

Remote Control of Operator Panel in Applications requiring Validation in the Pharmaceutical Environment

WinCC flexible/Audit and WinCC flexible/Sm@rtAccess

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SIMATIC

WinCC flexible/Audit and SmartService

Remote Control of Operator Panel in
Applications requiring Validation
in the Pharmaceutical Environment

Automation Task

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Warranty and Liability

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1 Automation Task

1.1 Overview

Introduction

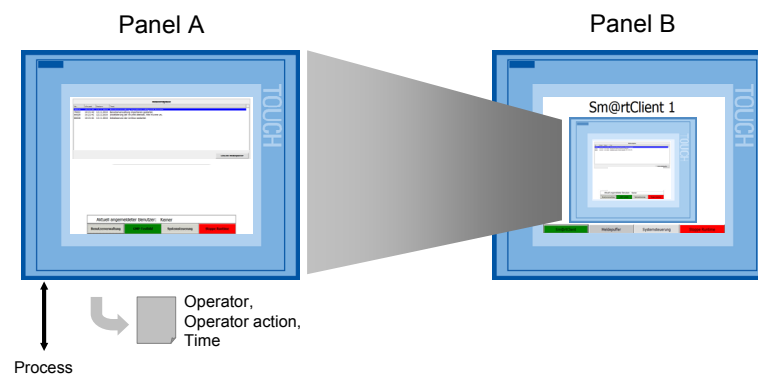
In plants requiring validation it is important that all operator actions are recorded and that they can be assigned to the corresponding operators.

In addition, there is the demand for “location-independent access to process data”.

Overview of the automation task

The figure below provides an overview of the automation task.

Figure 1-1



Description of the automation problem

A plant is to be operated with the operator panel A. All relevant operator actions have to be recorded. In addition, it shall be possible to remote control the operator panel from a different second workplace through operator panel B.

1.2 Requirements

Requirements to the automation task

Table 1-1

Requirement	Explanation
Only one user is allowed to operate.	It has to be guaranteed that no other operations can be remotely performed when the operator panel is operated directly. It has to be ensured that no operations are performed on the device when it is remote controlled.
If one operator panel connects with another, the current user has to be logged off automatically.	To ensure the uniqueness of the audit recording, only one operator can be logged on. The current user is only logged off automatically after a re-registration period.

Requirement	Explanation
If the remote control is exited, the user has to be logged off automatically.	
An automatic disconnection of the connection has to take place so that no permanent blocking of an operator panel can occur.	Automatic disconnection is only enabled after a longer period where no operation takes place.
In an audit trail, login and log off processes are to be recorded.	

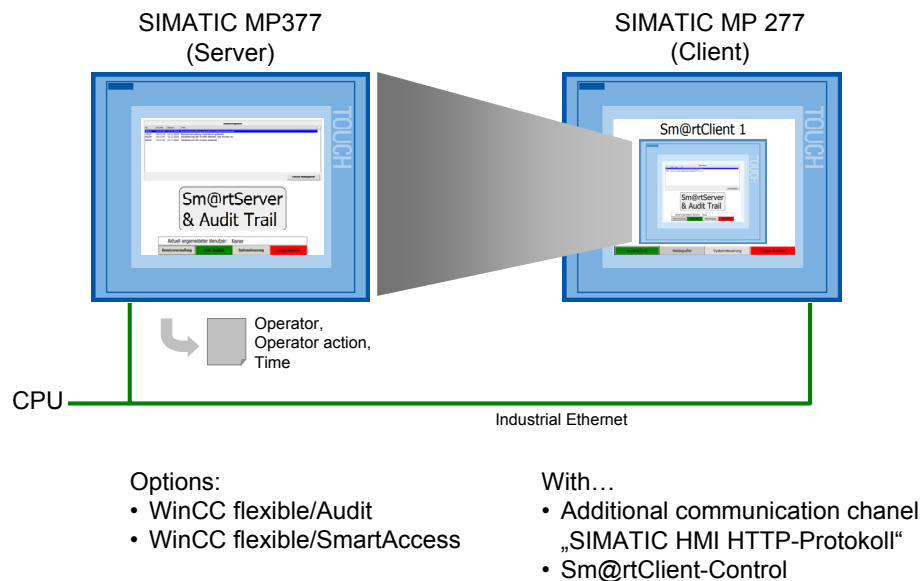
2 Automation Solution

2.1 Overview of the general solution

Schematic layout

The following figure gives a schematic overview of the most important components of the solution:

Figure 2-1



2.2 Description of the core functionality

2.2.1 General information

WinCC flexible/Sm@rtAccess

The WinCC flexible/Sm@rtAccess option enables client or server accesses from one panel to another. This is how the devices are "remote controlled". The Sm@rtServer provides its screen content to the Sm@rtClient. The Sm@rtServer can be operated through the Sm@rtClient.

In addition, the current process values can be accessed plant-wide and their archiving and analysis can be provided. With the Sm@rtAccess option you relieve your field busses and you use a flexible solution for location-independent access to your plant.

WinCC flexible/Audit

The WinCC flexible/Audit option enables the recording of all relevant operator actions of an operator panel.

Storing the production data in electronic form offers many advantages compared with paper documentation, such as the simple recording and archiving of data. However, at the same time it has to be ensured that the data is forgery-proof and can be read at any time.

More information regarding the issue WinCC flexible/Audit can be found under entry [36969886](#). \6\

Note

To be able to use the above mentioned options fully you need the licenses “WinCC flexible/Sm@rtAccess for Panels” and “WinCC flexible/Audit for Panels” on your operator panel. More information regarding the issues licenses and the transfer to the corresponding operator panels can be found under entry [27005215](#). \7\

2.2.2 Combination of both options

Illegal combination

If two options are combined, the requirements to an application requiring validation are **not** fulfilled since there is no interlock for “remote control/remote service”.

Additional functionality

In addition to the use of the two options, server and client are synchronized through the SIMATIC HMI HTTP protocol.

Via this additional “service canal” the basic connection establishment and the interlock for the “remote control” takes place.

