BA00065S/04/EN/12.22-00

71596264 2022-12-08

Operating Instructions FieldCare SFE500

Universal field device configuration tool for HART, PROFIBUS, FOUNDATION Fieldbus, Modbus, IO-Link, EtherNet/IP and PROFINET and PROFINET APL





Revision history

Product version	Operating Instructions	Changes	Comments
2.09.xx	BA00065S/04/EN/01.12	-	Original Operating Instructions
2.09.xx	BA00065S/04/EN/02.13	New	WirelessHART, NI card, FFusb modem; MACTek Bluetooth modem, installing DTM, updating DTM catalog, replacing iDTM
		Editorial	Procedure for installing USB in Windows 7
		Layout	New CD
2.10.xx	BA00065S/04/EN/03.15	Layout	New CMS
		New	HART via Rockwell Automation ControlLogix, PROFIBUS PA via Rockwell Automation ControlLogix section, user roles, checking the network
2.10.xx	BA00065S/04/EN/04.15	New chapters and changes	HART via RSG45, Fieldgate SFG500 and Siemens ET200M/iSP, PROFIBUS DP via PROFIBUS modem and WAGO Remote I/O, PROFIBUS DP via PROCENTEC ProfiCore, plant view, SFG500 error information
2.11.xx	BA00065S/04/EN/05.16	New chapters and changes	Introduction to FieldCare, Pepperl+Fuchs LB/FB Remote I/O, HIMA, PROFINET - PROFIBUS Gateway, PBI-PLUS, Heartbeat Verification, I/O Link networks, interface to W@M
2.11.xx	BA00065S/04/EN/06.17	Documentation separated into Operating Instructions and Special Documentation	Tutorial for FieldCare projects SD01928S/04/EN
2.12.xx	BA00065S/04/EN/07.17	New product version Changes to "Operation" section	-
2.13.xx	BA00065S/04/EN/08.18	New product version	-
2.13.xx	BA00065S/04/EN/09.18	Changes	Removed I/O-Link topic
2.14.xx	BA00065S/04/EN/10.19	New product version	IO-Link
2.15.xx	BA00065S/04/EN/11.20	New product version	USB stick instead of DVD Software license management (SLM)
2.17.xx BA00065S/04/EN/12.22		New product version	FDI Package support Security update

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1 About this document

1.1 Document function

These Operating Instructions contain all the information that is required to use the software: from product description, installation and use to system integration, operation, diagnosis and troubleshooting through to software updates and disposal.

1.2 Symbols

1.2.1 Safety symbols

Symbol	Meaning
A DANGER	DANGER! This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.
	WARNING! This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in serious or fatal injury.
	CAUTION! This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in minor or medium injury.
NOTICE	NOTE! This symbol contains information on procedures and other facts which do not result in personal injury.

1.2.2 Symbols for certain types of information

Symbol	Meaning
	Permitted Procedures, processes or actions that are permitted.
	Preferred Procedures, processes or actions that are preferred.
×	Forbidden Procedures, processes or actions that are forbidden.
i	Tip Indicates additional information.
	Reference to documentation
	Reference to page
	Reference to graphic
►	Notice or individual step to be observed
1., 2., 3	Series of steps
_►	Result of a step
?	Help in the event of a problem
	Visual inspection

1.2.3	FieldCare Symbols
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Symbol	Meaning
<mark>*</mark>	Start new project.
Ď	Open existing project.
	Save open project.
	Print open project.
	Open clipboard.
DTMs	Displaying the DTM catalog.
\$	Open documentation for selected device or detailed device information.
	Open inventory.
P	Activate protocol.
t _a	Add new device to the network.
E _X	Remove device from the network.
E	Create new network topology using CommDTM and DeviceDTMs.
T 🔥	Compares the network topology in the field with the actual physical network, and devices are added to the existing network.
	Scans the preconfigured topology and shows the report with the scanned device information.
	Indicates whether there is a connection with the device.
	Transfer information from the device to FieldCare.
0	Transfer information from FieldCare to the device.
P f	Device-specific functions for the selected device.
	Add plant level.
	Add item.
	Remove plant level.
×	Remove item.
i	Open device checklist to show selected devices in the plant.
-~	Confirm replaced device.
	Disconnected. ¹⁾

Symbol	Meaning
	Set up communication, ready for communication. ¹⁾
	Communication channel occupied or communication action canceled. ¹⁾
	Connected. ¹⁾
	W@M symbol, appears in the start bar on the bottom right if a connection to W@M has been established.
	Switch on touch mode.
	Switch off touch mode.

