Device Parameterization

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DIGSI 4 – Device Parameterization & Configuration

- Overview
- Device parameterization and configuration in the Offline mode
- Configuration of information
- CFC logical functions
- DIGSI 4 Editor for default and control display
- Settings transfer to device
- Settings change in the Offline mode
- Save settings change in the Offline mode
- Exercises

DIGSI 4 – Setting Block

Possible storage locations for a device setting block:

- Data structure of the DIGSI 4 settings computer
- Memory of the SIPROTEC 4 device
- External storage medium (for ex. memory stick)

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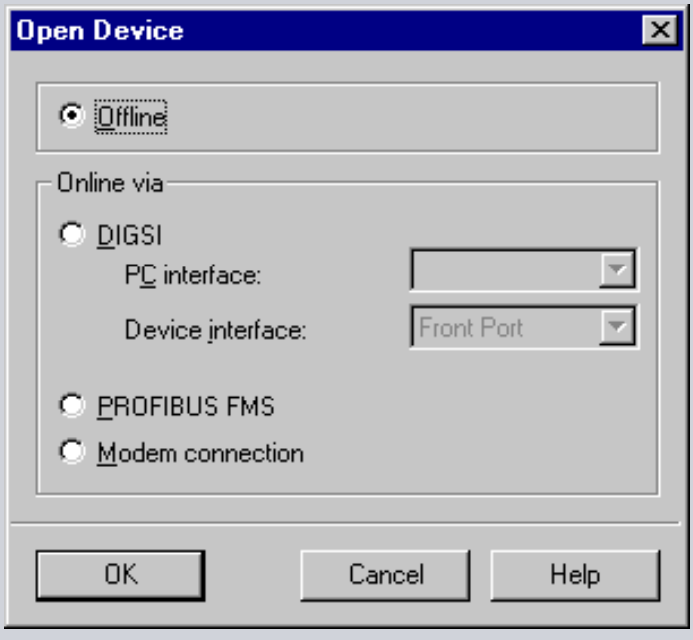
DIGSI 4 – Device in the Offline Mode

Working with SIPROTEC 4 data in the Offline mode



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DIGSI 4 – Device Settings

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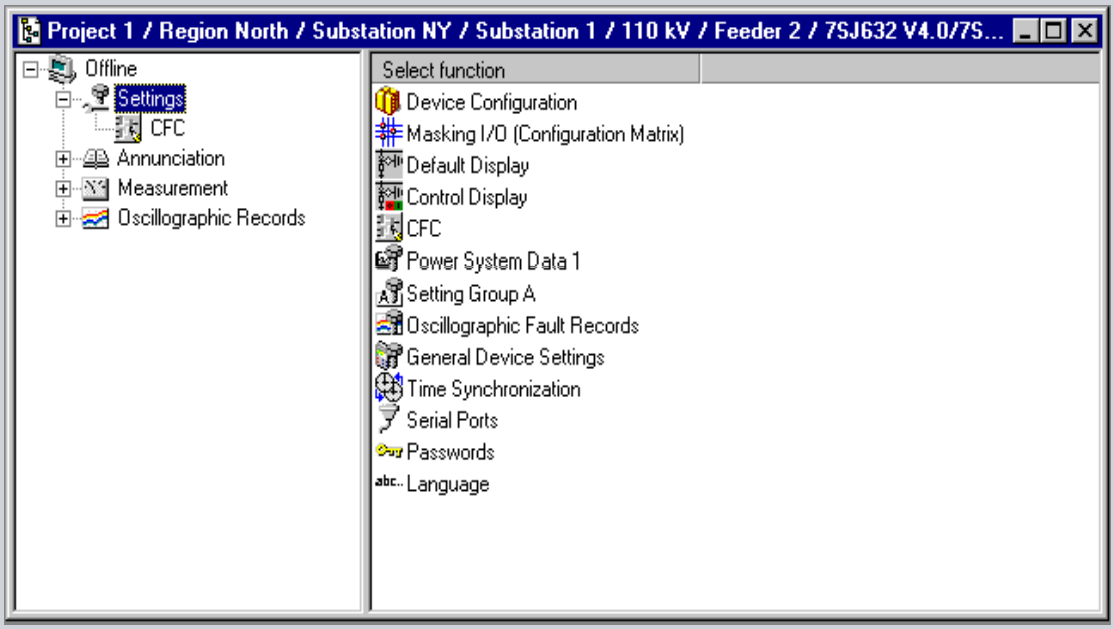
Open device

Open tree view

Select Settings



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DIGSI 4 – Device Configuration

