0x8000 002C | DF_E_DRV_INSTALLED |
| 0x8000 0030 | DF_E_CLOSED |
| 0x8000 0031 | DF_E_OPEN |
| 0x8000 0032 | DF_E_MODE |
| 0x8000 0033 | DF_E_CANCELED |
| 0x8000 0034 | DF_E_LOG_OPENED |
| 0x8000 0035 | DF_E_LOG_CLOSED |
| 0x8000 0040 | DF_E_WRITE_ACTIVE |
| 0x8000 0041 | DF_E_TX_OVERRUN |
| 0x8000 0042 | DF_E_SEND_SIZE_NULL |
| 0x8000 0043 | DF_E_WRITE_BUFFER_NULL |
| 0x8000 0044 | DF_E_RETURN_TX_NULL |
| 0x8000 0050 | DF_E_READ_ACTIVE |
| 0x8000 0051 | DF_E_RX_OVERRUN |
| 0x8000 0052 | DF_E_REC_SIZE_NULL |

| Code | Meaning |
|---|---|
| 0x8000 0053 | DF_E_READ_BUFFER_NULL |
| 0x8000 0054 | DF_E_RETURN_RX_NULL |
| 0x8000 0055 | DF_E_RECEIVED_OVERRUN |
| 0x8000 0060 | DF_E_GET_LENGTH_NULL |
| 0x8000 0061 | DF_E_GET_BUFFER_NULL |
| 0x8000 0070 | DF_E_SET_LENGTH_NULL |
| 0x8000 0071 | DF_E_SET_BUFFER_NULL |
| 0x8000 0080 | DF_DPP_LOAD |
| 0x8000 0081 | DF_E_DPP_LOAD |
| 0x8000 0082 | DF_E_DPP_NOT_FOUND |
| 0x8000 0083 | DF_E_DPP_READ |
| 0x8000 0084 | DF_E_DPP_FORMAT |
| 0x8000 0085 | DF_E_DPP_DRV_INSTALLED |
| 0x8000 0086 | DF_E_DPP_MEMORY |
| 0x8000 0087 | DF_E_DPP_SERIAL |
| 0x8000 0088 | DF_E_DPP_NOT_SUPPORTED |
| 0x8000 0090 | DF_8051_LOAD_ERROR |
| 0x8000 0091 | DF_8051_NOT_FOUND |
| 0x8000 0092 | DF_8051_LOAD_TIMEOUT |
| 0x8000 0097 | DF_8051_LOAD_8051_ACK |
| 0x8000 0098 | DF_8051_INSTALL_ACK |
| 0x8000 0099 | DF_8051_INSTALL_TIMEOUT |
| 0x8000 00A0 | DF_E_LINPAGELOCK |
| 0x8000 00B0 | DF_E_ALLOC_FAILED |
| 0x8000 00B1 | DF_E_AUTO_RECEIVE_FAILED |
| 0x8000 00B2 | DF_E_PRIVILAGE |
| 0x8000 00B3 | DF_E_BUSY |
| 0x8000 00B4 | DF_E_LOG_RX_OVERRUN |
| 0x8000 00B5 | DF_E_USER_OVERRUN |
| 0x8000 00B6 | DF_E_BUFFER_TO_SMALL |
| 0x8000 00B7 | DF_E_RECEIVED_DISCARD |
| 0x8000 00B8 | DF_E_TRANSMIT_DISCARD |
| 0x8000 00C0 | DF_E_NO_PCIBUS |
| 0x8000 00C1 | DF_E_PCI |
| 0x8000 00C8 | DF_E_INVALID_PARAMETER |
| 0x8000 00D1 | DF_E_8051_NO_PROFI |
| 0x8000 00D2 | DF_E_8051_ALREADY_LOADED |
| 0x8000 00D3 | DF_E_8051_LOAD_ERR |
| 0x8000 00D5 | DF_E_8051_LENGTH_NULL |
| 0x8000 00D6 | DF_E_8051_BUFFER_NULL |
| 0x8000 00D9 | DF_E_8051_INSTALL_TIMEOUT |
| 0x8000 00E0 | DF_E_NO_RESET_PORT |
| 0x8000 00E1 | DF_E_OS_LOADED |
| 0x8000 00E2 | DF_E_CMD |
| 0x8000 00F0 | DF_E_WD_SIZE_WRONG |
| 0x8000 00F1 | DF_E_WD_BUFFER_NULL |

| Code | Meaning |
|---|---|
| 0x8000 00F2 | DF_E_WD_VAL_WRONG |
| 0x8000 00F3 | DF_E_WD_NOT_IN_USE |
| 0x8000 00F4 | DF_E_WD_TIMEOUT |