Advantages of this solution

The solution presented here offers you the following advantages:

- Only one client is allowed to operate. Neither a second client nor the server can “seamlessly” take over the operation. Before a change there is always a log off of the current user.
- If a client connects with the server (to operate), the current user is automatically logged off beforehand.
- If an (operating) client leaves the remote control screen in which the Sm@rtClient is displayed, then the current user is automatically logged off.
- The Sm@rtServer is furthermore stopped, so that the client cannot automatically re-establish the connection and the server is no longer blocked.
- If the connection to the (operating) client is interrupted, the current user is automatically logged off – even if he previously performed this manually. The Sm@rtServer is furthermore stopped, so that the client cannot automatically re-establish the connection and the server can be operated again.
- The clients separate the connection after a defined period of time so that a lock on the server is withdrawn again.
- The Sm@rtServer is only in operation when operated via remote. This saves resources.
- There is generally no limit for the number of possible connectable clients. However, only one client can be operated at a time.

2.3 Hardware and software components used

The application document was generated using the following components:

Hardware components

Table 2-1

Component	No.	MLFB / order number	Note
MP 277 10"	1	6AV6643-0CD01-1AX1	As client
TP 277 6"	1	6AV6643-0AA01-1AX0	As server
S7 300/400	1	6ES7315-2EH14-0AB0	In this example, an exemplary DB is loaded and the clock memory is used.
PS307	1	6ES7 307-1BA01-0AA0	

The functional differences between the various operator panels and what other operator panels can be used for this application can be found under entry [40227286](#). \4\

Standard software components

Table 2-2

Component	No.	MLFB / order number	Note
WinCC flexible 2008 SP2	1		For configuration of the panels.
WinCC flexible/Audit	1		RT option for panel
WinCC flexible/Sm@rtAccess	1		RT option for panel
STEP 7 V5.5	1		For configuration of the controller.

Note

The hardware and software products listed here have an exemplary character. However, other products can also be used. Nevertheless, these have to support the scripting, Sm@rtService and audit options.

Sample files and projects

The following list includes all files and projects used in this example.

Table 2-3

Component	Note
Server.zip	Project for server
Client.zip	Project for client

3 Functional Mechanisms of this Application

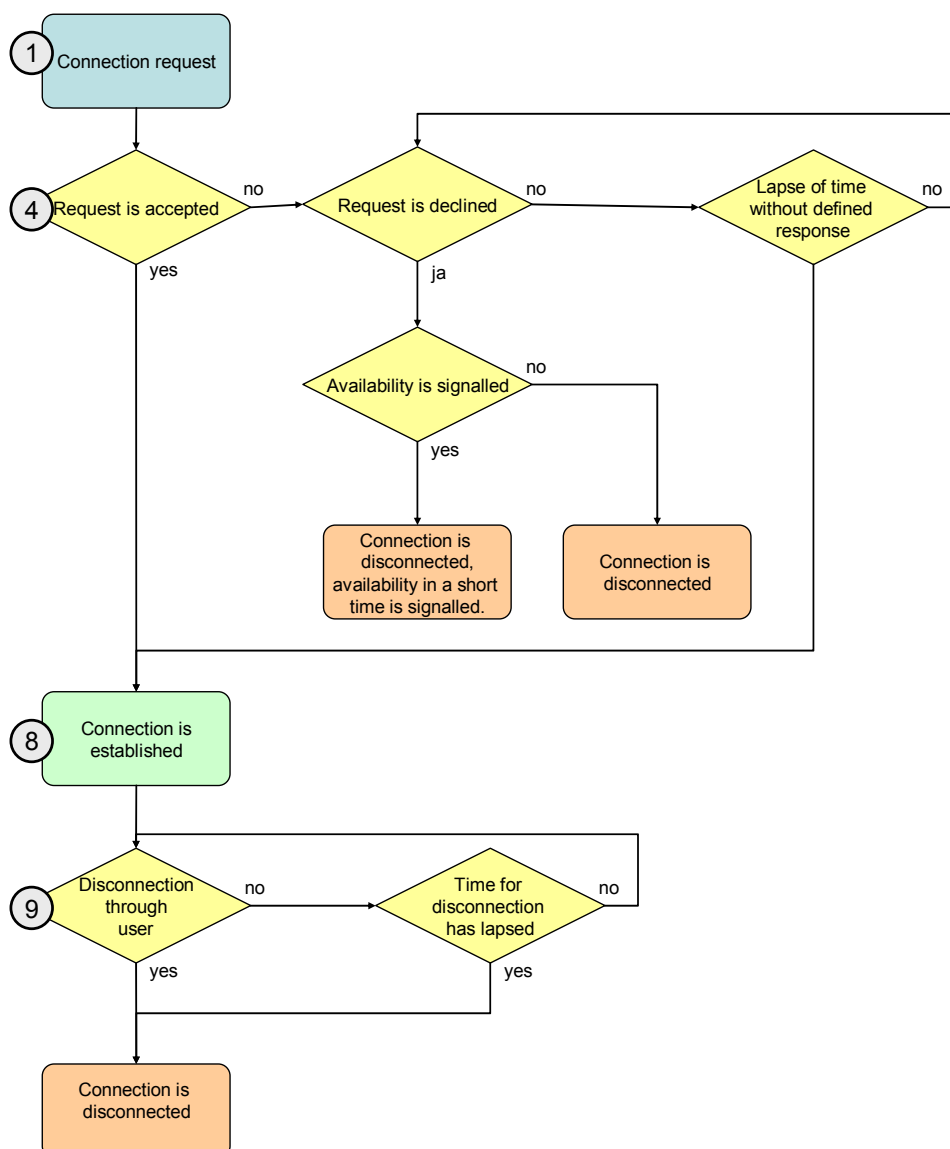
General information

In addition to the function of the two options Sm@rtAccess and Audit, the connection control between server and client is controlled through “HMI HTTP communication”.

The basic functional mechanisms are explained below.

