

How to choose the right DTM for smartLink HW-DP

- 1. Choosing the use case, choosing the suitable DTM
- 2. Configuration of smartLink HW-DP
- 3. Using smartLink DTM
- 4. Using PROFIBUS CommDTM (PROFIdtm)

1) Choosing the use case, choosing the suitable DTM

smartLink HW-DP can access two types of field devices: HART and PROFIBUS-DP



The user needs to decide whether he wants to access HART Field devices (via a PROFIBUS Remote I/O such as STAHL, ABB or other brands), or whether he want to access "real" PROFIBUS Field devices.

To access HART field devices the smartLink DTM is needed.

• smartLink DTM | Firmware V1.10

To access PROFIBUS DP / V1 field devices the PROFIBUS CommDTM is needed.

• PROFIdtm V2.24 | for usage in FDT frame applications



2) Configuration of smartLink HW-DP

- 1. Log on to the web server of smartLink HW-DP
- 2. Navigate to PROFIBUS and open "Segment DP1"

PROFIBUS	HART IP	OPC UA	MQTT	Restart Device	Logout administrator	}	Auto logout in 9 min
				Segment Configuration			
OLD IIdent Number	0+0400	DP .	÷		Se	gment DF	²¹ 🔅

3. Adjust the PROFIBUS-Parameters as needed, click "OK" and click "Apply Configuration".

	Project Settings		Effective Settings
Baudrate	1.5 MBaud	~	1.5 MBaud
Tsl [t/bit]	300	_ ✓	300
Min Tsdr [t/bit]	11	~	11
Max Tsdr [t/bit]	150	~	150
Ttr [t/bit]	20000	_ ✓	20000
Highest Station Address	126	_ ✓	126
Tset [t/bit]	1	_ ✓	1
Max Retry Limit	3	~ ~	3
Station Address	0	_ ✓	0
Please note: The busparamet	ers only get effective with the	e action "Ap	ply Configuration".



3) Using smartlink DTM

Download and install smartLink DTM

• smartLink DTM | Firmware V1.10

The smartLink HW-DP HART DTM will then be available in the catalog of the FDT container:

🔁 Device for							\times
□ <u></u> All Devices	All Devices (10/10 DTMs) Enter text to search Find Clear						
Device							
	Device		Protocol	Vendor	Group	Device Version	FC
	🐵 mobiLink PA		Profibus D	Softing Ind	DTM speci	1.0 / 2021-02-08	
	🐵 mobiLink Power FF		Fieldbus F	Softing Ind	DTM speci	1.0 / 2021-02-08	
	🐵 mobiLink Power HART		HART	Softing Ind	DTM speci	1.0 / 2021-02-08	
	🐵 mobiLink Power PA		Profibus D	Softing Ind	DTM speci	1.0 / 2021-02-08	
Vendor Group Type Protocol	PROFIdtm DPV1		Profibus D	Softing Ind	not specifi	V 2.24.0(171) / 2	
Show unselected devices too	smartLink HW-DP HART		HART	Softing Ind	DTM speci	1.0 / 2020-10-13	=
Nur installierte Geräte anzeigen	smartLink SW-HT HART		HART	Softing Ind	DTM speci	1.0 / 2020-10-13	

4) Using PROFIBUS CommDTM

- 1. Download and install the latest PROFIBUS-Driver "Universal PROFIBUS Driver V5.47.4" (or higher version) from the Softing web site.
- 2. Start the Driver Configurator from the start menu



3. Add a new Node under "smartLink HW-DP"

	smartLink H\	√ DP			Add
- PRUFIboard PCI PBpro USB / PROFlusb	Item	Data			Remove
PBpro PC104+ / PBpro PC110 PBpro PC1 / PBpro PC1 PBpro PC1 PBpro ETH / FG series pnGate DP/PA/PB mbGate DP/PA/PB epGate DP/PA/PB martInk HW DP	14 Firmware Ver	Filmiware version knot available?			E dit
elect Node Name	e following information i PROFIBUS interface f olication. Please enter a	s used to access rom an a symbolic node	×		
IN SI nar	ne.				

Softing Industrial Automation GmbH Richard-Reitzner-Allee 6 85540 Munich



Follow the instructions on the screen and finally press "Apply".
 A green check mark will show up beside the new Node.
 The Interface Number will later show up in the DTM Properties.

S PROFIBUS	smartLink HW DP	smartLink HW DP Node0			
PR0Flboard PCI PBpro USB / PR0Flusb PBpro PC104+ / PBpro PC104 PBpro PCI / PBpro cPCI PBpro ETH / FG series pnGate DP/PA/PB mbGate DP/PA/PB egate DP/PA/PB smartLink HW DP ✓ Node0	Item	Data	Remove		
	Interface Number Interface Type Serial Number	0 smartLink HW DP 204100321	E dit		
	Firmware Type Firmware Version	PROFIstack PB Master PA-Master 6.60.00.18613 e			
	IP-Address IP-Port	192.168.10.201 2357			
	Device Names	\\\PROFIBUS\Board0\Board \\\PROFIBUS\Board0\Pb0\Service \\\PROFIBUS\Board0\Pb0\DpData			
	Alias Dev. Names	\\\PROFIBUS\Node0\Board \\\PROFIBUS\Node0\Service \\\PROFIBUS\Node0\DpData			
his device is working properly					

- 5. Download and install softings PROFIBUS CommDTM
 - PROFIdtm V2.24 | for usage in FDT frame applications
- In the FDT Container (e.g. PACTware) you must choose "Softing PROFIBUS DPV1 DTM (CommDTM)
 Device for

All Devices	All Devices (10/10 DTMs)						
Device						_	
Driver	Enter text to search Find Clear						
	Device		Protocol	Vendor	Group	Device Version	FC
	🐵 mobiLink PA		Profibus D	Softing Ind	DTM speci	1.0 / 2021-02-08	
	🐵 mobiLink Power FF		Fieldbus F	Softing Ind	DTM speci	1.0 / 2021-02-08	
	mobiLink Power HART		HART	Softing Ind	DTM speci	1.0 / 2021-02-08	
	mobiLink Power PA		Profibus D	Softing Ind	DTM speci	1.0 / 2021-02-08	
Vendor Group Type Protocol	PROFIdtm DPV1		Profibus D	Softing Ind	not specifi	V 2.24.0(171) / 2	
Show unselected devices too	🐵 smartLink HW-DP HART		HART	Softing Ind	DTM speci	1.0 / 2020-10-13	
✓ Nur installierte Geräte anzeigen	🐵 smartLink SW-HT HART		HART	Softing Ind	DTM speci	1.0 / 2020-10-13	

- 7. In the Properties of the DTM you can choose the Board number (Refer to Interface number in the PROFIBUS Control Panel)
- 8. Do not try to adjust the Bus parameters in this dialog, as the Bus parameters from the smartLink HW-DP web interface will be used by the system automatically.