Table 11: Boardtreibermeldungen DF PROFI

| Code | Meaning | Explanation |
|---|---|---|
| 0x00 | SUCCESS, OK | Job was done successfully |
| 0x01 | WAIT_FOR_CONFIRM | Job not ended yet |
| 0x03 | MASTER_SERVICE_STILL_RUNNING | No parallel DP-Master/master functionality possible |
| 0x04 | SLAVE_SERVICE_STILL_RUNNING | No parallel DP-Master/slave-functionality possible. |
| 0x0B | NO_HEAP_AVAILABLE | No storage of the Resource available |
| 0x20 | DL | Data low received |
| 0x30 | DH | Data high received |
| 0x51 | DP_POLL_LIST_NOT_EXISTENT | No poll-liste defined |
| 0x52 | DP_POLL_LIST_ALREADY_STOPPED | Poll-activity already stopped. |
| 0x53 | DP_POLL_LIST_TOO_LONG | Poll-liste to long |
| 0x54 | DP_POLL_DATA_LIST_TOO_LONG | Poll-daten-puffer is not correspont to the actual process figuree.<br>Polled amount of data transcend the puffer size of the device.<br>TX-puffer-length oversized. |
| 0x55 | DP_POLL_LIST_LEN_INCONSISTENT | TX-puffer-lrngth oversized;<br>Number of stations different. |
| 0x82 | NR | Short acknowledgement received. |
| 0x83 | RR | No storage ressource on the partner |
| 0x91 | RDL | No storage ressource on the partner and Data low received. |
| 0xB1 | RDH | No storage ressource on the partner and Data hight received |
| 0xC1 | UE | Error on the interface of |

| Code | Meaning | Explanation |
|---|---|---|
| | | the partner |
| 0xC2 | RS | SAP not active on the partner;<br>Partner do not maintaine this fuction.;<br>Partner do not maintaine the present state of the function;<br>SAP reserved from another partner. |
| 0xC3 | NA | Partner don't answer |
| 0xC4 | BAD | Incorrect telegram from the partner |
| 0xE1 | NO | Function not possible in this state |
| 0xE2 | INI | Own Station not in ring, it is not initialised |
| 0xE3 | DS | Own Station not in ring or Bus separated |
| 0xE4 | IV | Incorrect parameters on function construction |
| 0xE5 | LR | Own equipment not sufficient |
| 0xE6 | LS | Ownr SAP not active |
| 0xF1 | FE | Format- error in request-telegram |
| 0xF2 | NI | Function not implemented on the partner |
| 0xF3 | AD | Access denied on the partner |
| 0xF4 | EA | Area exceeding on up-/ download |
| 0xF5 | LE | Datablocklength to big at uip-/download |
| 0xF6 | RE | Format- error in answer-telegram |
| 0xF7 | IP | Faulty parmameters |
| 0xF8 | SC | Function in actual mode of opperation not acceptable |
| 0xF9 | SE | Error in sequence |
| 0xFA | NE | Area at the partner not available |
| 0xFB | DI | Daten incomplete or incorrect |
| 0xFC | NC | Settings of parameter not compatible on download |
| | | |

| Code | Meaning | Explanation |
|---|---|---|
| 0xFD | TO | Timeout, Time control is up |

Table 12: Protocol driver message of DF PROFI

Other Errors are described in detail in the Profibus DP- or L2 protocol driver manual.

# 4 Attachment

Comsoft deliver with the Communication-DTM a separate Toll named CONFIGURATOR. It is for testing the Profibus without FDT. Here every profibus-command, Profibus DP or DPV1, can be set to a slave separate. Of cause the communication must be done above a Comsoft master. The configuration of the bus can also be done with a Comsoft master. The Tool has an online help function for better understanding.

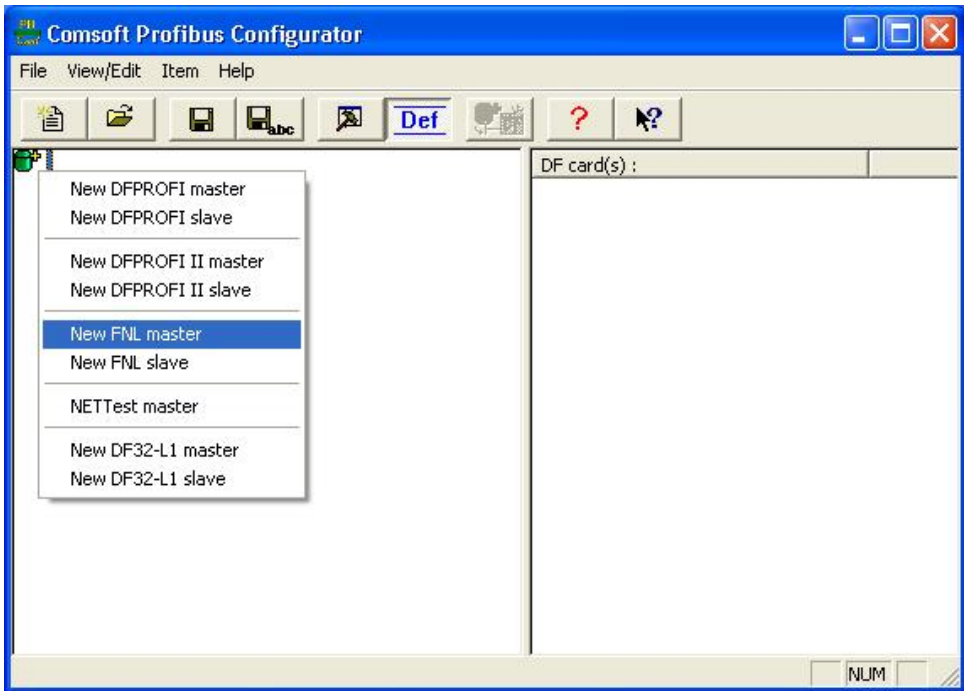


Figure 17: Comsoft CONFIGURATOR