

SIEMENS

SIMATIC HMI

WinCC flexible 2008 What's new in WinCC flexible 2008

System Manual

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Printout of the Online Help

Safety Guidelines

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

 DANGER
indicates that death or severe personal injury will result if proper precautions are not taken.
 WARNING
indicates that death or severe personal injury may result if proper precautions are not taken.
 CAUTION
with a safety alert symbol, indicates that minor personal injury can result if proper precautions are not taken.
CAUTION
without a safety alert symbol, indicates that property damage can result if proper precautions are not taken.
NOTICE
indicates that an unintended result or situation can occur if the corresponding information is not taken into account.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The device/system may only be set up and used in conjunction with this documentation. Commissioning and operation of a device/system may only be performed by **qualified personnel**. Within the context of the safety notes in this documentation qualified persons are defined as persons who are authorized to commission, ground and label devices, systems and circuits in accordance with established safety practices and standards.

Prescribed Usage

Note the following:

 WARNING
This device may only be used for the applications described in the catalog or the technical description and only in connection with devices or components from other manufacturers which have been approved or recommended by Siemens. Correct, reliable operation of the product requires proper transport, storage, positioning and assembly as well as careful operation and maintenance.

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We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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What's new in WinCC flexible 2008?

Optimizing performance in Runtime

- Enhancement of the performance of alarm logs and tag logs

New functionality and functional enhancements

CSV import/export

- New menu item for CSV import / export
- CSV import / export for tags and alarms

Extended user administration

- Number of failed login attempts can be set
- Logon is only possible with password
- Graduated authorizations for administration
- Exclusion of groups from password aging
- Hidden password input

Editors

- Screens, text lists
 - Output fields in texts
- Events at objects
 - Operator input completed
 - Leaving a pressed button
- Faceplates
 - Size of faceplate instances
 - Project texts of faceplates can be exported
- Alarms
 - Display of the absolute address for discrete alarms
- Device settings
 - Disable function keys on modal dialogs

ES and RT system functions

- New system function
 - SetDaylightSaving
 - EncodeEx
- Enhancement of existing system functions
 - ChangeConnection
 - ArchiveLogFile
 - NotifyUserAction

Transfer:

- S7 routing via Ethernet
- Transfer of the operating system image via Ethernet
- Adjustable transmission rate of the Ethernet interface

Runtime options

- Sm@rtService/Sm@rtAccess
- ProSave
 - Upload / download of recipe data records as CSV file.

HMI devices

Support for new HMI devices

- New Panel
 - TP 177B 4"
- New Multi Panel
 - MP 177 6" Touch
- New Panel series
 - SIMATIC HMI Basic Line
- New panel PCs

Enhancements for MP 377

- Modified response during reset to factory settings

Operating system

- Support for Microsoft Windows Vista

Licenses

- New RT license: "WinCC flexible 2008 Runtime (4096)"
- Raised system limit to support 4096 tags on MP 377

Optimizing performance in Runtime

Enhancement of the performance of alarm logs and tag logs

CSV file

Accelerated data storage on the basis of current CSV logging.

New logging format: RDB

Data can now be saved in RDB format. RDB is an internal format of Runtime. The optimized data storage accelerates read and write access. Logs of this format can only be read or displayed using WinCC flexible Runtime.

The selection of the storage location was expanded at the "Alarm log" and "Data log" for the RDB format.

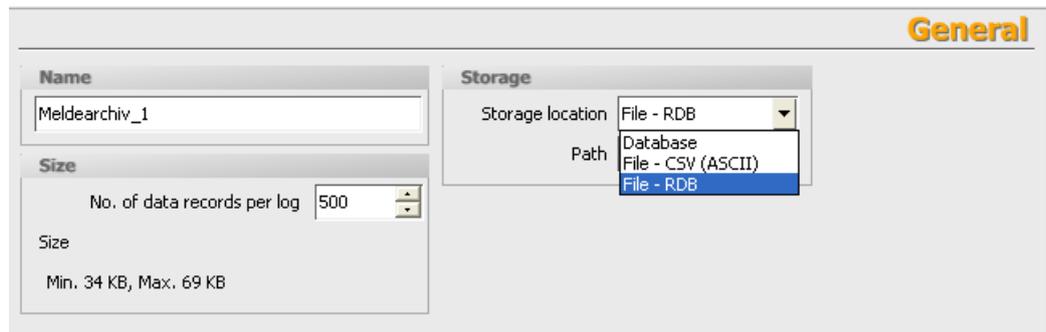


Figure 2-1 "Alarm log" editor

Convert the RDB file to CSV format using the "CopyLog" function to make the data available for applications outside of WinCC flexible Runtime.

