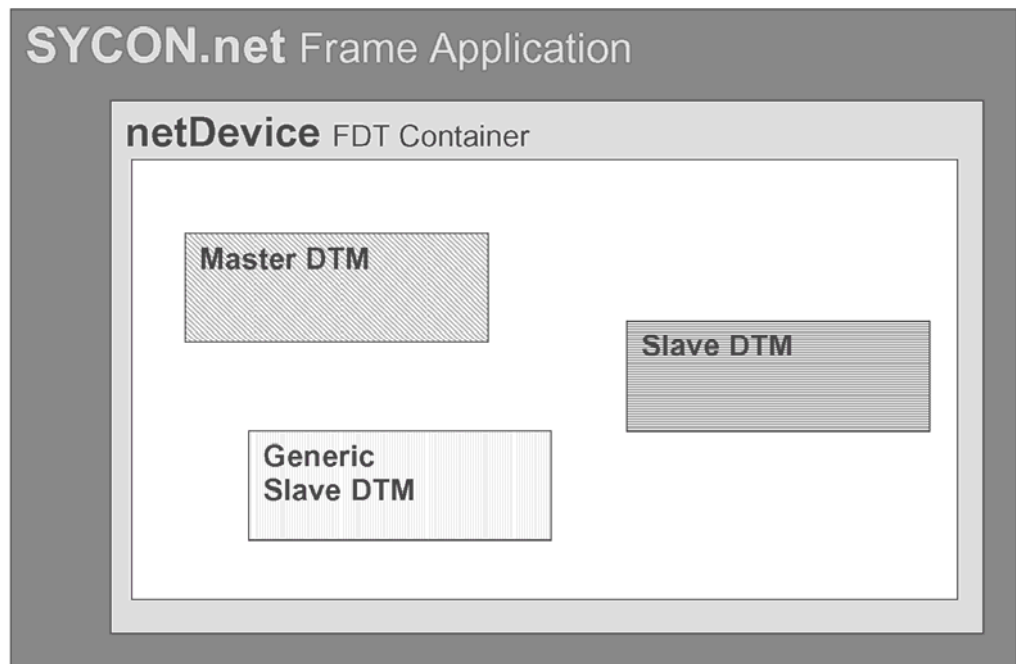


Operating Instruction Manual
SYCON.net
Frame Application



Hilscher Gesellschaft für Systemautomation mbH

www.hilscher.com

DOC040402OI09EN | Revision 9 | English | 2010-02 | Released | Public

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1 Introduction

1.1 About this Manual

1.1.1 Short Description

The configuration software described here is a FDT frame application to configure communication-capable fieldbus devices of different manufacturers in one project.

In accordance with the FDT Specification 1.2 (Field Device Tool Specification) the configuration software is used as a frame application for DTM (Device Type Manager), which are provided by the field device manufacturers.

Via the communication channel (Master DTM) the communication with the field devices is set up. The field devices uses protocols as e. g. PROFIBUS.

1.1.2 Overview

The table below gives an overview of the descriptions provided in this manual:

Section	Subsection	Manual Page
Installation	<i>System Requirements</i>	10
	<i>Installation of the Software</i>	11
Menus	<i>The Menu Bar</i>	13
	<i>Toolbars</i>	13
How to use	<i>Start Program</i>	17
	<i>Create New Project / Open Existing Project</i>	19
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	<i>User Management</i>	20
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Table 1: Overview

1.1.3 Online Help

The frame application contains an integrated online help facility.

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

1.1.4 List of Revisions

Index	Date	Version	Komponente	Chapter	Revision
1	30.07.04			all	created
2	31.08.04	1.0.1.0	Syconu.exe	all	revised
3	06.09.04	1.0.1.1	Syconu.exe	3.1	adapted to new login dialog (with entering and confirming password)
4	08.05.06	1.0.2.8	Syconu.exe	1	No Windows® NT
5	26.09.07	1.32.0.X	Syconu.exe	1 2,3,4,5 all	Completed revised Revised, Manufacturer and product names generalized
6	26.06.08	1.32.0.X	Syconu.exe	3,5	Revised, Manufacturer and product names generalized
7	21.01.09	1.40.1118.x	Syconu.exe	1 3.3.4	Chapter 'Introduction' revised, Section 'Debug Toolbar' added.
8	05.02.09	1.40.1118.x	Syconu.exe	2.1	Section 'System Requirements' actualized.
9	23.02.10	1.400.0.x	Syconu.exe	8	Current document template, Chapter ' <i>Contacts</i> ' aktualisiert.