1) Status indicator: online/offline status indication of devices in the plant and network view

1.3 Text emphasis

Emphasis	Meaning	Example	
Bold	Keys, buttons, program icons, tabs, menus, commands	Start \rightarrow Programs \rightarrow Endress+Hauser In the File menu, select the Print option.	
Angle brackets	Variables	<dvd drive=""></dvd>	

1.4 Acronyms used

Acronyms	Meaning	
APL	Advanced Physical Layer	
CSV	Comma Separated Value	
DTM	Device Type Manager (driver for devices)	
FDI	Field Device Integration	
FDT	Field Device Tool	
HART	Highway Addressable Remote Transducer	
I/O	Input/Output	
IO-Link	Brand name for a communication system comprising intelligent sensors and actuators	
IODD	Electronic device description (IO Device Description)	
IP	Internet Protocol	
PROFIBUS	Process Field Bus	
PROFINET	Process Field Network	
SLM	Software License Management	
TCP	Transmission Control Protocol	
UDP	User Datagram Protocol	
URL	Uniform Resource Locator	
W@M	Web Enabled Asset Management	

1.5 Documentation

FieldCare SFE500

- Getting Started KA01303S/04/A2
- Tutorial for FieldCare Projects SD01928S/04/EN
- Technical Information TI00028S/04/EN

1.6 Registered trademarks

PROFINET[®] is a registered trademark of the PROFIBUS Nutzorganisation e.V. (PROFIBUS User Organization), Karlsruhe/Germany.

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IO-Link[®] is a registered trademark of the IO-Link Consortium/IO-Link Community c/o PROFIBUS Nutzerorganisation e.V. (PNO) Karlsruhe/ Germany

FOUNDATIONTM Fieldbus is the trademark of the FieldComm Group, Austin, TX 78759, USA.

HART[®], WirelessHART[®] is the registered trademark of the FieldComm Group, Austin, TX 78759, USA.

Ethernet/IP is the registered trademark of ODVA, Michigan USA.

Modbus® is a registered trademark of the Modbus Organization, Hopkinton, USA

All other brand and product names are trademarks or registered trademarks of the companies and organizations in question.

2 Basic safety instructions

2.1 Requirements for personnel

Physical and electronic access to field devices, networks, computers and systems must be restricted to an authorized group of individuals. Therefore a role-based access system must be used. Establish detailed guidelines and processes to only allow authorized persons access to the PC or other equipment.

2.2 Designated use

FieldCare is an FDT-based (Field Device Tool) Plant Asset Management tool which, depending on the version, can be used for device configuration, instrument management or condition monitoring. By use of the appropriate Device Type Managers (DTMs), it is able to operate field devices and system components independent of communication protocol.

A properly configured firewall must be used, which blocks all data that do not meet the security specifications. To further increase security, ports that are not in use must be deactivated, and a demilitarized zone or intrusion detection system must be used. An organized and timely patch management process must be in place for all products, e.g. operating systems, internet browsers, programs, apps, databases and drivers. Similarly, anti-virus software must be used on the PC. Hardware, software, firmware and other electronic content should be used only if provided by trusted sources.

The use of safe passwords for electronic access to programs, e.g. for the PC, FieldCare, SQL Server and field devices, is recommended:

- Password must be at least 8 characters long
- Do not use a user name, name or company names
- It must not contain a complete word
- It must differ significantly from earlier passwords
- It must comprise upper-case letters, lower-case letters, a number and a symbol
- It must be changed regularly

2.3 Product safety

DEP - Data Execution Prevention

DEP is a security tool that helps keep viruses, damage and security threats away from your computer. By monitoring programs, DEP can help protect the computer and ensure that applications use system memory safely. As soon as an application attempts to access a program, DEP closes the program.