Overview of the sequence of the connection control

Figure 3-1



The description of the gray markings can be found in the following chapter.

Sequence of the connection control

The connection through the “Sm@rtViewer Client Control” is normally established automatically (via screen selection, where the control is integrated). This approach is not desired here.

The connection request is through an additional screen. This is where the user can send a connection request to the server.

The “Sm@rtViewer Client” cannot be started directly; an additional connection to the server is not possible.

Table 3-1

Step	Sequence
Connection request (Client → Server)	
1.	The user requests the connection through the button.
2.	The button sets the tag for the connection request.
3.	The tag for connection request accesses the tags of the server through the HMI HTTP protocol. This means the connection request is known to the server.
Dialog to connection request (server)	
4.	A special screen is displayed once the client has set the bit for the connection request.
5.	The Sm@rtServer is started if the request is accepted.
6.	Another bit is set which the client can read through the HMI HTTP protocol.
Connection is established	
7.	The client detects the set bit for the connection approval through the HMI HTTP protocol.
8.	The Sm@rtViewer client is started and the connection is established.
Disconnecting the connection	
9.	By changing to another screen or after a lapse of the specified safety time, the Sm@rtViewer client is exited by changing to another screen.

4 Configuration Process

Content of the chapter


This chapter shows you what configuration steps you have to carry out so that you can expand your own project or a new project with the described functionalities.

The settings of the server are necessary to use the sample project.

4.1 Configuration of server operator panel

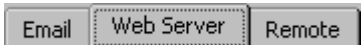
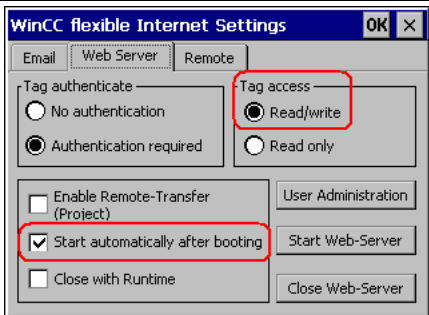
Enabling of the Sm@rtServer

Table 4-1

No.	Step	Comment/screen
1.	In the project tree, navigate to: "Device settings > Device settings".	
2.	In the "Runtime services" field enable the two services just as shown in the screen and transfer the project to the panel.	

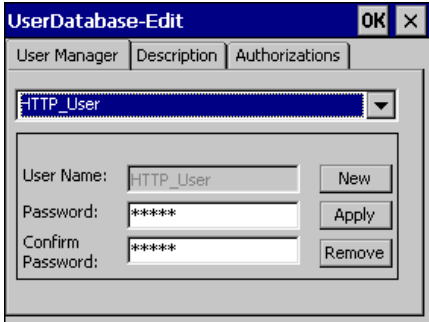
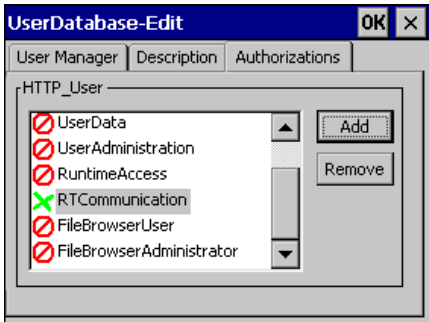
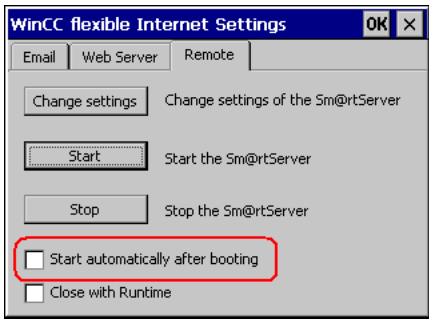
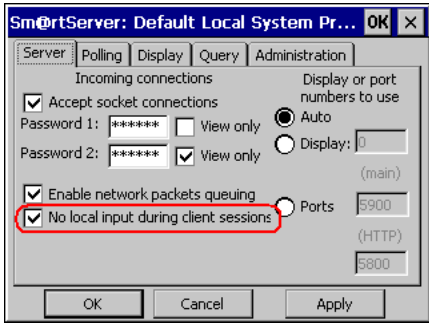
Settings of the Sm@rtServer (incl. safety settings)

Table 4-2

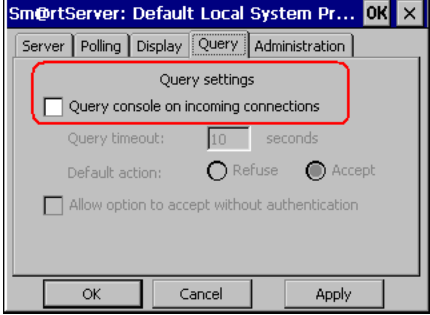
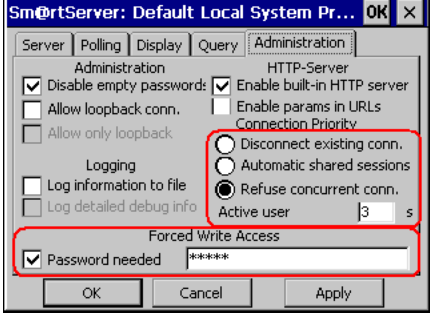
No.	Step	Comment/screen
1.	Open the "Control Panel" of your server operator panel.	For example, when switching on the operator panel.
2.	This is where you start the settings for the "WinCC flexible Internet Settings" via the "WinCC Internet Settings" icon.	
3.	Enable the "Web Server" tab.	
4.	Accept the settings just as shown in the screen. "Tag access" has to be set to "Read/write" otherwise no mutual communication will be possible. "Start automatically after booting" has to be enabled.	
5.	Click the "User Administration" button.	