1.1.5 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:



Important: <important note>



Note: <note>



<note, were to find further information>

1.2 Legal Notes

1.2.1 Copyright

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1.2.2 Important Notes

The user manual, accompanying texts and the documentation were created for the use of the products by qualified experts, however, errors cannot be ruled out. For this reason, no guarantee can be made and neither juristic responsibility for erroneous information nor any liability can be assumed. Descriptions, accompanying texts and documentation included in the user manual do not present a guarantee nor any information about proper use as stipulated in the contract or a warranted feature. It cannot be ruled out that the user manual, the accompanying texts and the documentation do not correspond exactly to the described features, standards or other data of the delivered product. No warranty or guarantee regarding the correctness or accuracy of the information is assumed.

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Hilscher Gesellschaft für Systemautomation mbH is not liable under any circumstances for direct, indirect, incidental or follow-on damage or loss of earnings resulting from the use of the information contained in this publication.

1.2.3 Exclusion of Liability

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It is strictly prohibited to use the software in the following areas:

- for military purposes or in weapon systems;
- for the design, construction, maintenance or operation of nuclear facilities;
- in air traffic control systems, air traffic or air traffic communication systems;
- in life support systems;
- in systems in which failures in the software could lead to personal injury or injuries leading to death.

We inform you that the software was not developed for use in dangerous environments requiring fail-proof control mechanisms. Use of the software in such an environment occurs at your own risk. No liability is assumed for damages or losses due to unauthorized use.

1.2.4 Warranty

Although the hardware and software was developed with utmost care and tested intensively, Hilscher Gesellschaft für Systemautomation mbH does not guarantee its suitability for any purpose not confirmed in writing. It cannot be guaranteed that the hardware and software will meet your requirements, that the use of the software operates without interruption and that the software is free of errors. No guarantee is made regarding infringements, violations of patents, rights of ownership or the freedom from interference by third parties. No additional guarantees or assurances are made regarding marketability, freedom of defect of title, integration or usability for certain purposes unless they are required in accordance with the law and cannot be limited. Warranty claims are limited to the right to claim rectification.

1.2.5 Export Regulations

The delivered product (including the technical data) is subject to export or import laws as well as the associated regulations of different countries, in particular those of Germany and the USA. The software may not be exported to countries where this is prohibited by the United States Export Administration Act and its additional provisions. You are obligated to comply with the regulations at your personal responsibility. We wish to inform you that you may require permission from state authorities to export, re-export or import the product.

1.2.6 Registered Trademarks

Windows® 2000 and Windows® XP are registered trademarks of Microsoft Corporation.

All other mentioned trademarks are property of their respective legal owners.

2 Installation

2.1 System Requirements

- PC with 1 GHz processor or higher
- Windows® 2000/ Windows® XP
- Internet Explorer 5.5 or higher
- Free disk space: min. 130 MByte
- CD ROM drive
- RAM: min. 256 MByte, recommended 512 MByte
- Graphic resolution: min. 1024 x 768 pixel
- Keyboard and Mouse



Note: If the project file is saved and opened again or it is used on another PC, the system requirements need to match. Particularly the DTMs need to be installed on the used PC.

2.2 Installation of the Software

Close all application programs on the system!

Insert the Installation CD in the local CD ROM drive of your PC. The installation program will start by itself (Autostart enabled). Otherwise change into the root directory on the CD and start the **Setup.exe** (Autostart disabled) by a double click.



Note: Administrator privileges are necessary for installation on Windows® 2000/ Windows® XP systems.