Supported HMI devices:

MP 277, MP 377, WinCC flexible 2008 Runtime

New functionality and functional enhancements

3.1 CSV import/export

Enhancements for CSV import / export

- Enhancements in WinCC flexible ES
 - A new command for the import and export of CSV files was added to the "Project" menu.

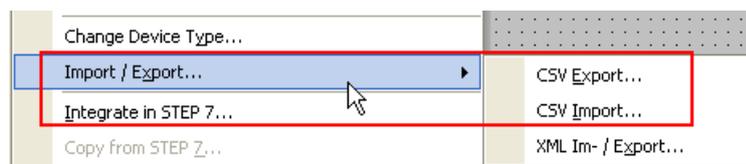
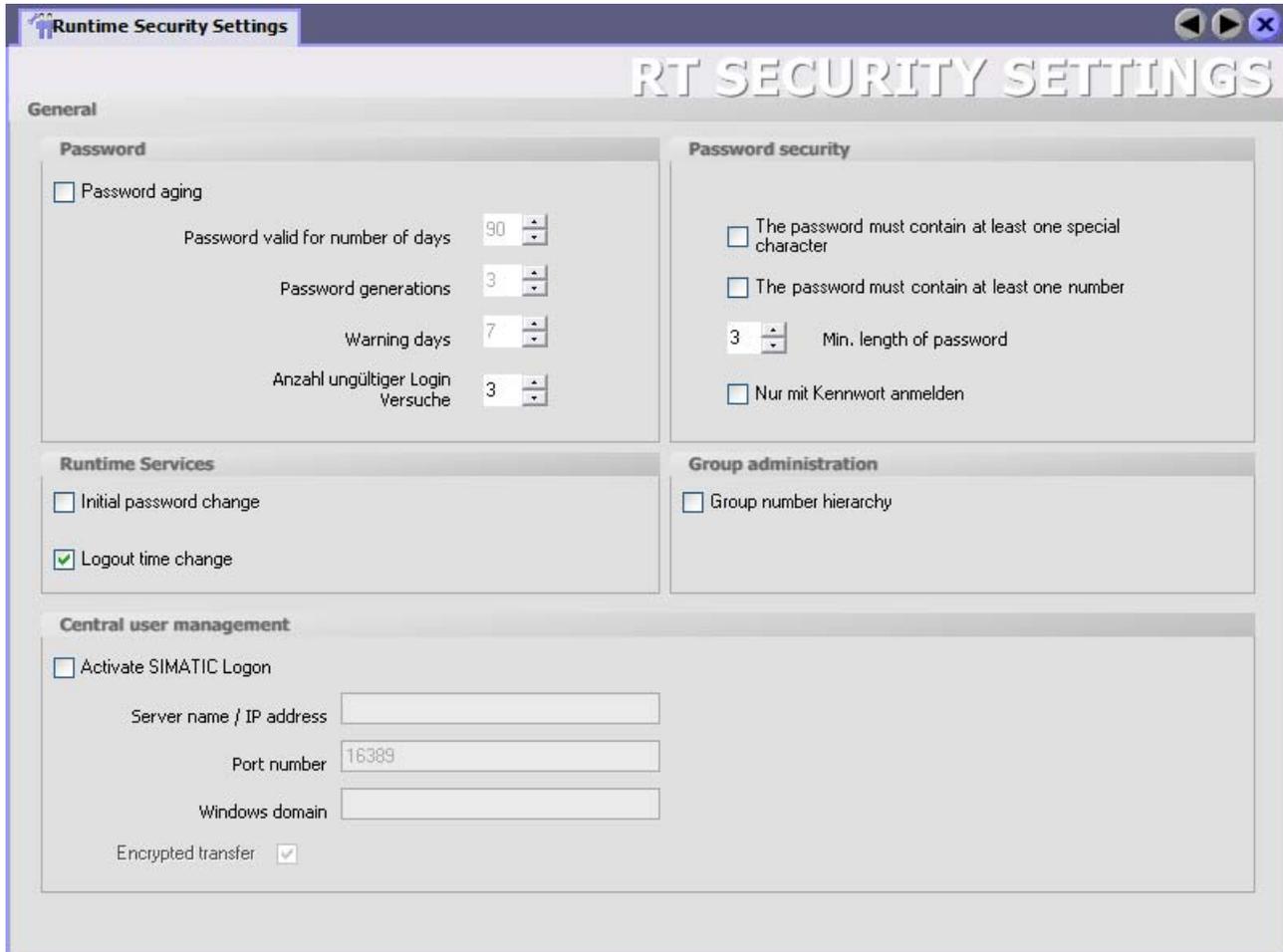


Figure 3-1 "Import/export" menu command

- New importable/exportable objects
 - Alarms
 - Tags
 - Connections

3.2 Extended user administration

"Runtime security settings" editor



The "Runtime security settings" editor has been expanded to include the following:

- Advanced password rules in the "Password" area

"Number of failed login attempts"

You can now define the number of invalid login attempts. Users exceeding the number of invalid login attempts in Runtime are assigned to the "Unauthorized" group.