Configuring DEP

- 1. Click Windows key \rightarrow Pause key \rightarrow Advanced system settings \rightarrow Advanced.
- 2. Enter administrator password when prompted to do so.
- 3. Select **Performance** → **Settings**.
- 4. Click the **Data Execution Prevention** tab and then select **Turn on DEP for All Programs and Services**. If the program is not in the list, click **Add**, select the program and click **Open**.
- 5. Click OK.
 - └ The "System properties" dialog box opens.
- 6. Click **OK**.
- 7. Restart the computer to activate the changes.

Number	Explanation	Status
0	Always Off	DEP is switched off for all the processes.
1	Always On	DEP is switched on for all the processes.
2	Opt In	DEP is switched on for the main Windows programs and services, default setting.
3	Opt Out	DEP is possible for all processes, apart from programs and services.

Technical improvements

Endress+Hauser reserves the right to make technical improvements to the software and devices at any time and without prior notification. If such improvements have no effect on the operation of the software, they are not documented. If the improvements affect operation, a new version of the Operating Instructions is created and issued.

2.4 IT security

Our warranty is valid only if the product is installed and used as described in the Operating Instructions. The product is equipped with security mechanisms to protect it against any inadvertent changes to the settings.

IT security measures, which provide additional protection for the product and associated data transfer, must be implemented by the operators themselves in line with their security standards.

3 Product description

3.1 Software function

These Operating Instructions describe how FieldCare can be used to establish a connection to HART, PROFIBUS, FOUNDATION Fieldbus, Modbus, IO-Link and EtherNet/IP devices using modems, gateways and remote I/Os.

3.1.1 Software license management (SLM)

Detailed information on "Software license management (SLM)": Getting Started $\rightarrow \textcircled{B} 7$

3.1.2 User roles

User login is initially disabled after installing FieldCare so that FieldCare can be started without having to log in.

Activating user login

1.	Open FieldCare Adr	ninistrator → 🖺 14.
2.		
	 FieldCare Administrator User and User Groups Configuration Users 	Configuration User Login active Frable Activity Logging

Select **User and User Groups → Configuration** and click **User Login active**.

User roles

Various user roles are available. Every user can log in with a specific role he/she has been assigned. The user receives authorization for certain functions. This ensures that only authorized users have access to technical and operating features. Furthermore, the rights can be defined for a set period.

- 📔 🛯 Create any number of users
 - Assign optional settings to the user account
 - Change password following optional settings
 - Users can change a password
 - User password is valid for a specified period
 - Deactivate user account if necessary
 - Assign user a role in accordance with FDT standard

User role	Access rights
Administrator	Unrestricted access to carry out all functions, e.g. development, commissioning and runtime phases in FieldCare.
	Administrative tasks, e.g. allocate user accounts.
	Change or update DTM catalog.
Planning engineer	Unrestricted access to carry out all functions, e.g. development, commissioning and runtime phases in FieldCare.
Maintenance engineer	Carry out authorized commissioning and runtime phases.
	Replace, calibrate and adjust devices.
	Write parameters to devices, change or read parameters.
	Carry out device-specific operations in online mode.
User	Carry out authorized commissioning and runtime phases.

User role	Access rights
	Observe and manage current process.
	Check current status of a device.
	Change set points in order to ensure device is functioning correctly.
Observer	Observe and manage current process.
	Read device parameters and documents of connected devices.

3.2 Application

FieldCare is the universal tool for configuring and managing smart field devices. Easy device configuration, maintenance management, condition-based maintenance and life cycle management are all possible. It can be adapted to different needs depending on the license, and is therefore upgradeable at any time.

4 Installation

Detailed information on "Installation": Getting Started $\rightarrow \square 7$

5 Operation

5.1 Start FieldCare.



Open FieldCare.