4 Configuration Process

4.1 Configuration of server operator panel

No.	Step	Comment/screen
6.	Create a new user. For this purpose, click the "New" button. Use your own user name and an individual password.	
7.	Go to the "Authorizations" tab.	
8.	Enable the "RTCommunication" authorization.	
9.	Close the "User Manager" with OK. Confirm the dialog for restart of the web server also with "OK".	
10.	Go to the "Remote" tab.	
11.	Disable the "Start automatically after booting" setting. Note "Start automatically after booting" has to be disabled because the server must only be started if a connection is requested.	
12.	Click the "Change settings" button.	
13.	Set the "No local input during client sessions" option. "No local input during client sessions" has to be enabled otherwise a local user on the server (without authorization) can withdraw the operation from a client and who is then able to change values. These modifications would then be protocolled under the user from whom the operation was withdrawn!	

4.1 Configuration of server operator panel

No.	Step	Comment/screen
14.	Assign a password under "Password 1" that is not known to the user and/or customer.	<p>The password is only needed for the configuration of the Sm@rtClient displays in the respective screens since this is where the password is entered once.</p> <p>After that, the password is no longer needed.</p>
15.	Go to the "Query" tab.	
16.	Check whether the "Query console on incoming connections" option is disabled.	 <p>The "Query settings" are not used since these are realized through the WinCC flexible project.</p> <p>The Query console deals with requests for incoming connections. This means, automatic accepting of SmartAccess requests could be set up. This is not desired in this example.</p>
17.	Go to the "Administration" tab.	
18.	<p>Accept the settings just as shown in the screen.</p> <p>Confirm the dialog for the restart of the remote server with "OK".</p> <p>Enable "Password needed" under "Forced Write Access".</p> <p>Note The password is not needed in operation and must not be known to the user. (See step 14.)</p>	 <p>"Connection Priority" has to be set to "Refuse concurrent conn.".</p> <p>Access attempts by an unauthorized client (for example through Sm@rtClient.exe) can thus be prevented during the time in which the Sm@rtServer is active (because it is currently communicating).</p>

4 Configuration Process

4.1 Configuration of server operator panel

Access to the “Control Panel” of the server operator panel


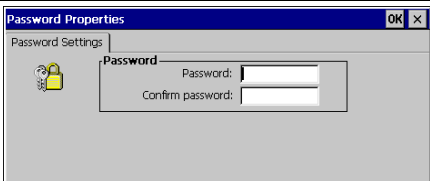
There must be no access to the control panel of the Sm@rtServer operator panel because this could change the WinCC Internet settings and unauthorized people could gain access to the operator panel.

There are two options:

- Assigning a password. (Table 4-3)
- The waiting time for boot process is set to 0 seconds. (Table 4-4)


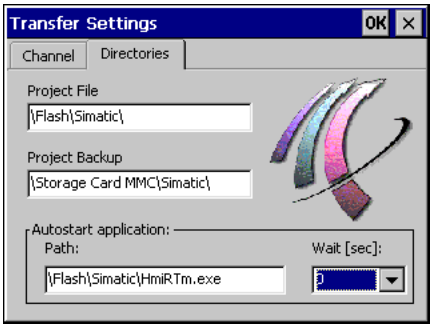
Assigning a password

Table 4-3

No.	Step	Comment/screen
1.	Start the “Password” dialog in the “Control Panel” of the server operator panel.	 Password
2.	Assign a password. Note The user must not know the password. This password disables the Control Panel. This means that without this password you can no longer go to the control panel.	
3.	Close the dialog with “OK”.	

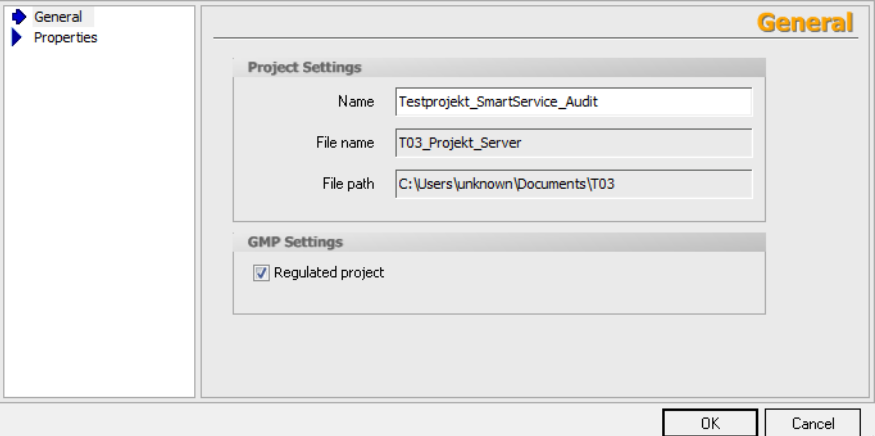
Setting the waiting time for the boot process to 0 seconds.

Table 4-4

No.	Step	Comment/screen
1.	Start the “Transfer” dialog in the “Control Panel” of the server operator panel.	 Transfer
2.	Set the time for delaying the boot process to “0” seconds. Note If the “Open system Control” function is used in the WinCC flexible project it has to be protected in a way that only authorized people have access to the control panel through this way.	 Thus, the panel no longer shows the “Loader menu” and you can no longer go to the control panel during ramp-up.
3.	Close the dialog with “OK”.	

Enabling a regulated project (WinCC flexible/Audit)

Table 4-5

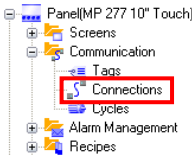
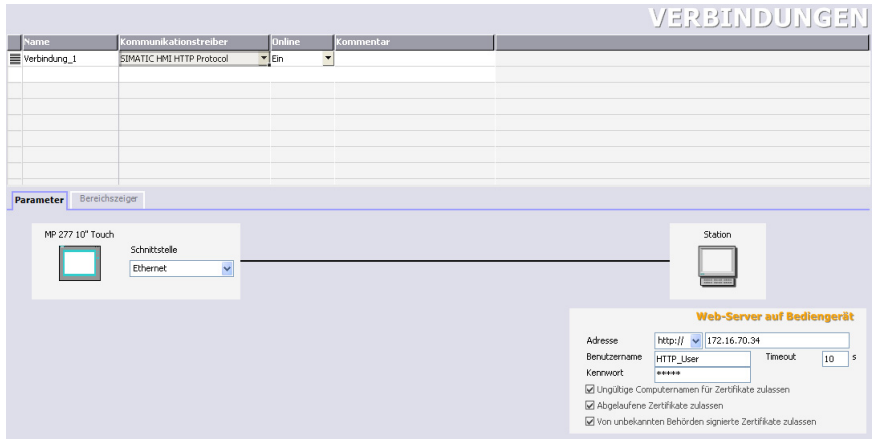
No.	Step	Comment/screen
1.	Open the "Properties" entry in the project window of the context menu of the project. Right-click the title of the project in the top level of the project tree.	
2.	Select the "General" tab. Enable the "Regulated project" option under the GMP settings. Now the project is expanded by configuration options to trace operator actions.	