The number of login attempts is unlimited if you enter the value zero for the number of invalid login attempts.

- Advanced password rules in the "Password security" area

"Login using password exclusively"

Users are only authenticated in Runtime by means of the password.

For proper user identification, do not assign any redundant passwords.

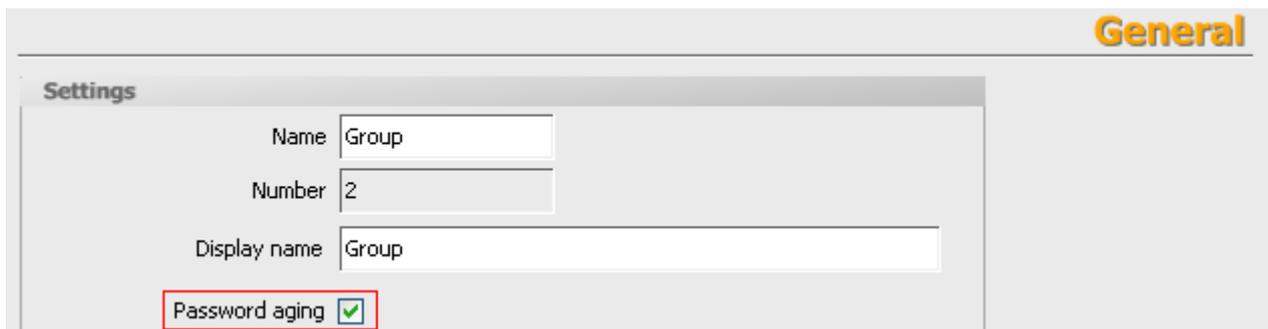
- New "Group administration" area

"Group number hierarchy"

Administrators administer only those users whose group number is less than or equal to that of the administrator. The group numbers can be edited. Allows the creation of administrators with different permissions.

"Groups" editor

You can exclude specific groups from password aging in the "Groups" editor.



Hidden password input

- In WinCC flexible 2008, password input is hidden in the user view.
- A password change must be confirmed by entering the new password twice. This repeated entry meets requirements issued by the FDA.



Supported HMI devices:

OP 77B, xP 177, xP 277, MP 370, MP 377

3.3 Editors

3.3.1 Screens, text lists

Output fields in texts

You can insert output fields for tag values or for the contents of other text lists in texts for the following objects.

- "Screens" Editor
 - Text field
 - Symbolic I/O field
 - Button
 - Switch
- "Text list" editor
 - Text list entry

You can also output control tag values in text lists.