← FieldCare opens.

Vector Vector Top Lange Vector Vector Vector							1.2222.142242	1-8-55-55 w +x	14 D C	n in er s
		X SOTING CCU38	Real Control C	MATTO Mattop PC instan	norel Convertion Original ISS Herefore INCLM	RefCase New Lakes I An Ecca Aces PC* Inselect National Inst Context are supply		er. EX	• ×	nunk
		Caroal	Que	6						

5.2 Link FieldCare to W@M Portal.

Requirements for FieldCare and W@M portal connection:

- FieldCare/FieldCare Administration and W@M must be installed
 W@M typically installed on a server
- FieldCare/FieldCare Administration typically installed on a PC
- Conclude a W@M Portal contract and have user accounts created
- Create user and password in W@M Portal

5.2.1 Make settings in FieldCare.

- 1. Start FieldCare $\rightarrow \square$ 13.
- 2. Close the "FieldCare" dialog box.



└ The "Options" dialog box opens.

splay Project DTM Catalog Scannin	n Tag Management W/@M
Menu/ Toolbars	
Personalized menus	✓ Toolbar Tooltips
Menu Animation	
Cidea Manua	
I out of the second sec	-
Appearance	
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Open DTM windows outside frame Open CM windows outside frame a	application
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Open DTM windows outside frame a Open CM windows outside frame a Language US English FieldCare Usage Touch Mode	application
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Open DTM windows outside frame Open CM windows outside frame a Language US English FieldCare Usage Touch Mode	pplication

- 4. Click on the "W@M" tab.
 - ← The **W@M** tab is displayed.

Display Project DTM Catalog Scanni	ng Tag Management [🥨	@M Plan
W@M		
✓ Enabled		
Device Identification Key		
Which device attribute shall be used to	link to W@M record?	
Serial Number (default)		
C Tag		
Options		
Johow success upload message		
Launch W@M after successful uple	bad	
Configuration event comment:		1000
Enter comment manually		-

- 5. Tick the Enabled checkbox and select Serial Number (default).
 - └ Devices are identified according to serial number between the W@M portal and FieldCare.

5.2.2 Make settings in FieldCare Administration.

1 Close FieldCare before starting FieldCare Administration.



Open FieldCare Administration.

└ The "FieldCare Administrator Login" dialog box opens.

0	Please enter User Name and	
1	Password	Login
User Name:		Cancel

Enter Administrator as the user name and Admin as the password and click Login.
 The "FieldCare Admin" dialog box opens.



3. Select W@M Configuration.

└ The "W@M Configuration" view opens.

/#W V10	ndra Mila	
e am 22	ren ne	
 In the second sec	Section Construction of the section of the	4
	Camerony (* Dated <u>Antr</u>	

- 4. Select **W@M Portal URL** and click **Apply**.
- 5. Select the **user**.
 - └ The " User" view opens.

the Astron Mary Mile	the life life				- 0
and at 100 100 100					
Ford on Advancements					
Configuration	G Administrator	анк росцион			



6. Right-click **Administrator** → **Properties**.

└ The "User Properties" dialog box opens.

General	User Roles	E-mailer	∑Qw@m
🛐 Adr	ninistrator		
ull Name	1		
escription			_
User must chang	e password at next login		
User is allowed to	o change password		
Password expires	sin <u>30 ×</u>	days	

- 7. Click on the **W@M** tab.
 - └ The "W@M" tab opens.

General	User Roles	E-mailer	W@
User Name:			
Password:			

- 8. Enter **User Name** and **Password** and click **OK**.
 - └ The "User Properties" dialog box closes.
- 9. Close Windows Explorer.
 - ← The connection to FieldCare is established for the administrator.

W@M functions

1. Right-click on a device.



2. Click **Device in Web** → **Show device specific details**.

- ← A connectivity test is carried with W@M.
- 3. Right-click on a device.
- 4. Click **Documentation**.
 - ← All available W@M functions are called up.
 - Upload offline parameter configuration to W@M...
 Upload online parameter configuration to W@M...
 Compare online with offline parameter configurations...
 Compare offline with historical parameter configuration...
 Compare online with historical parameter configuration...
 Compare online with historical parameter configuration...
 Compare historical parameter configurations...