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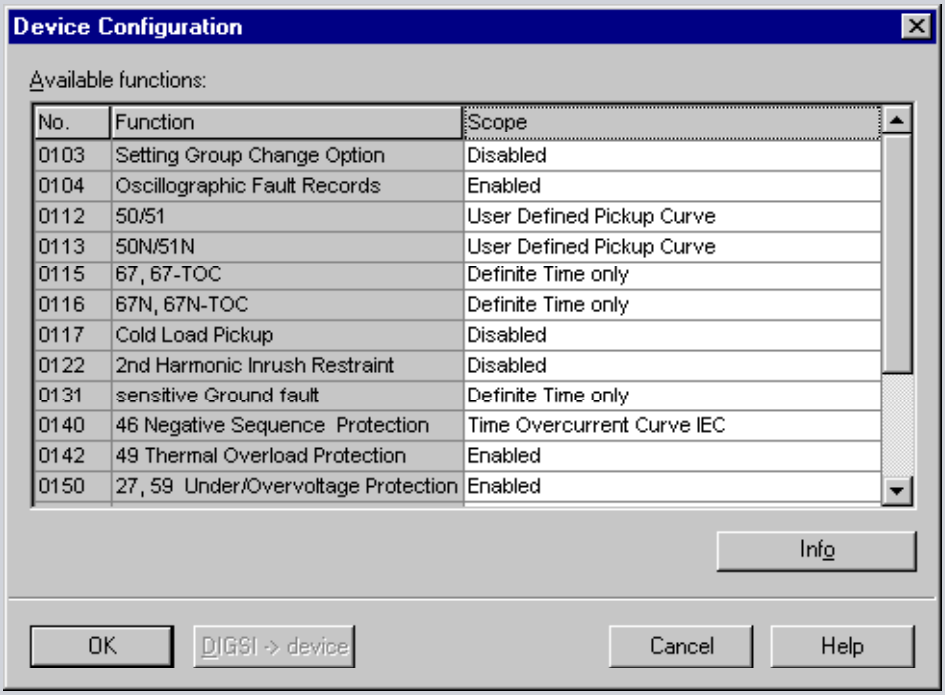
Selecting the device configuration



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DIGSI 4 – Setting Groups

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Editing

Display activated group

Switching

Copy

Reset

Export protection settings

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DIGSI 4 – Setting Group Definition

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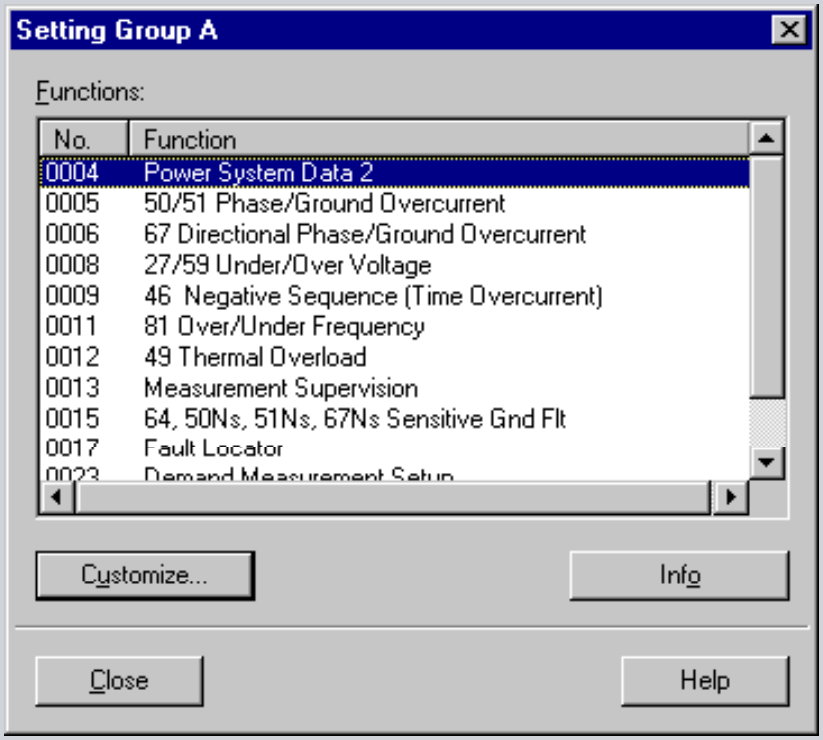
Define Setting Group



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DIGSI 4 – Changing Setting Group

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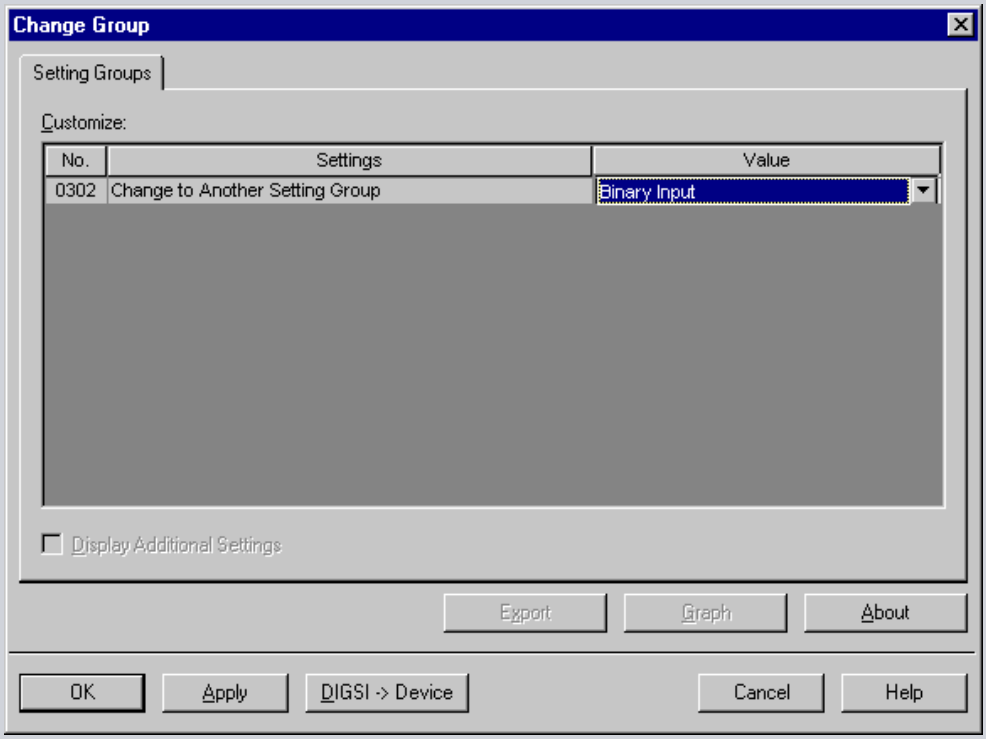
Direct selection in the DIGSI 4 Dialog