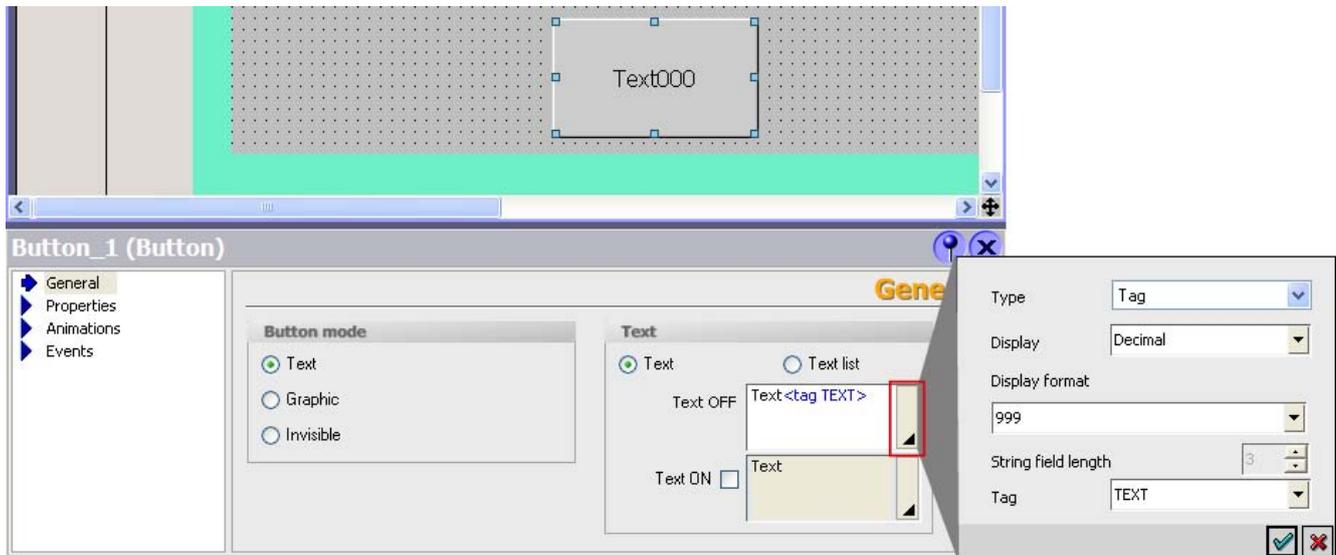


Figure 3-2 Example of the "Screens" editor: Output field in the text of a button

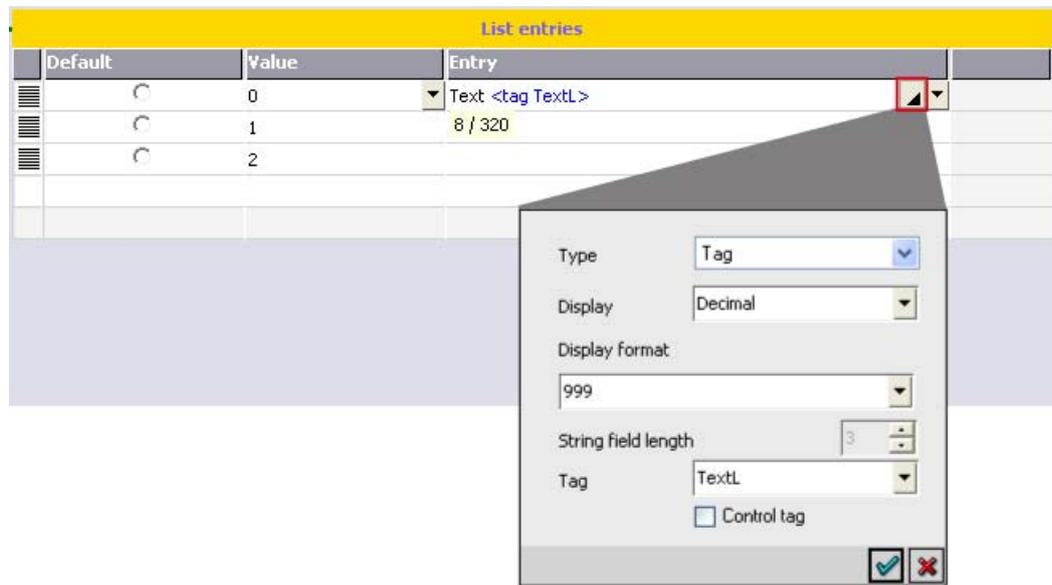


Figure 3-3 Example of the "Text list" editor: Output field in a text list entry

3.3.2 Events at objects

Input completed

The "Input completed" event is triggered after you have confirmed your entries at an I/O field by pressing ENTER, by mouse click or by touch screen operation.

Configurable objects:

I/O fields, graphic I/O field, symbolic I/O field

Release

You can define whether to trigger the "Release" event after the operator has released a specific button. Activate this setting in the "Device settings" editor.