FieldCare provides several functions for the data synchronization of FieldCare with W@M Enterprise:

- Upload offline parameter configuration to W@M
- Upload online parameter configuration to W@M
- Compare online and offline parameter configurations
- Compare offline and historic parameter configuration
- Compare online and historic parameter configuration
- Compare historic parameter configurations

5.2.3 Integration of Heartbeat verification in W@M Portal

1. Make settings in FieldCare $\rightarrow \cong$ 13.

2. Make settings in FieldCare Administration $\rightarrow \equiv 14$.

3. Select W@M Configuration.

└ The "Connection" dialog window opens.

• • 2 🗊 🖬 🗉	are are	
FieldCare Administrator FieldCare Administrator Configuration Ureri Groups Project Storage Configuration	Connection Select Will Select and URL Property of the select of and the select of an enter the Will Property of the select of th	
	Acoy	

4. Enter W@M contract number and click **Apply**.





5.3 User interface



- Plant view 1
- Network view 2
- 3 Menu bar
- 4 Toolbar
- 5 DTM/parameter view Optional dialogs
- 6 7
- Status bar

5.4 **General settings**

Project settings 5.4.1

1. In FieldCare click **Extras** \rightarrow **Options**.

- 2. Click on the **Project** tab.
 - └ The "Project" tab opens.

(mmmmmm)	
Display Project DTM Catalog Scanning Tag Mana	agement W@M Plar
Start-Up	
Prompt for project at start-up	
C Open Connection Wizard	
C None	

- 3. Select **Prompt for project at start-up** and click **OK**.
 - └ The project dialog is displayed each time the program is started.

5.4.2 Scan settings

- 1. In FieldCare click **Extras** \rightarrow **Options**.
- 2. Click on the **Scanning** tab.
 - └ The "Scanning" tab opens.

After	r Scanning Connect after scanning if only one device is found and automatically
V	open the DTM in the Online window
Gen	eric DTMs
Г	Allow generic, profile or placeholder DTMs only for scanning and device assignment
Sca	n Result
•	Hide scan result dialog after Create Network if at least a generic, profile or placeholder DTM were automatically assigned for all devices
~	Recursive scan
~	Prefer FDT 1.2.1 scanning

3. Tick the checkbox beside **Connect after scanning if only one device is found and automatically open the DTM in the Online window** and click **OK**.

Once the network has been set up, the scanning result is displayed.

- After scanning, if FieldCare only finds one device, an automatic connection is established with the DTM and switched online. Where more than one device is found, each DTM must be connected separately. Depending upon the DTM, a double-click on an unconnected device will also prompt the connection. If this is not the case, the Connect option must be used. The configuration of individual devices is not described in these Operating Instructions. This information can be found in the Operating Instructions for the device in question.
- By default, FieldCare uses the FDT 1.2 interfaces to perform a scan. If the "Prefer FDT 1.2.1 scan" option is enabled, the FDT 1.2.1 scan options can be used as an alternative.

FDT 1.2.1 can offer advantages in terms of speed when scanning with own Comm/ Gateway DTMs.

5.4.3 Plant view

Changes to the network view are automatically synchronized with the plant view. Manual changes to the plant view do not affect the network view. It is thus possible to design a plant independently of the network topology.

Adding a new level

1. Right-click an item.

2. Click **Plant View** \rightarrow **Add Plant Level**.

└ A new plant level can be selected.