Binary input

Telegram (IEC60870-5-103)



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DIGSI 4 – Editing System Data

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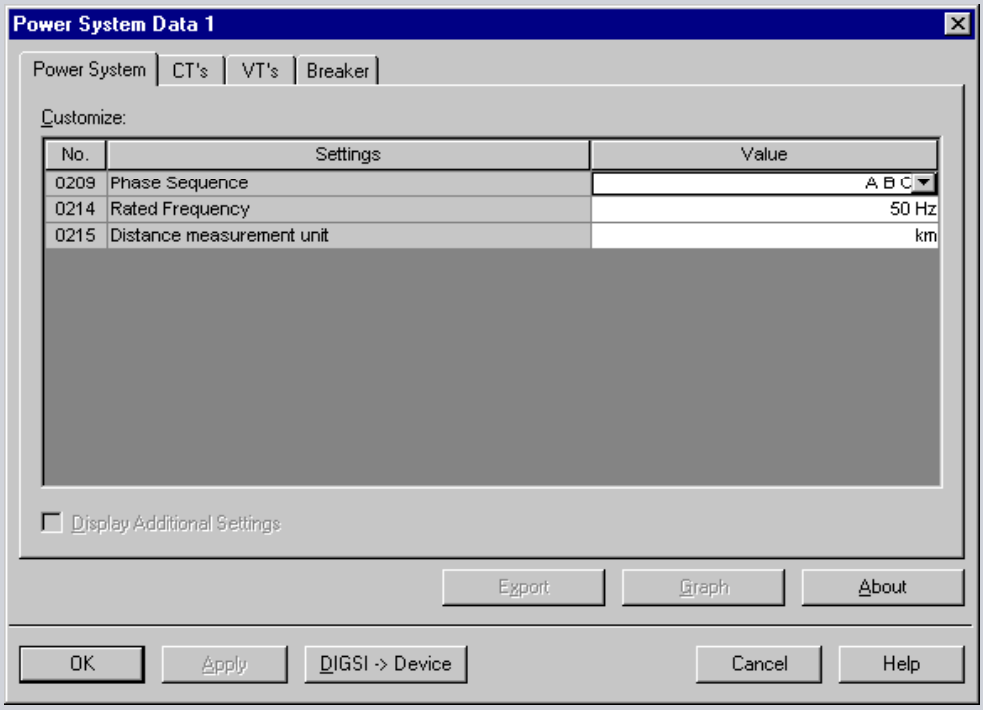
Higher-level device data definition



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DIGSI 4 – Defining Interfaces

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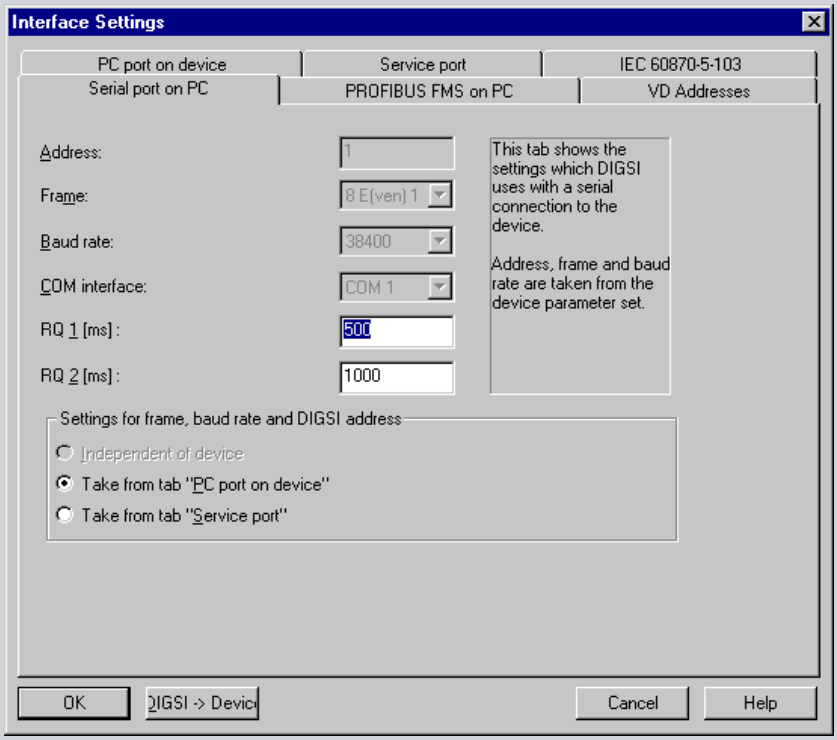
Definition of the
PC Interface Settings