4.2 Configuration of the client

Connection settings of the client

For the connection control, the communication takes place through the SIMATIC HMI HTTP protocol between server and client. For this purpose this connection has to be established.

Table 4-6

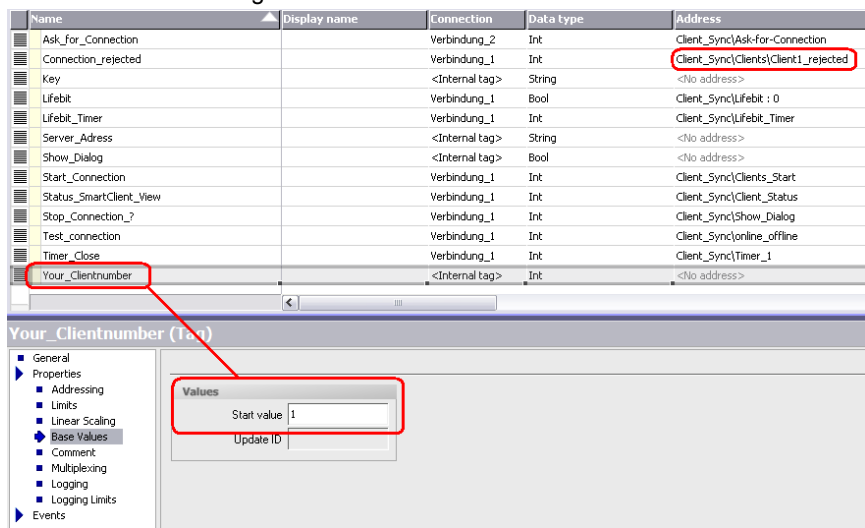
No.	Step	Comment/screen
1.	In the project tree, navigate to "Communication > Connections".	
2.	Create a new connection and select the "SIMATIC HMI HTTP Protocol" as communication driver.	
3.	Enter the IP address of the server operator panel as connection parameter.	
4.	Use the data that you have assigned as user name and password for your server operator panel.	See previous section "Settings of the Sm@rtServer (incl. safety settings)" in table 4-2, step 6.

4.3 Configuration of another client

Configuration on the client

To insert another client with the help of the preconfigured project (Client.zip), the following changes have to be made on the project.

Table 4-7

No.	Step	Comment/screen																																																																						
1.	Open the project of the already configured client and save it under a different name. You can use the sample project for each new client. Only the following 2 steps have to be carried out.																																																																							
2.	Set the start value of the “Your_Clientnumber” tag in the tag table (Communication > Tags) to the value of the client. If you are to configure, for example, client 3 then the start value of the tag is to be set to value 3.	 <p>The screenshot shows the 'Communication > Tags' table with the following data:</p> <table><tr><th>Name</th><th>Display name</th><th>Connection</th><th>Data type</th><th>Address</th></tr><tr><td>Ask_for_Connection</td><td></td><td>Verbindung_2</td><td>Int</td><td>Client_Sync\Ask-for-Connection</td></tr><tr><td>Connection_rejected</td><td></td><td>Verbindung_1</td><td>Int</td><td>Client_Sync\Clients\Client1_rejected</td></tr><tr><td>Key</td><td></td><td><Internal tag></td><td>String</td><td><No address></td></tr><tr><td>Lifebit</td><td></td><td>Verbindung_1</td><td>Bool</td><td>Client_Sync\Lifebit : 0</td></tr><tr><td>Lifebit_Timer</td><td></td><td>Verbindung_1</td><td>Int</td><td>Client_Sync\Lifebit_Timer</td></tr><tr><td>Server_Address</td><td></td><td><Internal tag></td><td>String</td><td><No address></td></tr><tr><td>Show_Dialog</td><td></td><td><Internal tag></td><td>Bool</td><td><No address></td></tr><tr><td>Start_Connection</td><td></td><td>Verbindung_1</td><td>Int</td><td>Client_Sync\Clients_Start</td></tr><tr><td>Status_SmartClient_View</td><td></td><td>Verbindung_1</td><td>Int</td><td>Client_Sync\Client_Status</td></tr><tr><td>Stop_Connection_?</td><td></td><td>Verbindung_1</td><td>Int</td><td>Client_Sync\Show_Dialog</td></tr><tr><td>Test_connection</td><td></td><td>Verbindung_1</td><td>Int</td><td>Client_Sync\online_offline</td></tr><tr><td>Timer_Close</td><td></td><td>Verbindung_1</td><td>Int</td><td>Client_Sync\Timer_1</td></tr><tr><td>Your_Clientnumber</td><td></td><td><Internal tag></td><td>Int</td><td><No address></td></tr></table> <p>The 'Your_Clientnumber (Tag)' configuration dialog is shown with the 'Start value' set to 1.</p>	Name	Display name	Connection	Data type	Address	Ask_for_Connection		Verbindung_2	Int	Client_Sync\Ask-for-Connection	Connection_rejected		Verbindung_1	Int	Client_Sync\Clients\Client1_rejected	Key		<Internal tag>	String	<No address>	Lifebit		Verbindung_1	Bool	Client_Sync\Lifebit : 0	Lifebit_Timer		Verbindung_1	Int	Client_Sync\Lifebit_Timer	Server_Address		<Internal tag>	String	<No address>	Show_Dialog		<Internal tag>	Bool	<No address>	Start_Connection		Verbindung_1	Int	Client_Sync\Clients_Start	Status_SmartClient_View		Verbindung_1	Int	Client_Sync\Client_Status	Stop_Connection_?		Verbindung_1	Int	Client_Sync\Show_Dialog	Test_connection		Verbindung_1	Int	Client_Sync\online_offline	Timer_Close		Verbindung_1	Int	Client_Sync\Timer_1	Your_Clientnumber		<Internal tag>	Int	<No address>
Name	Display name	Connection	Data type	Address																																																																				
Ask_for_Connection		Verbindung_2	Int	Client_Sync\Ask-for-Connection																																																																				
Connection_rejected		Verbindung_1	Int	Client_Sync\Clients\Client1_rejected																																																																				
Key		<Internal tag>	String	<No address>																																																																				
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Timer_Close		Verbindung_1	Int	Client_Sync\Timer_1																																																																				
Your_Clientnumber		<Internal tag>	Int	<No address>																																																																				
3.	Adjust the addresses of the “Connection_rejected” tags of your client. Note If you are to configure, for example “Client three”, then the address is to be set to “Client3_rejected”.																																																																							