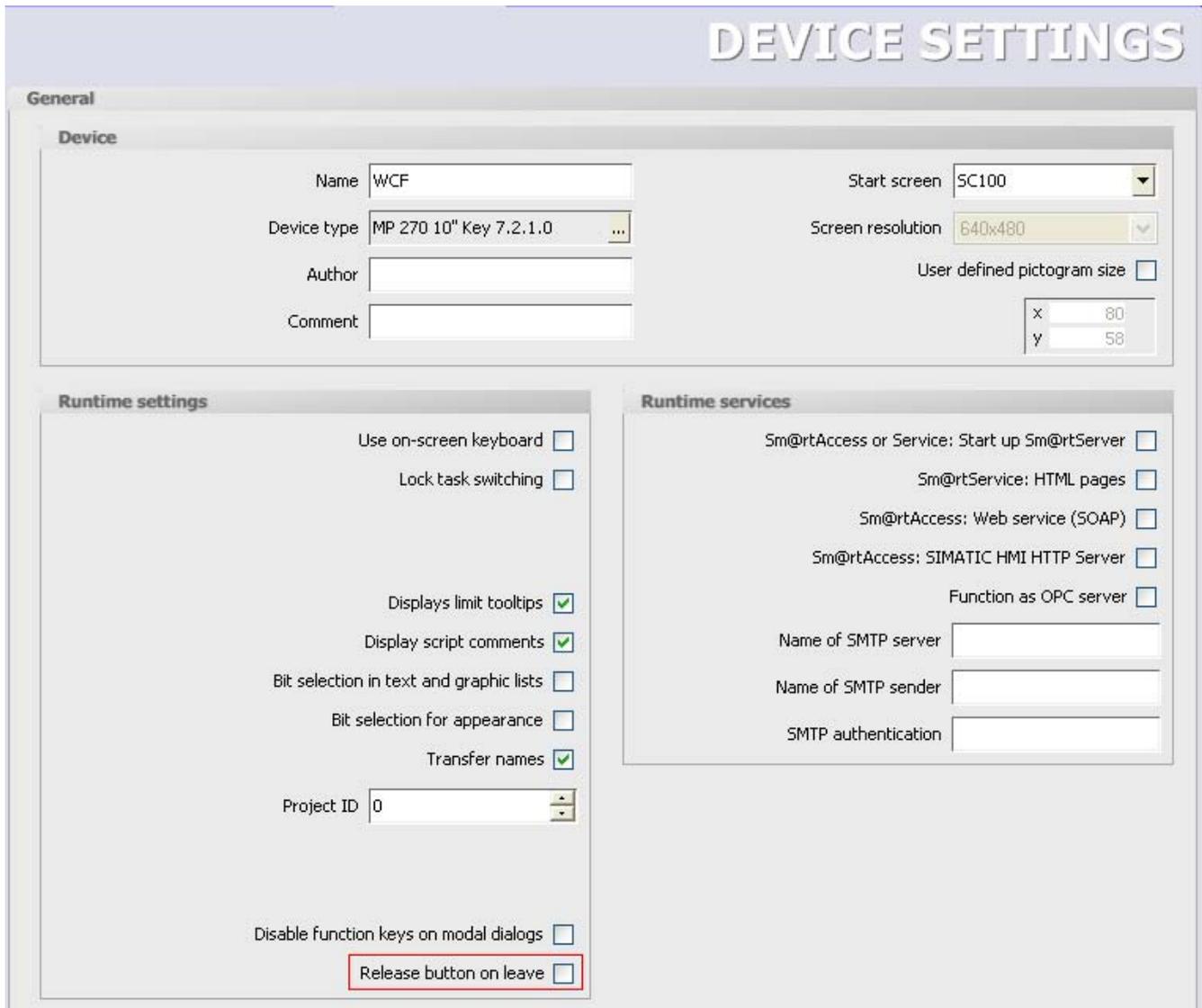


Figure 3-4 "Device settings" editor

3.3.3 Faceplates

Faceplates

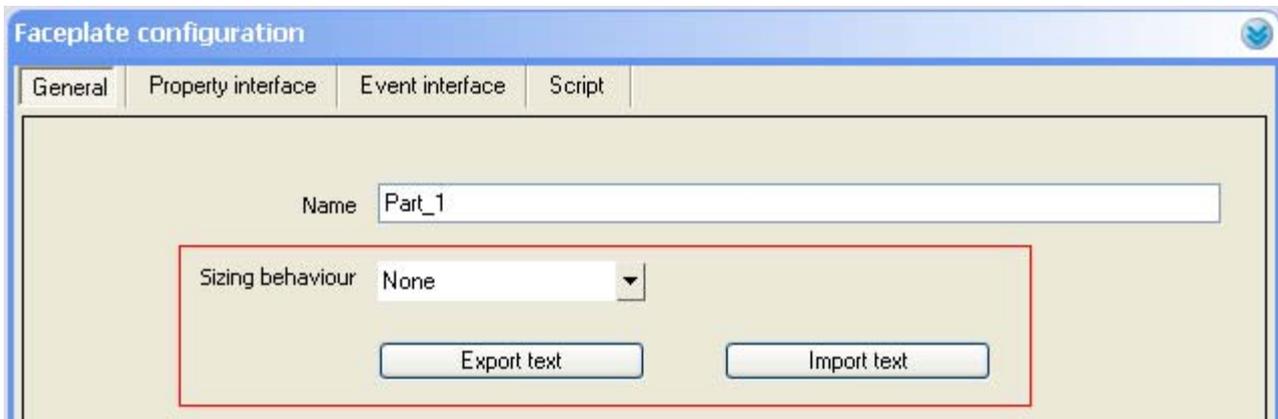


Figure 3-5 "Faceplate configuration" dialog

- Aspect ratio
Define the aspect ratio for the faceplate instance when you create a faceplate. Select "Keep ratio" to maintain the aspect ratio when resizing the faceplate instance. You cannot resize the faceplate instance after having selected "Fixed size".
- Importing and exporting texts
You can export any texts you may be using in faceplates to a CSV file and you can import these texts. Use the export file to transfer the faceplate text to external service providers, e.g. for translation purposes.

3.3.4 Alarms

Enhanced view in the "Discrete alarms" editor

The "Trigger address" column was added to the "Discrete alarms" editor. This column displays the address of the trigger tag. Use this address for correct addressing of the trigger tag in the PLC.