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DIGSI 4 – Time Synchronization

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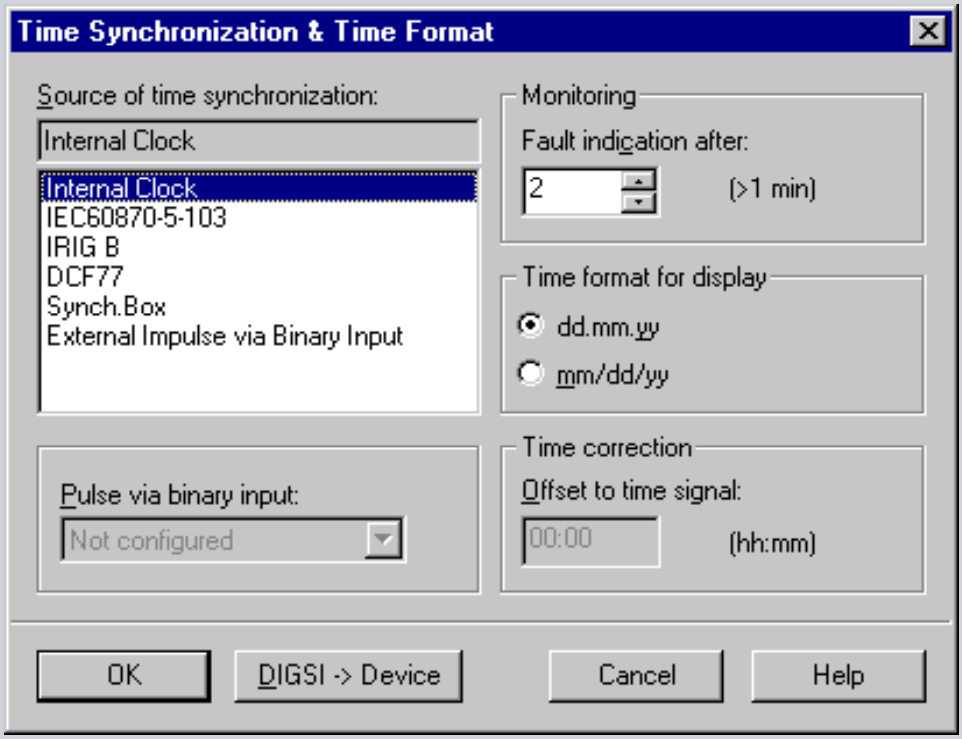
Setting of the
device time
synchronization



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DIGSI 4 – Password Protection

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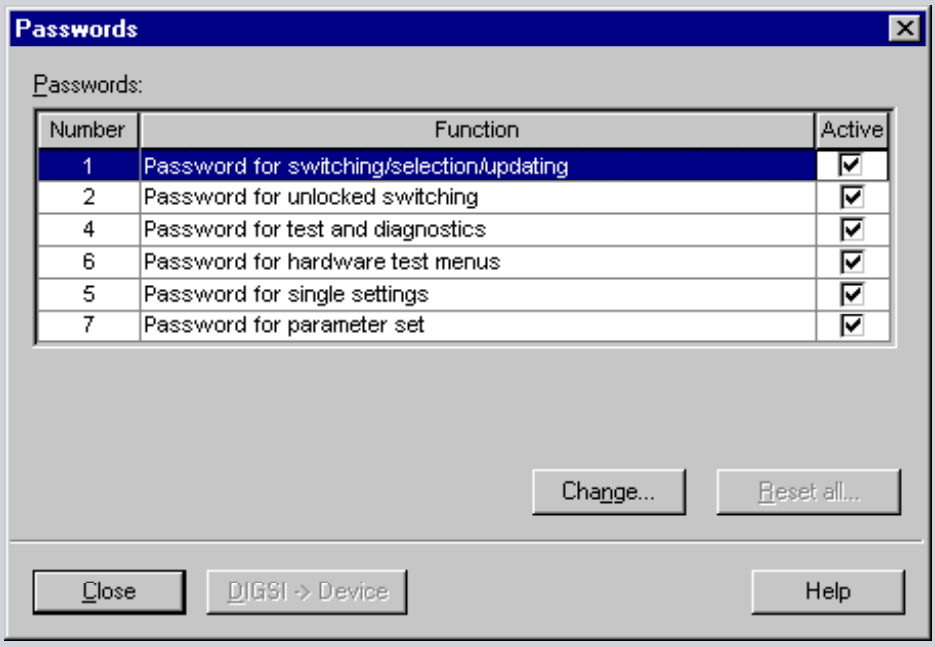
Password assignment



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DIGSI 4 – Password Protection

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Password

Definition Change

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DIGSI 4 – Device Parameterization

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- Configuration of information
- Configuration of CFC functions
- Configuration of default and control displays

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DIGSI 4 – Configuration of Information

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Settings - Masking I/O (Configuration Matrix) - Project 1 / Region North / Substation NY / Substation 1 / 110 kV / Feeder ...