2.2.1 Select Setup Language

Starting the installation program you are requested to select the language, the software should be installed in. Confirm this selection with **OK** and **Next**.



Note: The selection of the language refers only to the installation. The programming language can be changed later at any time. This is described in section on page 22.

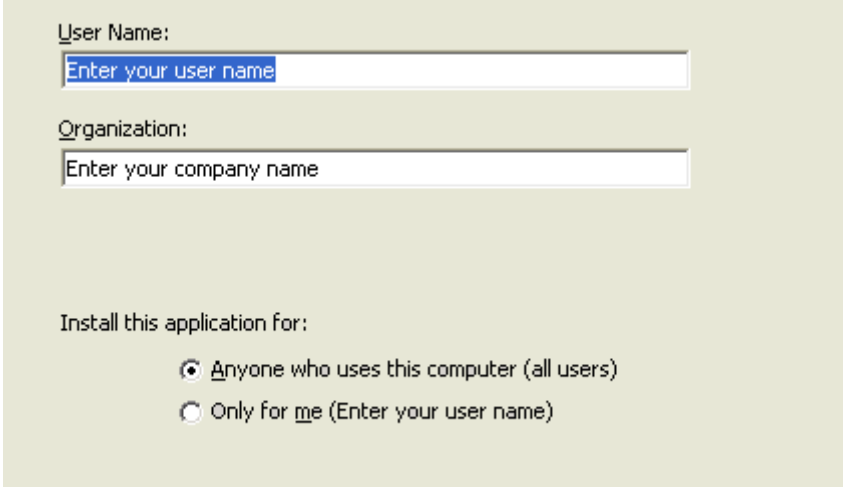
2.2.2 Confirm License Agreement

You are requested to accept the license agreement of the company Hilscher Gesellschaft für Systemautomation GmbH in the following dialog. Read the agreement carefully and confirm your agreement by selecting the option **I accept the terms in the license agreement**.

Click the button **Next** to continue.

2.2.3 Enter Customer Information

You are requested to enter your **User Name** and the name of your **Organization** in a further dialogue and if whether the software is to be installed for all users of the PC or only for you.

The image shows a light green dialog box titled 'Enter Customer Information'. It contains two text input fields. The first is labeled 'User Name:' and has a placeholder text 'Enter your user name'. The second is labeled 'Organization:' and has a placeholder text 'Enter your company name'. Below these fields, there is a section titled 'Install this application for:' with two radio button options: 'Anyone who uses this computer (all users)' (which is selected) and 'Only for me (Enter your user name)'.

User Name:
Enter your user name

Organization:
Enter your company name

Install this application for:

Anyone who uses this computer (all users)

Only for me (Enter your user name)

Figure 1: Installation - Enter Customer Information

Confirm this setting by clicking the **Next** button.

2.2.4 Select Setup Type and Installation Path

In the following dialog you can select whether the software should be installed completely or only program features.

- In case of the complete program installation, confirm simply with **Next**.
- If you like to install only certain features or if you want to change the installation path, select the option **Custom** and click the **Next** button.

An additional dialogue opens, where the components to be installed can be selected and the installation path can be changed.

Select the desired components and confirm with **Next**.

Finish Installation

Now click the **Install** button, in order to start the installation. The software is now installed. This can take some minutes.

The installation program indicates if the installation was finished successfully. Confirm this message by clicking the **Finish** button.

Now the software can be used.

3 Windows and Menus

3.1 Output Window

The **Output Window** contains index cards, which indicate:

- Information, warnings and error messages in plain text.
- The numbers of the index card are installation qualified.

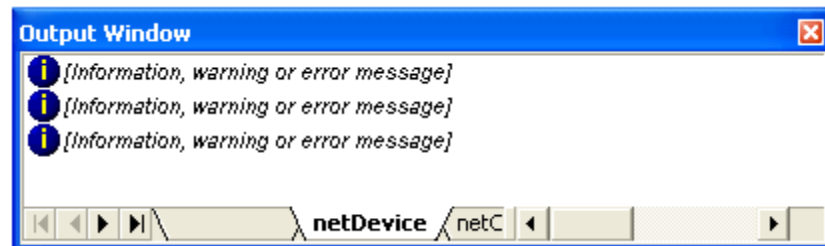


Figure 2: Output Window

The following icons can be found in the **Output Window** above. They symbolize the failure class.