Text	Class	Trigger Tag	Trigger bit	Trigger address
1	Errors	T100	0	DB1 DBX1.0
2	Errors	T100_0	1	DB1 DBX3.1
3	Errors	T100_1	2	DB1 DBX5.2
4	Errors	T100_2	3	DB1 DBX7.3

Figure 3-6 "Discrete alarms" editor

3.3.5 Device settings

Disable function keys on modal dialogs

You could unintentionally trigger an operation as the function keys remain active on a modal dialog. The "Disable function keys on modal dialogs" function in the "Device settings" editor disables the function keys for the duration of the displayed dialog.

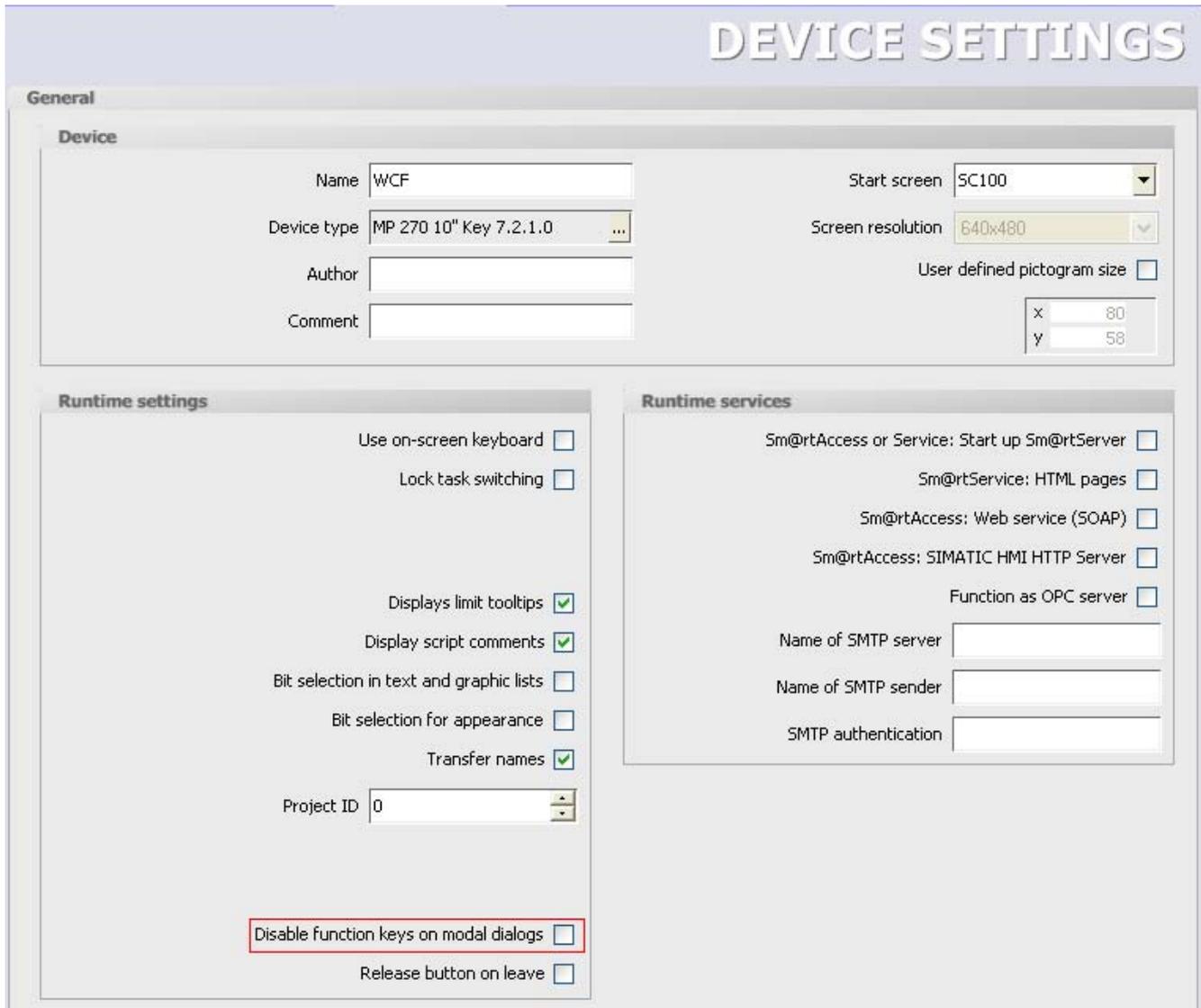


Figure 3-7 "Device settings" editor

To evaluate the status of a PLC, you can configure the following events in the Scheduler after a modal dialog has opened:

- When dialog is opened
- When dialog is closed

3.4 Transfer

S7 routing via Ethernet

WinCC flexible 2008 also supports S7 routing via Ethernet.