	Information				Source																										
	No.	D	L	T	BI																								F	C	
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			1
Device, General	0005	>Reset LED		SP		H																								
		>Light on		SP			H																								
		Brk OPENED		IntSP																										X	
P.System Data 1																															
Osc. Fault Rec.																															
P.System Data 2	0501	Relay PICKUP		OUT																											
	0511	Relay TRIP		OUT																											U
	4601	>52-a		SP					H																						
	4602	>52-b		SP				H																							
50/51 Overcur.					*																										
67 Direct. O/C																															
27/59 O/U Volt.																															
46 Negative Seq																															
81 O/U Freq.																															
49 Th.Overload																															
Measurem.Superv	0162	Failure Sum I		OUT																											
	0163	Fail I balance		OUT																											
	0167	Fail V balance		OUT																											
	0176	Fail Ph. Seq. V		OUT																											
	0175	Fail Ph. Seq. I		OUT																											
Sens. Gnd Fault																															
Fault Locator																															
Cntrl Authority																															
Control Device								*	*	*	*	*	*																	*	*

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DIGSI 4 – Configuration of Information

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Structure of the matrix:

- Information
- Source
- Destination

Information blocks

- general
- protection functions
- indications, measured values, statistics
- functional scope related
- user-defined

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DIGSI 4 – Object Properties

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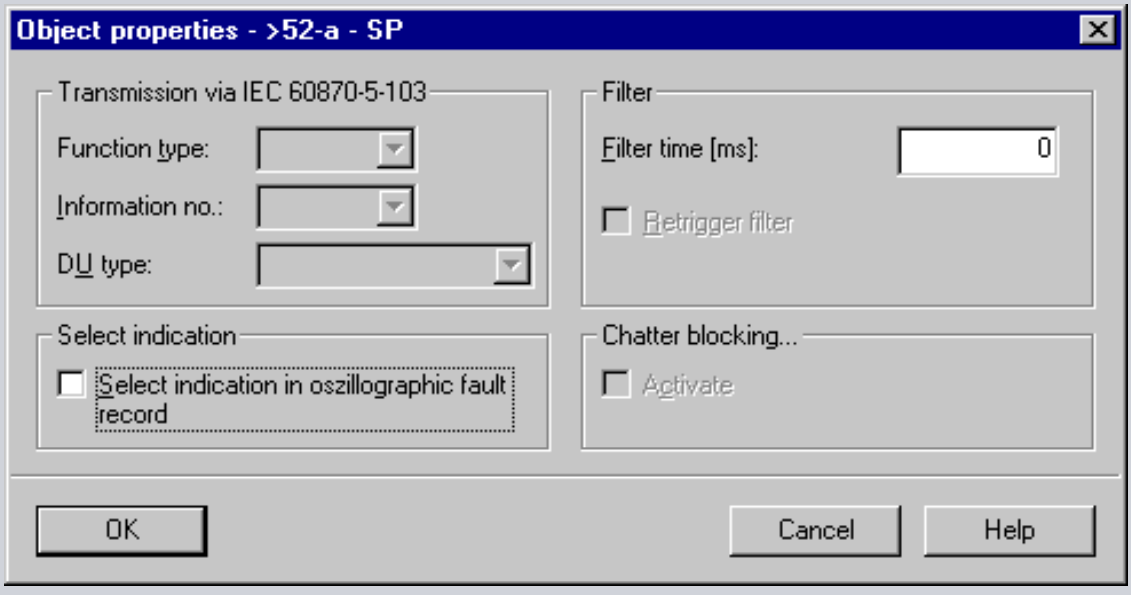
Single Point Indication SP



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DIGSI 4 – Graphical Display

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Default display

- Not operator-controllable
- Indication of operational status, measured values, texts

Control display

- Release of switching operations
- Indication of operational status, measured values, texts

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DIGSI 4 – Default and Control Display

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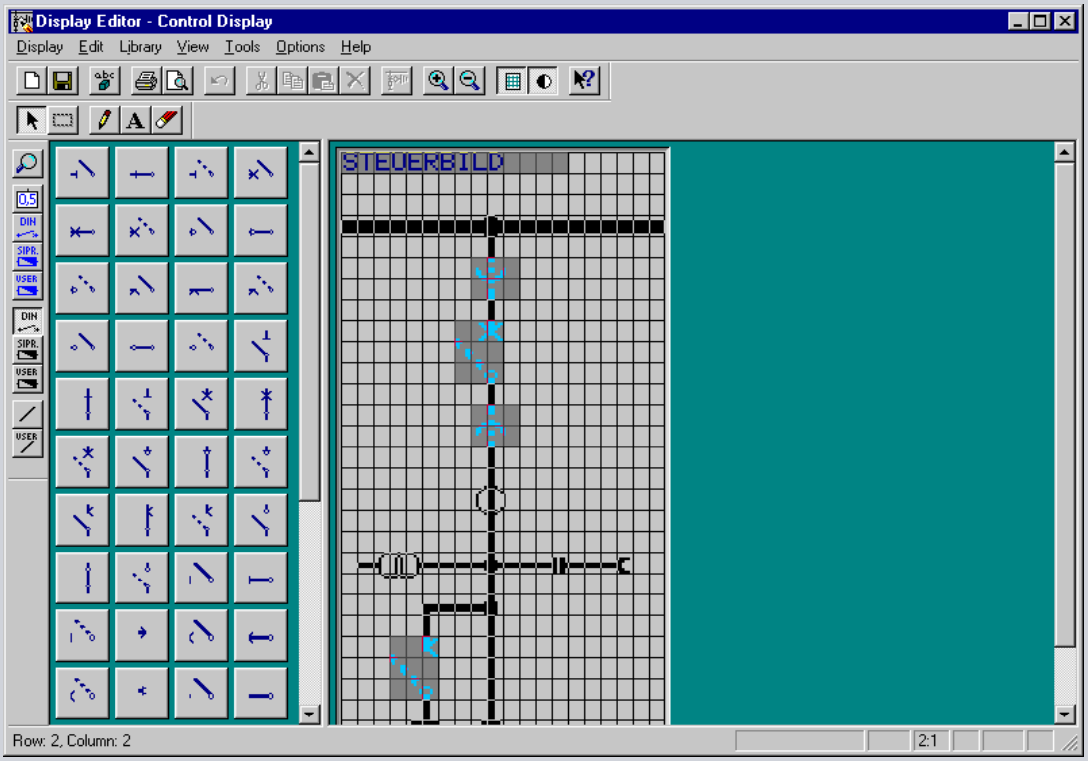