	IMPORTANT	Icon appears if an important failure is detected.
	WARNING	Icon appears in case of a warning.
	INFORMATION	Used for informational purposes.
	SUCCESS	Program step was executed without failure.
	FATAL	Program step was executed with a fatal fault; task following the icon did not complete.



Note: The executed program task is described in the **Output Window** besides the icon.

3.2 The Menu Bar

The menu bar of the configuration software contains pull down menus, via which all available program functions can be called up.

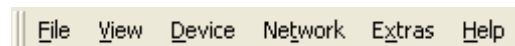


Figure 3: Menu bar



Note: The two menus **Device** and **Network** are not a function of the frame application, but dynamic menus of the FDT of container netDevice. That means these menus are only faded in the menu bar, if the windows **netProject** or **netDevice** of the FDT container are activated.

3.2.1 File

The **File** menu contains functions for working on projects.

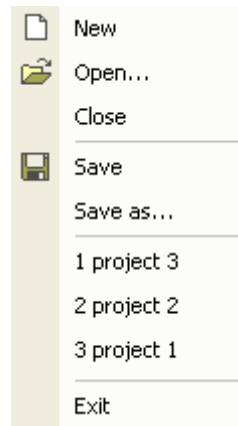


Figure 4: Menu File

Menu	Meaning
New	Creates a new project. At least the <i>User Rights</i> (described on page 23) of maintenance are necessary.
Open	Opens an existing project.
Close	Closes the actual opened project. If changes are not stored yet, a dialog appears which requests the user to save the project before closing.
Save	Saves the actual configuration. Therefore at least the <i>User Rights</i> (described on page 23) of maintenance are necessary.
Save As	Saves the project file with a new name. Therefore at least the <i>User Rights</i> (described on page 23) of maintenance are necessary.
Exit	Closes the program. If changes of the project file are not stored yet, a dialog appears which requests the user to save the project before ending.

Table 2: Menu File



Note: The button **Project** is only enabled, if projects were already stored. If there are still no projects available on the system the button is disabled.

3.2.2 View

The frame application offers several possibilities for the arrangement and representation of the projects. In the menu **View** the individual tool bars and windows can be faded in and/or out.

Actual indicated tool bars and/or windows are marked in the **View** menu by a checkmark.



Note: The representation in the menu **View** is dynamic. That means it depends on the components which were installed during installation.

3.2.3 Extra

The menu **Extra** contains functions for the program settings of the frame application. These settings are stored when closing the software and called up again during the next program start.

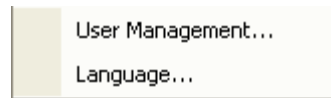


Figure 5: Menu Extra

Menu	Meaning
User Management	Opens a dialog window for setting-up, changing and deletion of users. In section <i>User Management</i> on page 21 you find detailed information about the user management.
Language	Opens a dialog window for changing the programming language. Further information for changing the programming language you find in section <i>Select Program Language</i> on page 22.

Table 3: Menu Extra

3.2.4 Help

The menu **Help** contains both the documentation about the frame application as well as general information about the software and a reference to the homepage of the manufacturer.

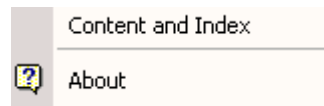


Figure 6: Menu Help

Menu	Meaning
Content and Index	Opens the documentation of the frame application.
About	Information about the program version.

Table 4: Menu Help

3.2.4.1 About

Shows the version of the frame application.

Menu	Meaning
Component	Displays installed components, including version and path.
Support	Opens a list of contact details of the subsidiaries.
Systeminfo	Provides technical data on the operating system.
Ok	Closes the About window.