☑ 2 Structure of the plant view

Plant level	Description
Enterprise	Only create one entry of this type in the top level 0.
Site Area Process cell Unit	Create on level 1.
Area Process cell Unit	Create under type "Site".
Process cell Unit	Create under type "Area".
Unit	Create under type "Process cell".
Analysis device Digital device Pressure Special Flow device Level Temperature device Valve Unknown device	Create under type "Unit".
Item	Change item subsequently with Change software.
	This is no longer possible retrospectively for all other types. In this case, the type must be deleted and a new one created.
An entry can b using Unassig The caption te A note can be website URL.	e logically linked to a device in the network view with the Assign function. Delete the link n Device . xts for all the entries can be modified subsequently. entered for every entry via the context menu, or every entry can be linked to a file or

The network view must first be created before the plant view can be created. The plant view corresponds to the actual plant topology; the technology view is a hierarchical representation of the production process. Any user with the role of "Planning engineer" or higher can create new plant views or modify existing ones.

The items can be shifted in the plant view. The elements in the plant view can be renamed, added or deleted.

Column	Use
Plant TAG	Plant tag for every plant position.
Connections	Symbol indicating online/offline status.
Status	Indicates the current diagnostic status.
Monitored	Option to enable monitoring of the current device via Condition Monitoring.
Critical	Option to specify if the device is a critical device.
Channel	Indicates the channel via which the device is connected.
Address	Indicates the address of the device that is assigned to this plant position.
Device type (DTM)	Indicates what type of device the device is.
Physical device	Identifies the physical device at the particular point in the network.

5.4.4 Network view

The network view is a graphical representation of the device network belonging to a FieldCare project.

Column	Use
Network TAG	Network TAG of the device.
Connections	Symbol indicating the online/offline status.
Channel	Indicates the channel via which the device is connected.
Address	Unique network address of the device.
Device type (DTM)	Indicates the type of device for each of the individual devices.
Physical device	Identifies the physical device at the particular point in the network.

5.5 General functions

Plant/Network view

- Via the Context menu → Customize Plant View
- Display dialog
- Show/hide columns
- Adjust the order of the columns

List function

- Adjust so that lists are sorted according to column header
- Change the column width
- Change order of columns using "Copy" and "Paste"

5.6 Verifying the network

The network topology in FieldCare can be compared against the actual physical network. This is particularly useful if a device is added to an existing network. A project can be prepared offline and then uploaded via FieldCare. In this way it is possible to verify the current topology in the network and the physical topology to make any necessary changes.

Before verifying the network please note that only verified networks are verified for communication devices that have at least one DTM. Otherwise the **Verify Network** menu item is disabled.

Verifying the network

- 1. In the network view, select a device with at least one DTM.
- 2. Click **Verify network** in the toolbar.
 - ← The "Communication channel" dialog box opens.
- 3. Select the desired channel and click **OK**.
- FieldCare scans the desired channel. Once the network has been verified, the "Scanning Result" dialog opens. A Live list is displayed and the Status column indicates how well the devices in the pre-planned topology fit into the actual topology. There are five different states in total: The device types and serial numbers are identical. The device types are identical. The device types are different. A new device has been found. Unexpected device in the project.
 Changes can be made in the context menu of the device in question. Read/write device data or replace device type.
 - Click **OK** to confirm changes.
 - ← The changes are saved.

6 System integration

6.1 Setting up an IP address

Administrator rights are required
 The description applies to Windows 7

All Endress+Hauser devices with an Ethernet interface are supplied with a default IP address, e.g. the IP address for Fieldgate FXA720 is 192.168.253.1. For the host computer to be able to communicate with the Fieldgate FXA720 Web server, it must be allocated an IP address in the same address domain, e.g. 192.168.253.99. For more information, please contact your network administrator.

Setting the computer IP address

- 1. Click Start → Control Panel → Network and Internet → Network and Sharing Center.
 - ← The "Network connections" dialog box opens.
- 2. Click Manage Network Connections.
- 3. Right-click the **connections** that are to be changed.
- 4. If required:

Enter the Administrator password or confirmation.

- 5. Right-click the **Network** tab.
- 6. Click on **Internet Protocol Version 4 (TCP/IPv4)** in the "This connection uses the following items" entry.
- 7. Click **Properties**.

8. Note the original values of the IP address and subnet mask of the computer to restore them if necessary at end of the operation. A computer used in a company network will obtain its address automatically.

Click Use the following IP addresses.