Configuration on the server

To insert another client on the server with the help of the preconfigured project (Server.zip), the following changes have to be made on the project.

Table 4-8

No.	Step	Comment/screen
1.	Create the "Clientx_rejected" tag under "Tags→Client_Sync→Clients". Example: "Client3_rejected"	
2.	Supplement a new "Case" for the new client and adjust the client number in the "Ask_for_Connection" script. The new "Case" always has to correspond to the client number. <pre> Select Case SmartTags("Client_Sync\Ask-for-Connection") Case 1 SmartTags("Client_Sync\Show_Dialog")=1 SmartTags("Client_Sync\Client_Number")=1 SmartTags("Client_Sync\Timer_2")=SmartTags("Client_Sync\Config\Time_Request") ControlSmartServer hmiStart Case 2 SmartTags("Client_Sync\Show_Dialog")=1 SmartTags("Client_Sync\Client_Number")=2 SmartTags("Client_Sync\Timer_2")=SmartTags("Client_Sync\Config\Time_Request") ControlSmartServer hmiStart Case 3 SmartTags("Client_Sync\Show_Dialog")=1 SmartTags("Client_Sync\Client_Number")=3 SmartTags("Client_Sync\Timer_2")=SmartTags("Client_Sync\Config\Time_Request") ControlSmartServer hmiStart End Select </pre>	
3.	Supplement a new "Case" for the new client and adjust the client number in the "Clients_call" script. The new "Case" always has to correspond to the client number. <pre> Select Case SmartTags("Client_Sync\Ask-for-Connection") Case 1 'Client1 is active SmartTags("Client_Sync\Clients_Start")=1 SmartTags("Client_Sync\Show_Dialog")=2 Case 2 'Client2 is active SmartTags("Client_Sync\Clients_Start")=2 SmartTags("Client_Sync\Show_Dialog")=2 Case 3 'Client3 is active SmartTags("Client_Sync\Clients_Start")=3 SmartTags("Client_Sync\Show_Dialog")=2 End Select </pre>	

No.	Step	Comment/screen
4.	<p>Supplement a new "Case" for the new client and adjust the client number in the "Clients_rejectes" script (as explained in step 1). The values from the script do not have to be adjusted. The new "Case" always has to correspond to the client number.</p> <pre> Select Case SmartTags("Client_Sync\Ask-for-Connection") Case 1 If SmartTags("Client_Sync\Clients_rejected")=1 Then SmartTags("Client_Sync\Clients\Client1_rejected")=1 SmartTags("Client_Sync\Show_Dialog")=0 SmartTags("Client_Sync\Timer_2")=0 ElseIf SmartTags("Client_Sync\Clients_rejected")=2 Then SmartTags("Client_Sync\Clients\Client1_rejected")=2 SmartTags("Client_Sync\Show_Dialog")=0 SmartTags("Client_Sync\Timer_2")=0 ElseIf SmartTags("Client_Sync\Clients_rejected")=3 Then SmartTags("Client_Sync\Clients\Client1_rejected")=3 SmartTags("Client_Sync\Show_Dialog")=0 SmartTags("Client_Sync\Timer_2")=0 End If </pre>	<p>• • •</p> <pre> Case 3 If SmartTags("Client_Sync\Clients_rejected")=1 Then SmartTags("Client_Sync\Clients\Client3_rejected")=1 SmartTags("Client_Sync\Show_Dialog")=0 SmartTags("Client_Sync\Timer_2")=0 ElseIf SmartTags("Client_Sync\Clients_rejected")=2 Then SmartTags("Client_Sync\Clients\Client3_rejected")=2 SmartTags("Client_Sync\Show_Dialog")=0 SmartTags("Client_Sync\Timer_2")=0 ElseIf SmartTags("Client_Sync\Clients_rejected")=3 Then SmartTags("Client_Sync\Clients\Client3_rejected")=3 SmartTags("Client_Sync\Show_Dialog")=0 SmartTags("Client_Sync\Timer_2")=0 End If End Select </pre>
5.	<p>Supplement a new "Case" for the new client and adjust the client number in the "SmartClient_Test" script. The new "Case" always has to correspond to the client number.</p> <pre> If SmartTags("Client_Sync\Client_Status")>0 Then Select Case SmartTags("Client_Sync\Client_Status") Case 1 'Client2 is activ and parameters will be set If SmartTags("Client_Sync\Clients_online?") = 0 Then SmartTags("Client_Sync\Clients_online?") = 1 SmartTags("Client_Sync\Timer_1")=SmartTags("Client_Sync\Config\Time_Online") Else If SmartTags("Client_Sync\Clients_online?") = 1 Then Logoff ControlSmartServer hmiStop SmartTags("Client_Sync\Clients_online?") = 0 End If End If </pre>	<p>• • •</p> <pre> Case 3 'Client3 is activ and parameters will be set If SmartTags("Client_Sync\Clients_online?") = 0 Then SmartTags("Client_Sync\Clients_online?") = 3 SmartTags("Client_Sync\Timer_1")=SmartTags("Client_Sync\Config\Time_Online") Else If SmartTags("Client_Sync\Clients_online?") = 3 Then Logoff ControlSmartServer hmiStop SmartTags("Client_Sync\Clients_online?") = 0 End If End If End Select End If </pre>