Table 5: Menu About

3.3 Toolbars

Frequently used menu functions are united in toolbars:

3.3.1 Standard Toolbar

The **Standard** toolbar contains the functions (from left to the right)

- **File > New,**
- **File > Open,**
- **File > Save and**
- **Help > Info**

It is displayed or hidden via the menu **View > Standard**.



Figure 7: Standard Toolbar

3.3.2 Preset Toolbar

The **Preset** toolbar gives the possibility to call up to four different representations variants for a project.

The respective representation is always stored in the active view. The last representation in the respective view is called up by selecting another representation.



Figure 8: Preset Toolbar

- A right click on the Preset toolbar allows changing different view of the open project

3.3.3 Network Toolbars

It is possible that toolbars from further installed components are displayed in the frame application.

For example the frame application indicates a network toolbar, which is displayed and/or hidden via the menu **View > Network**, if the netDevice component is installed.

The toolbar **Network** contains the functions (from left to the right):

- **Network > Add busline,**
- **Network > Delete last busline and**
- **Network > Device Catalog**



Figure 9: Network Toolbar



Note: The **Network** toolbar is enabled, if the focus is put on the **netDevice** or **netProject** window.

3.3.4 Debug Toolbar



Note: The menu entries for the **debug mode** are only available, if the debug mode ist supported by the frame application and the Master DTM.

The debug toolbar is faded in and faded out via the menu **View > Debug**.

This toolbar contains the functions (from the left to the right):

- **Debug > Start Project Debug Mode,**
- **Debug > Stop Project Debug Mode**



Figure 10: Debug Toolbar - Start Project Debug Mode



Figure 11: Debug Toolbar - Stopp Project Debug Mode

4 Working with the Frame Application

4.1 Start Program

Start the frame application via the corresponding program entry in **Start > Programs**. The following dialog window opens:

A dialog window titled "User Registration" with a light beige background. It contains two input fields: "User Name:" with a dropdown menu showing "Administrator" and a small downward arrow, and "Password:" with an empty text box. At the bottom, there are two buttons: "OK" and "Cancel".

Figure 12: Start Program - User Registration

Select the **User Name** in the pull down menu and enter the **Password**. Confirm this with **OK**.



Note: With the first program start a request appears, to type in a password for the administrator. This password must be confirmed by entering it again. This password can be changed by the administrator with the menu **Extra > User Management**.



Note: Please note, that the capitalization of the password is important for the login!

In case of successful registration the software is started, otherwise the following error message appears:





Figure 13: Registration has failed



Note: In the dialog window of the **User Management** further users can be created. Here it must be considered that the user management can be called only by the **Administrator**. Further information about this you find in section *User Management* on page 21.

4.2 Create New Project / Open Existing Project

A new project is created via the menu **File > New** or by clicking the  symbol in the toolbar. Now the menus are selectable.

With the menu **File > Open** or respectively via the symbol  in the toolbar an already existing project is opened. The existing projects are indicated in the dialog window and the project which should be opened can be selected by clicking on it.

4.3 Save Projects

Via the menu **File > Save** or **File > Save as** or via the symbol  a project can be saved.

If the program is exit and the current configuration does not agree with the last saved configuration, the following question appears:

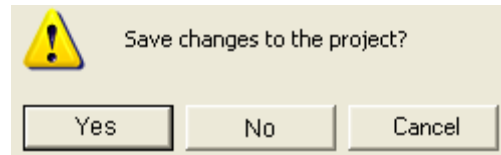


Figure 14: Security Question - Save Project

If you answer this question with **Yes**, the project data are stored. If you answer this question with **No**, the changed project data are rejected.

The saving procedure is aborted by clicking the **Cancel** button and the project data is not stored.

4.4 User Management

The privileges and right for individual users are specified by the **User Management**. Via the menu **Extra > User Management** the user administration is called up.



Note: Only the **Administrator** has the authorization to call up the user administration, to install new users or to edit existing user data. The other users do not have administrative laws. Thus the menu of the user administration is grayed out for these users and disabled.

4.4.1 Install User

The user **Administrator** is pre-defined and disabled. However the **Password** for the administrator can be changed.