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DIGSI 4 – Configuration of CFC Functions

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CFC blocks to link information

- creating group indications
- defining interlocking checks

Configuration steps

- starting CFC
- inserting chart
- inserting module
- defining order of execution
- interconnecting blocks

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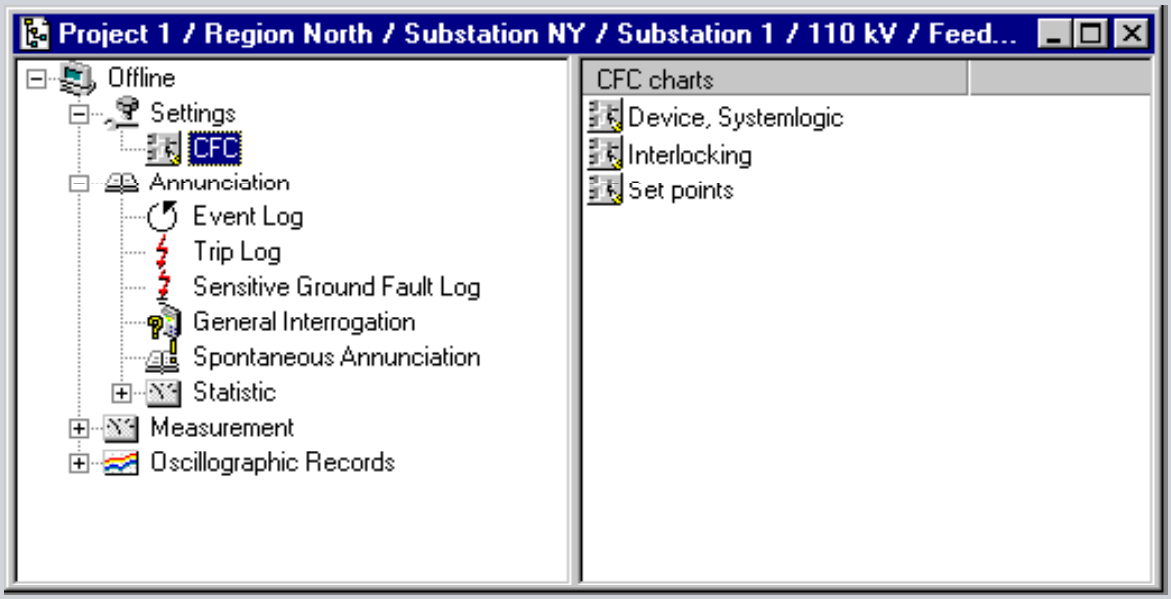
DIGSI 4 – Configuration of CFC Functions

SIEMENS

Start CFC



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DIGSI 4 – Configuration of CFC Functions