4.4 Configuration of the controller

Note

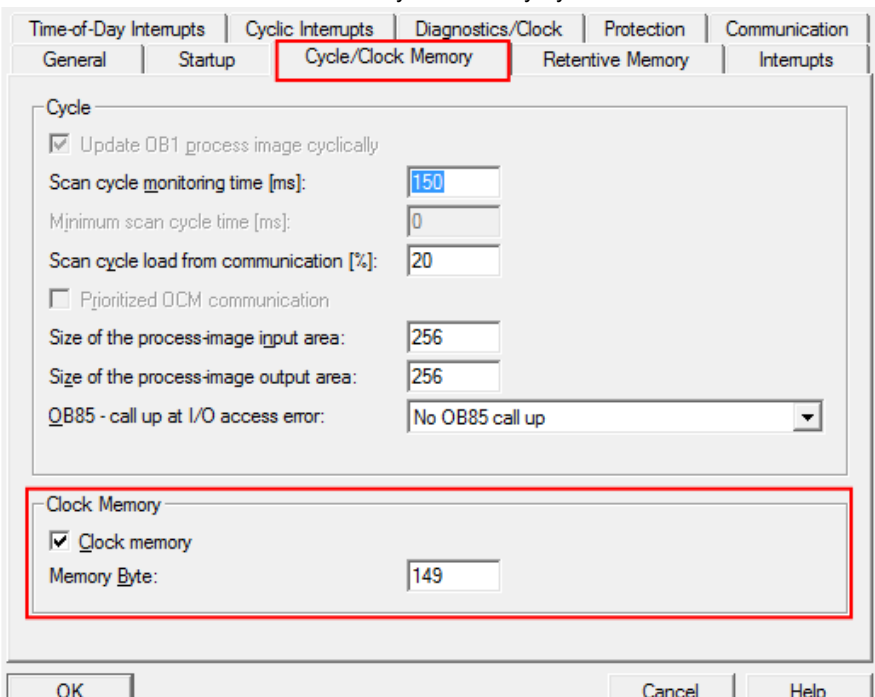
The configurations of the operator panel access flag words and the clock memory of the CPU.

The flag words **MW140** and **MW142** are used. Observe these flag words if you integrate the example in an existing controller project.

Using the clock memory

Check whether the clock memories are enabled in the hardware configuration of the used CPU.

Table 4-9

No.	Step	Comment/screen
1.	Open your controller project.	
2.	Select the CPU in the HW Config and open the "Properties" dialog.	
3.	Go to the "Cycle/Clock memory" tab.	
4.	Check here whether the clock memory for memory byte 149 is enabled.	

5 Installation

Software installation

The sample configuration was created for WinCC flexible 2008 SP2. Make sure that the respective software package (or a higher version) is installed on your PC and that the OS operating system on the panel is the latest version. More information regarding the issue operating system update can be found under entry [19701610](#). \8\

In addition, you will require a controller connection to the server. A connection to your controller has to be created in the "Server.zip" project and the "every second" clock memory has to be enabled and configured accordingly in the WinCC flexible project of the server.

6 Startup of the Application

6.1 Preparation

Make sure that a controller and the two panels are located in an Industrial Ethernet Network and connected to the power supply.

Unzip the archives with the sample projects in a directory of your choice.

6.2 Commissioning

Adjusting the IP addresses to the operator panels

Table 6-1

No.	Action
1	Change the IP addresses of the two panels in the control panel according to the specifications of your network.
2	Assign an individual password in the safety settings of the Sm@rtServer. See table 4-1.

Using the cycle memory of the controller

Table 6-2

No.	Action
1	Open the sample project for the server panel.
2	Create a connection to your controller under "Connections". The controller does not need any further configuration. You only have to enable the clock memory.
3	Adjust the "cycle" tag in the server project to the range of your clock memory.
4	Transfer the project to your panel.

Transferring the server project

Table 6-3

No.	Action
1	Open the sample project for the server panel.
2	Adjust the IP address of your controller and your panel in the connection settings.
3	Make the settings in the control panel of the server operator panel. See chapter "4.1 Configuration of server operator panel"
4	Transfer the project to your panel. Enter the IP address of your panel in the transfer settings.

Transferring the client project

Table 6-4


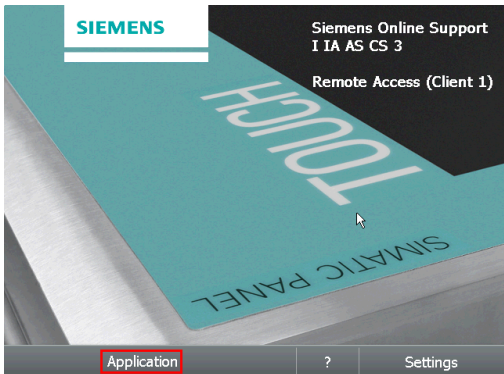
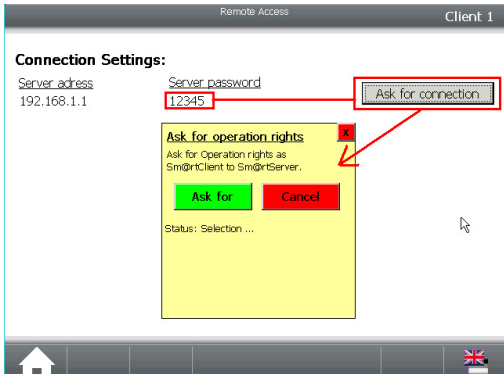
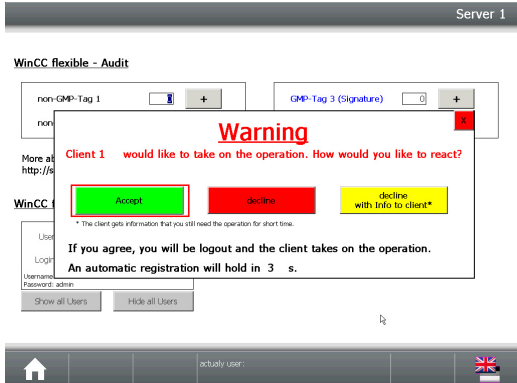
No.	Action
1	Open the sample project for the client panel.
2	Adjust the IP address of the server panel in the connection settings. Use the user name and password that you have assigned for the server operator panel.
3	Assign the IP address of the server panel in the general settings of the Sm@rtClient display.
4	Transfer the project to your panel. Enter the IP address of your panel in the transfer settings.