By selecting the individual pre-defined users **Planning Engineer**, **Maintenance**, **Operator** and respectively **Observer** the respective users are created. The created users are indicated in the pull down menu **User Name** of the user login.

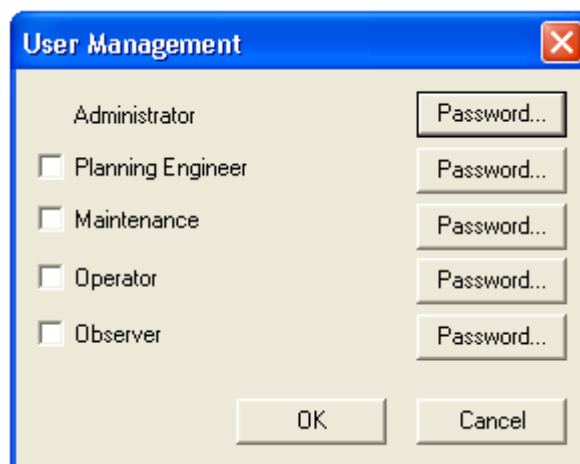


Figure 15: Extra > User Management

In section *User Rights* on page 23 you find an overview of the several users with their respective rights.

4.4.2 Delete User

By checking off the check box in front of the user name an existing user is deleted. The deleted user is not longer available in the pull-down menu in the login dialog.

4.4.3 Change Password

Via the **Password** button in the line of the respective user right a password can be assigned to each individual user group.

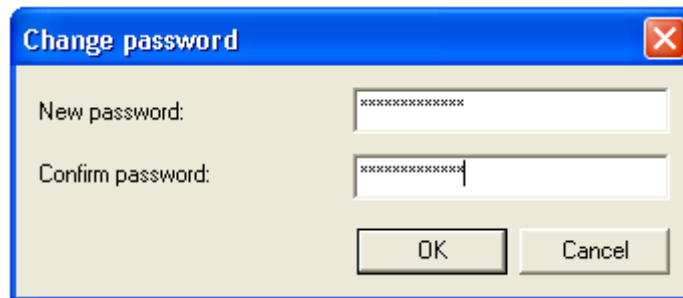
A dialog box titled "Change password" with a blue title bar and a close button (X) in the top right corner. It contains two text input fields: "New password:" and "Confirm password:". Both fields are filled with a series of asterisks (XXXXXXXXXX). Below the fields are two buttons: "OK" and "Cancel".

Figure 16: Change password



Note: Please note, that the capitalization of the password is important for login!

4.5 Select Program Language

The menu **Extra > Options** opens the following dialog for selecting the program language:

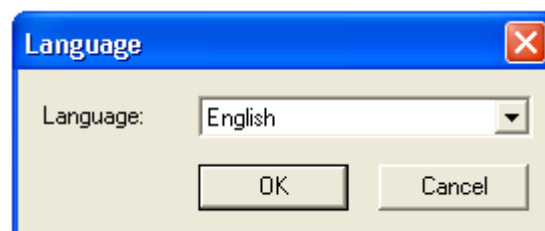
A dialog box titled "Language" with a blue title bar and a close button (X) in the top right corner. It contains a label "Language:" followed by a dropdown menu showing "English". Below the dropdown are two buttons: "OK" and "Cancel".

Figure 17: Select Program Language

Select the desired language from the list field by clicking on it and confirm this selection with OK.

You are requested to the program again, that the change is taken over.

5 Appendix

5.1 User Rights

Apart from the administrator, which has full rights of access, there are four further user levels, which have different rights of access in each case:

Action	Observer	Operator	Maintenance	Planning Engineer
File				
New	No	No	Yes	Yes
Open	Yes	Yes	Yes	Yes
Close	Yes	Yes	Yes	Yes
Save	No	No	Yes	Yes
Save As	No	No	Yes	Yes
Exit	Yes	Yes	Yes	Yes
View				
(any)	Yes	Yes	Yes	Yes
Extra				
User Management	No	No	No	No
Options	Yes	Yes	Yes	Yes

Table 6: User Rights

5.2 References

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

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7 Glossary

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.

8 Contacts

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