- 9. Enter the **IP address, subnet mask and default gateway** for "TCP/IPv4".
- 10. Click **OK**.
 - └ The procedure is completed.

6.2 Windows Firewall

If firewalls are in use on the computers on which the servers and clients reside, they must be programmed to allow mutual access. As firewall configuration is often a matter of company IT security policy, your system administrator should be consulted before proceeding. In addition, administration rights are required to perform this task.

The ports available for Fieldgate SFG500 are listed in the table below:

Port number	ID
TCP 60010	TCP_PCPS2_SFG500_PORT
UDP 60015	UDP_IDENTIFY_PORT
UDP 60020	UDP_ANNUNC_PORT

Managing the Windows firewall

1. Press Start → Control Panel → Windows Firewall.

- 2. In the left pane, click Allow a program or feature through Windows Firewall.
- 3. If required: Enter Administrator password.
- 4. Check the box beside the program that should be allowed and click **OK**.
- 5. In the left pane, click **Advanced Settings**.
- 6. If required: Enter Administrator password.
- 7. In the "Windows Firewall with Advanced Security" dialog, click **Inbound Rules**.
- 8. In the left pane, click **New Rule**.
- 9. Follow the instructions in the New Inbound Rule Wizard.
- **10.** Switch to the **Exceptions tab**.
 - Two main levels open. Exceptions can be added on these levels.
 "Add Program" specifies which applications are able to respond to unsolicited requests.
 - "Add Port" specifies that the firewall should allow TCP traffic at ports used by the servers.
- 11. On the "General" tab, tick the **On (recommended)** check box.

The firewall is now active.

7 Operation

The project-related data are saved in a database or in files, depending on the project storage mode.

7.1 Setting the operating language



2. Click **Extras** \rightarrow **Options**.

└ The "Options" dialog box opens.

the second se	. In
isplay Project DTM Catalog Sc	anning Tag Management W@M Pla
Menu/ Toolbars	
Personalized menus	✓ Toolbar Tooltips
Menu Animation	
Sliding Menus	•
Appearance	
Open DTM windows outside	frame application
Open DTM windows outside	frame application
Open DTM windows outside Open CM windows outside free	frame application ame application
Open DTM windows outside Open CM windows outside fr Language	frame application ame application
Open DTM windows outside Open CM windows outside fr Language US English	frame application ame application
Open DTM windows outside Open CM windows outside fr -Language US English RieldCare Usage	frame application ame application
Open DTM windows outside Open CM windows outside fr Language US English FieldCare Usage Touch Mode	frame application ame application

- 3. Select the required language in the "Display" tab and click **OK**.
 - └ The language is saved and available next time the program is started up.

7.2 Creating a project

■ The first steps in creating a project are always identical. The FieldCare dialog appears by default; this can be deactivated under **Extras** → **Options** → **Project**. The FieldCare dialog is no longer displayed if the **None** check box is checked.

ptions		
Display	Project DTM Catalog Scanning Tag Management W@M	Plant
Start	-Up	
0	Prompt for project at start-up	
С	Open Connection Wizard	
œ	None	

Creating a project

1. Open FieldCare.

└ The "FieldCare" dialog opens.

	×	HART	HART	00000 1003
Create Project	Connection Wizard	MultiDrop	Point-to-Point	SOFTING
				÷
PCP Interface	ISS Interface	IPC Interface	CDI FXA291	CDI USB
	۲			
National Inst.	10-Link			
reates an empty (project			

- 2. On the "New" tab, select the **Create Project** item and click **Open**.
 - └ FieldCare opens a new project with a host PC.

7.3 Saving a project

FieldCare projects are stored in a database but are not accessible as files on the hard i disk. It is possible to access these files by using FieldCare in file mode. All projects are saved in the same manner.

Saving a project

1. Select **File** \rightarrow **Save As**.

averrojeer	As	
Existing		
Look In:	Projekte	
FieldCa	re tra le Projekt	
	e: FieldCare BA	

- 2. Enter a project name and click **Save**.
 - ← The project is saved.