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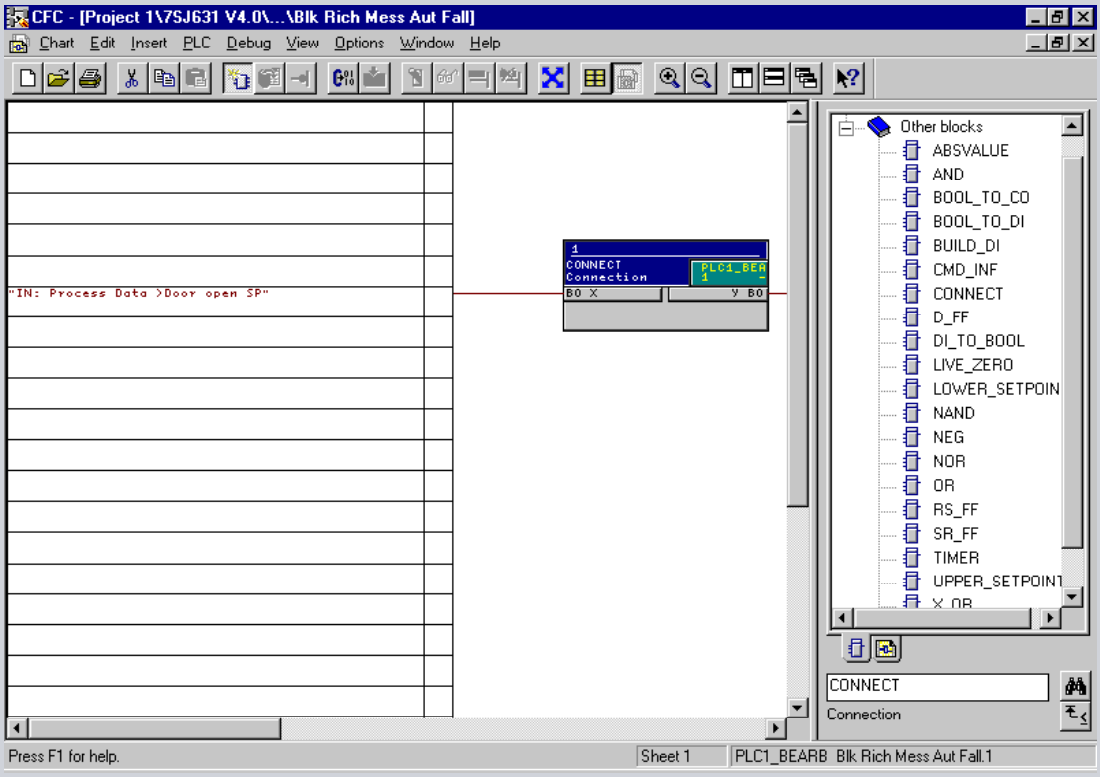

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DIGSI 4 – Configuration of CFC Functions

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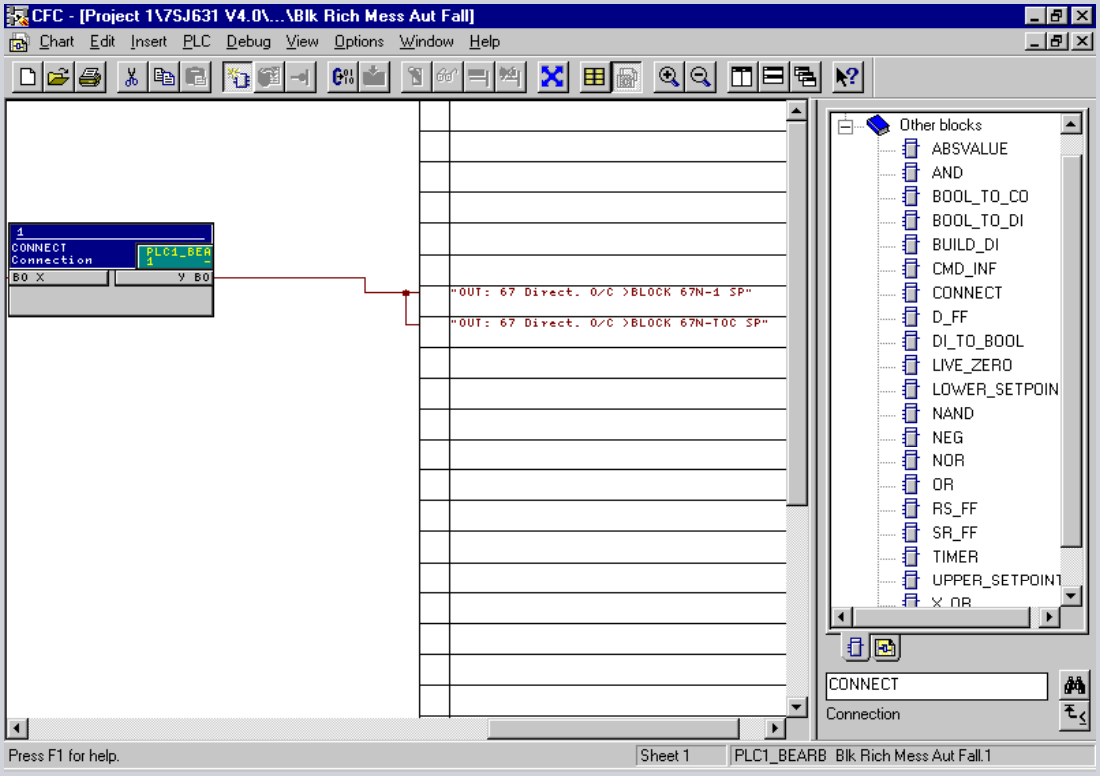

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DIGSI 4 – Online Mode

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- Loading of the settings
- Change of individual settings
- Indications, measured values, retrieval of fault records
- Device control

- Execute test functions
- Device reset and resume
- Setting of clock and date

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DIGSI 4 – Device Interfaces

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User interface
- DIGSI 4 direct connection

Service interface
- DIGSI 4 modem connection

System interface (PROFIBUS)
- connection to control center

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DIGSI 4 – Device Initialization