Possible S7 routing paths:

Source	Target
Ethernet	Ethernet
Ethernet	MPI/PROFIBUS
MPI/PROFIBUS	Ethernet

Supported HMI devices:

Mobile Panel 277, MP 277, MP 377, WinCC Runtime

Bootstrapping via Ethernet

The following HMI devices now support the transfer of the operating system image (bootstrap) via Ethernet.

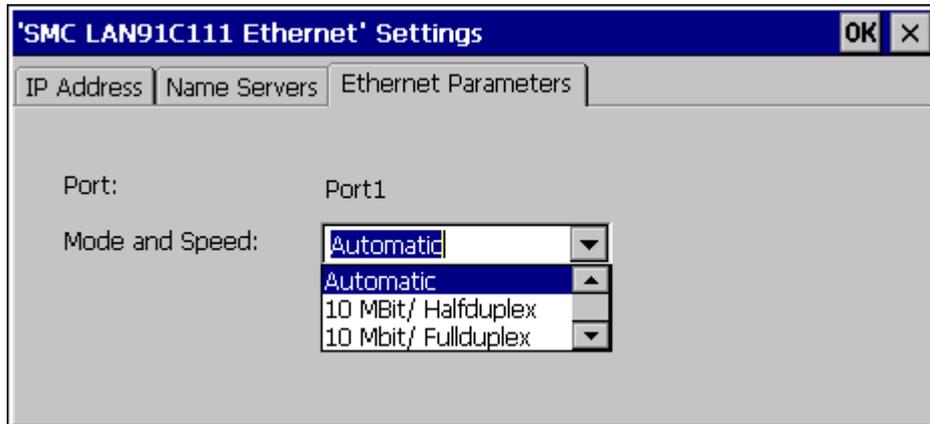
TP 177B 4", MP 377, TP1500 Basic PN, KTP1000 Basic PN, KTP600 Basic color PN, KTP600 Basic mono PN and KTP400 Basic mono PN

Transmission rate of the Ethernet interface

The "Ethernet Parameters" tab was added to the "Ethernet Settings" dialog in the Control Panel of HMI devices MP 177, MP 277 and MP 377.

You can set the following transmission rates in the "Ethernet Parameters" tab:

- 100 Mbps / full duplex
- 100 Mbps / half duplex
- 10 Mbps / full duplex
- 10 Mbps / half duplex
- Automatic



3.5 ES and RT system functions

New system functions

SetDaylightSaving

The system function "SetDaylightSaving" changes the time of the HMI device from standard to daylight saving time and vice versa.

Available on:

TP/OP/MP 277, MP 370, Mobile Panel 277, Mobile Panel 277 IWLAN, Mobile Panel 277F IWLAN, MP 377

EncodeEx

The system function is an enhancement of the "Encode" system function. Contrary to the "Encode" system function, you can define the line break parameter. Use the "Line break" parameter to delete line breaks or replace them with predefined characters.

Available on:

OP 77B, TP/OP 177B, Mobile Panel 177, TP/OP/MP 277, Mobile Panel 277, Mobile Panel 277 IWLAN, Mobile Panel 277F IWLAN, MP 370, MP 377

Enhancement of existing system functions

ChangeConnection

The following connections via Ethernet port are supported:

- SIMATIC S7 300/400
- SIMATIC S7 200

- Simotion
- SimaticNC

ArchiveLogFile

The "Directory name" parameter can be specified by means of a tag.

NotifyUserAction

The following parameters can be specified by means of a tag:

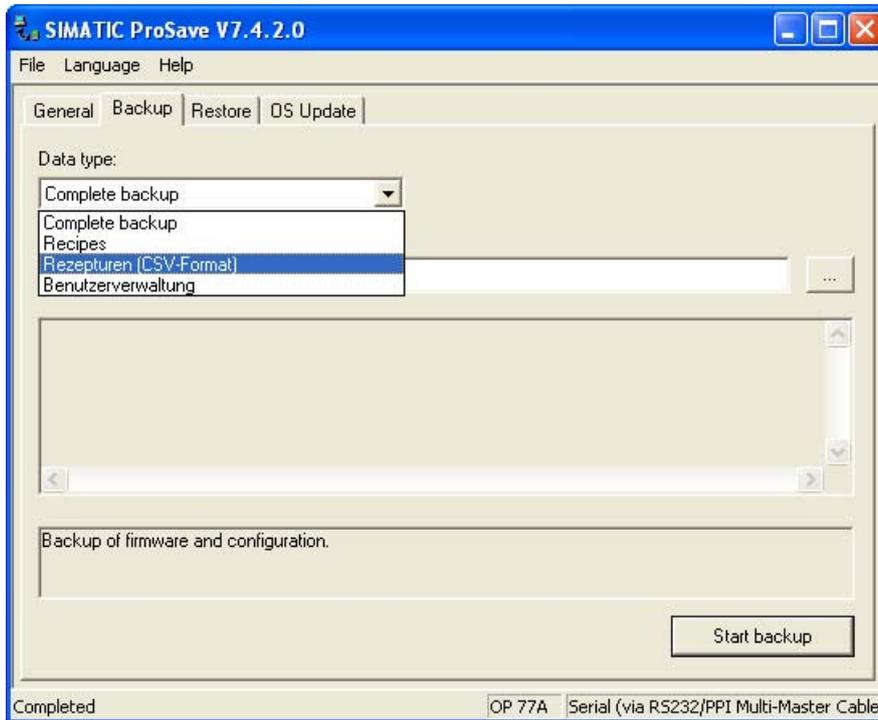
- Category
- Object name
- Description

3.6 Runtime options

3.6.1 ProSave

Enhanced data backup

ProSave now provides an option for backing up or exporting recipe data records to a CSV file.



You can transfer this backup of recipe data to the target device to restore its original state.

Supported HMI devices:

OP77A, TP177A, KTP400 Basic, KTP600 Basic

3.6.2 Sm@rtService/Sm@rtAccess

Service and diagnostics

WinCC flexible/Sm@rtAccess and WinCC flexible/Sm@rtService have changed as follows:

- The options can be used on the new Ethernet-enabled HMI devices:
 - MP 177 6" Touch
 - TP 177B 4"

HMI devices

4.1 Support for new HMI devices

4.1.1 New Panel

TP 177B 4"

The TP 177B 4" features a 4.3" TFT display with wide-screen format. This display extends the visible area on the HMI device by approximately 25 % compared to similar displays with 4:3 format. The HMI device also features four function keys with tactile feedback. In combination with the intuitive touch operation, it offers maximum operating efficiency. In addition to MMC cards, the TP 177B 4" supports SD cards and USB memory sticks.

The following software options are available for the TP 177B 4":

- WinCC flexible/Sm@rtService
- WinCC flexible /Sm@rtAccess

4.1.2 New Multi Panel

MP 177 6" Touch

Multi Panel MP 177 with 6" touch display represents an enhancement of the Multi Panel device family.

All Multi Panels are based on the innovative standard operating system Microsoft Windows CE 5.0. Multi Panels offer enhanced communication options to the office world. All Multi Panels feature a special hardware which provides optimal support for WinAC MP (software PLC).

The MP 177 offers great diversity for applications, high performance and a favorable cost/performance ratio.

The MP 177 features:

- PROFIBUS interface
- Ethernet interface for connection to PROFINET (LAN)
- USB interface
- TFT screen with up to 64k colors

4.1 Support for new HMI devices

The functionality of MP 177 as a "multifunctional platform" was enhanced with the following software options:

- WinAC MP (software PLC)
- Sm@rtService
- Sm@rtAccess

4.1.3 New Panel series

SIMATIC HMI Basic Line

The SIMATIC HMI Basic Line offers touch panels for simple operating and monitoring tasks.

- TP1500 Basic PN
- KTP1000 Basic PN, KTP1000 Basic DP
- KTP600 Basic color PN, KTP600 Basic color DP, KTP600 Basic mono PN
- KTP400 Basic mono PN

Installation of the SIMATIC HMI Basic Line is compatible with existing touch HMI devices of the Panel and Multi Panel product family. The HMI devices are available with four different display sizes from 4 to 15 inches. All HMI devices are equipped with an Ethernet interface.

4.1.4 New panel PCs

New panel PCs

The following Panel PCs can be configured using WinCC flexible 2008:

- Panel PC 477 19" Touch
- Panel PC 677 17" Touch

4.2 Enhancements for MP 377

Modified response during reset to factory settings

It was previously required to cycle the power supply to the MP 377 off and on again to restore the factory settings.

Reset the MP 377 to factory settings using the "Prepare for Reset" button.

Open the "Device" tab in the "OP Properties" dialog accordingly and press the "Reboot" button.

The next message displays the "Prepare for Reset" button. Press this button to initiate the reset to factory settings.



Operating systems

Support for new operating systems

WinCC flexible as of this version supports the Windows Vista operating system. Support covers the 32-bit version of the Vista Ultimate and Business editions.

	WinCC flexible 2008	WinCC flexible 2008 Micro	WinCC flexible 2008 Runtime
Windows XP Home SP2, SP3	--	✓	--
Windows XP Professional SP2, SP3	✓	✓	✓
Windows Vista Business	✓	✓	✓
Windows Vista Ultimate	✓	✓	✓

Licenses

New WinCC flexible Runtime license

A new license key is available to cover the extended system limits: "WinCC flexible 2008 Runtime (4096)"

Extended system limit

The maximum number of tags within a project was raised to 4096 tags.

Supported HMI devices:

WinCC flexible Runtime, MP 377

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