7.4 Opening a saved project

Opening a saved project

1. In the **FieldCare** dialog, click the **Existing** tab.

└ The "Open Project" dialog opens. The last projects to be opened are displayed.

FieldCare BA	lauro		•
FieldCare Projekt			

2. Select **Project** and click **Open**.

└ The project is displayed.

If the project does not appear on the screen, click **View** \rightarrow **Network**.

7.5 CSV export and import

The structural information of the plant and network view (plant/network topology) can be exported to a CSV file and imported from a CSV file to a FieldCare project.

Importing CSV file

1. Create a project. $\rightarrow \cong 25$

2. Click **File** → **Import/Export** → **Import CSV file**.

└ The "Import CSV file" dialog box opens.

- 3. Select a file and click **Open**.
 - └ The data in the CSV file are imported in plant view and/or network view.

Exporting CSV file

1. Select a project.

2. Click File \rightarrow Import/Export \rightarrow Export CSV file.

└ The "Exported topology" dialog box opens.

3. Click **Export**.

4. Select a storage location and a name and click **Save**.

└ The network view is exported to a CSV file.

7.6 DTM information

The Information dialog contains a summary of all the relevant DTM information.

Displaying DTM information

1. Click **Device catalog** in the menu bar.

2. Click **Display**.

- └ The device catalog opens.
- 3. Right-click a DTM.

4. Click **DTM Information**.

└ The "Information" dialog box opens.

DTM II	nformation			
Name	CDI Communication DTM			
Version	9.11.0800			
Vendor	Endress+Hauser			
Date	2016-11-08			
Supported	d Devices:	<u> </u>		-
Supported	d Devices: CDI Communication FXA291	<u></u> ↓		-
Supported Name Version	d Devices: CDI Communication FXA291 2.09.00	 		
Supported Name Version Vendor	d Devices: CDI Communication FXA291 2.09.00 Endress+Hauser	<u>_</u>		
Supported Name Version Vendor Date	d Devices: CDI Communication FXA291 2.09.00 Endress+Hanser 2016-11-08	<u>_</u>		
Supported Name Version Vendor Date	d Devices: CDI Communication FXA291 2.09.00 Endress+Hauser 2016-11-08	<u>R</u>	 	
Supported Name Version Vendor Date	d Devices: CDI Communication FXA291 2.09.00 Endress+Hauser 2016-11-08			

Possible options in the "Information" dialog

- Shows basic information of all device types DTM supports
- Displays DTM information:
 - Manufacturer ID
 - Device Type ID
 - SubdeviceType ID
 - Device Type Information

7.7 Displaying the device catalog

The **Device catalog** dialog contains the list of all the DTMs and FDI Packages that are currently in the device management system. The DTMs can be grouped by category, manufacturer or protocol.

1. Click **Device catalog** in the menu bar.

- 2. Click Display.
 - └ The device catalog opens.

7.8 Updating the device catalog

Detailed information on **Updating the device catalog**: Getting Started $\rightarrow \square 7$

Diagnostics and troubleshooting 8

General troubleshooting 8.1

Problem	Troubleshooting
FieldCare SQL Server fails to start.	 Start SQL Server manually: Start Windows and enter services.msc in the search field. Select SQL Server (SQLFIELDCARE). Click Start.
Scanning macros	 Import macros: In the folder "\Endress+Hauser\FieldCare\db" import the file
missing.	ImportScanningMacros.cmd. Then restart FieldCare.
Duplicate menu	Reset layout:
entries or windows	• Close FieldCare.
missing.	• In the "\Endress+Hauser\FieldCare\Profiles" folder, delete the file profile.xml .
Defective device	 Reset FieldCare device catalog: Close FieldCare. In the "\Endress+Hauser\FieldCare\Frame" folder, delete the file
catalog.	FRMRepository.xml. Restart FieldCare and update the device catalog.



In the event of further problems, please contact your Endress+Hauser sales organization: www.addresses.endress.com

9 Software updates

Detailed information on "Updating software": Getting Started $\rightarrow \square 7$



www.addresses.endress.com