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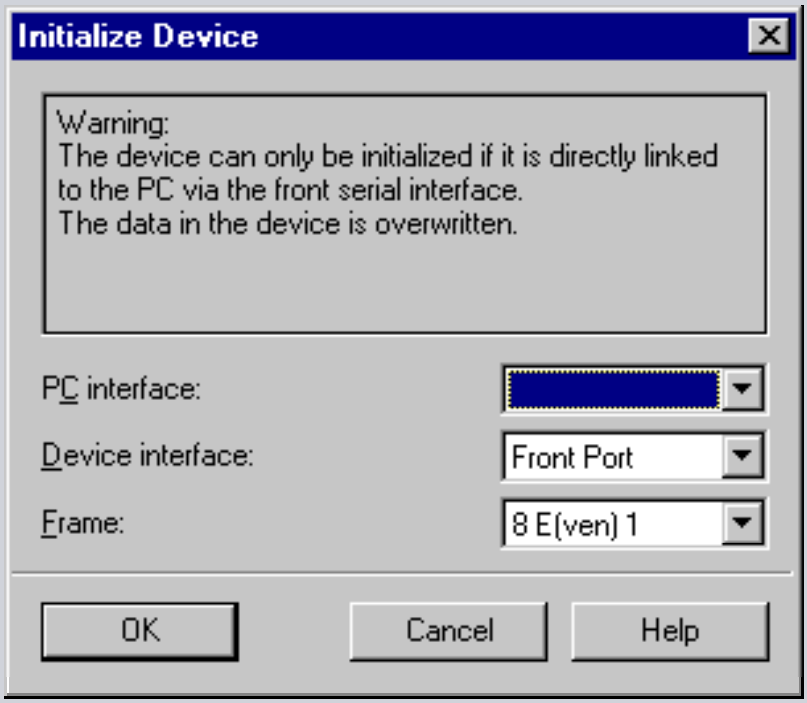
The online mode



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DIGSI 4 – Setting up of Device Connection

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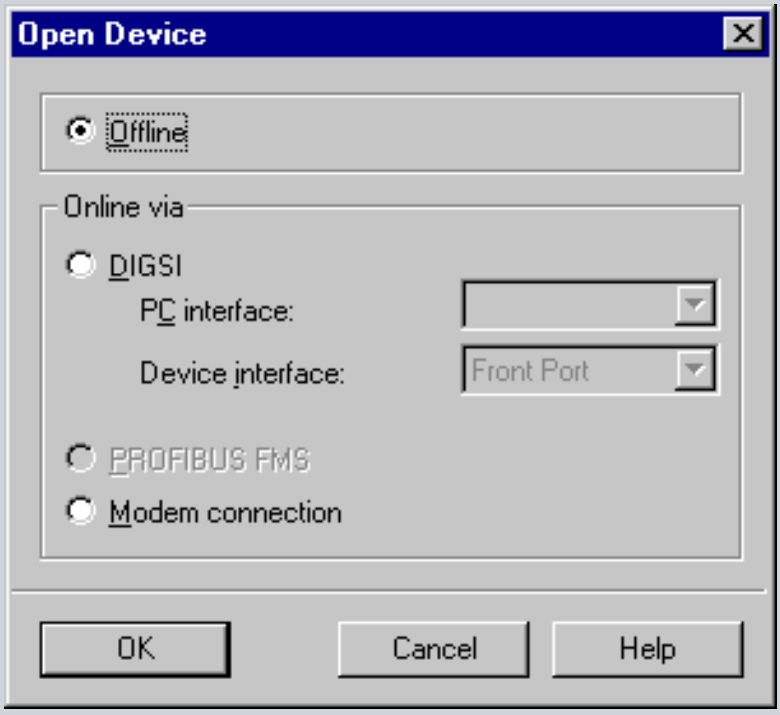
Open device
Parameterize connection



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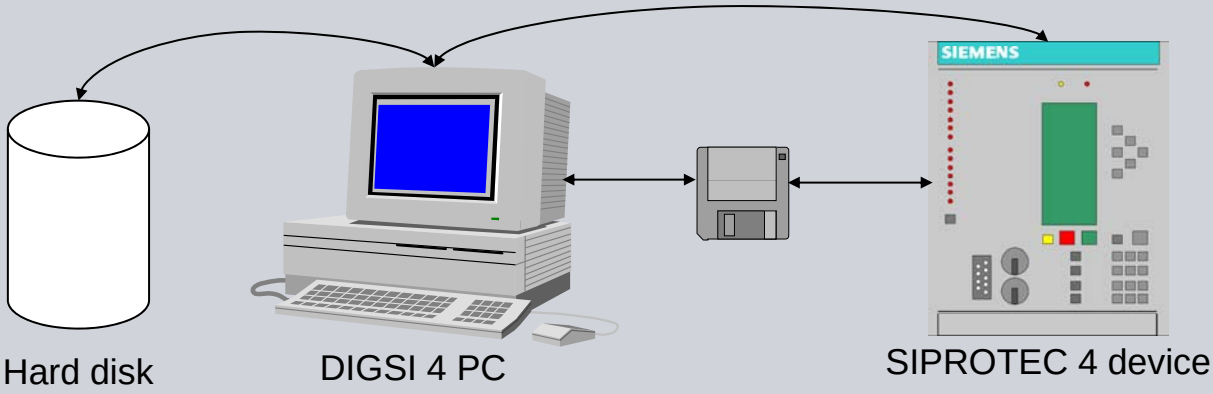
DIGSI 4 – Saving Settings



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