7 Operating the Application

Operation scenarios:

Client requests connection and server accepts

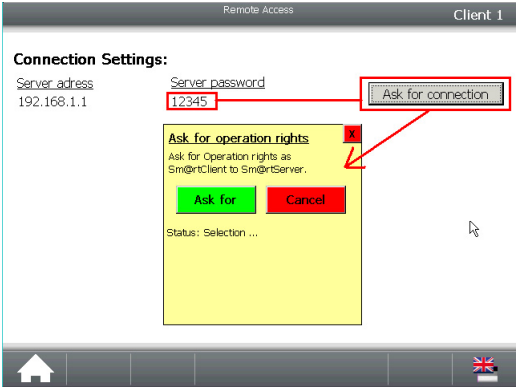
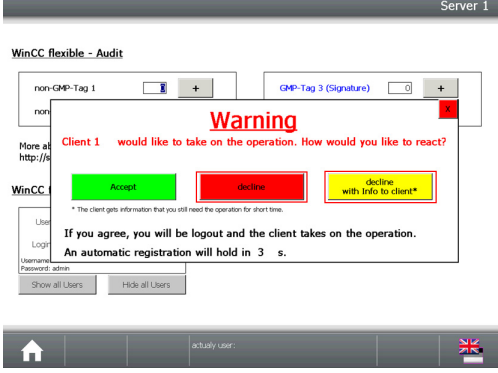
Table 7-1

No.	Server	Client
1.	 <p>Go the "Application" screen.</p>	 <p>Go the "Application" screen.</p>
2.		 <p>Enter the password you have assigned for the connection establishment to the server. (To make an entry you have to be logged on as administrator: User: operator, password: operator) Click the "Ask for connection" button. A toolbox opens in which you can decide how to proceed. Click the "Request" button and send a request to the server.</p>
3.		

No.	Server	Client
	<p>A client request appears.</p> <p>In the displayed menu you can see which client it is and how much time until the automatic acceptance remains. You can accept this request or decline it and a reply is automatically sent to the client.</p> <p>Click the “Accept” button.</p>	
4.	<div><div><div>Remote Access action</div><div>Client 1 (85 s)</div></div><div>Server 1</div><div>WinCC flexible - Audit</div><div><div><div>non-GMP-Tag 1</div><div><input type="checkbox"/></div><div>+</div></div><div><div>non-GMP-Tag 2</div><div><input type="checkbox"/></div><div>+</div></div></div><div><div><div>GMP-Tag 3 (Signature)</div><div><input type="checkbox"/></div><div>+</div></div><div><div>GMP-Tag 4 (Signature)</div><div><input type="checkbox"/></div><div>+</div></div></div><div>More about WinCC flexible / Audit you will find her: http://support.automation.siemens.com/WW/view/en/36969886</div><div>WinCC flexible - User Administration</div><div><div><div>User</div><div>admin</div><div>SET</div></div><div><div>Login</div><div>*****</div><div>RESET</div></div><div><div>Username: Admin</div><div>Password: admin</div></div><div><div>Show all Users</div><div>Hide all Users</div></div></div><div><div>home</div><div>actually user:</div><div></div></div></div> <p>A connection was established.</p> <p>On the server you can see the running connection on the left top edge of the screen.</p> <p>It is displayed which client is connected and how long it takes until automatic logout.</p>	<div><div>Remote Access - View: Server 1 -</div><div><div>Remote Access: active</div><div>Client 1 (85 s)</div></div><div>WinCC flexible - Audit</div><div><div><div>non-GMP-Tag 1</div><div><input type="checkbox"/></div><div>+</div></div><div><div>non-GMP-Tag 2</div><div><input type="checkbox"/></div><div>+</div></div></div><div><div><div>GMP-Tag 3 (Signature)</div><div><input type="checkbox"/></div><div>+</div></div><div><div>GMP-Tag 4 (Signature)</div><div><input type="checkbox"/></div><div>+</div></div></div><div>More about WinCC flexible / Audit you will find her: http://support.automation.siemens.com/WW/view/en/36969886</div><div><div><div>←</div><div>→</div><div>Warning: The SmartClient View will be close automatically after 3-4 minutes.</div></div></div></div> <p>To execute actions requiring validation, you have to authorize yourself as "serviceengineer" with the "serviceengineer" password.</p> <p>A connection was established.</p> <p>Exit the connection with the “→” button.</p> <p>The time until automatic logout is also visible.</p>

Operation scenarios:
Client requests connection and server declines

No.	Server	Client
1.	<div><div>SIEMENS</div><div>Siemens Online Support I IA AS CS 3 Remote Access (Server 1)</div><div><div>Application</div><div>?</div><div>Settings</div></div></div> <p>Go the “Application” screen.</p>	<div><div>SIEMENS</div><div>Siemens Online Support I IA AS CS 3 Remote Access (Client 1)</div><div><div>Application</div><div>?</div><div>Settings</div></div></div> <p>Go the “Application” screen.</p>

No.	Server	Client
2.		 <p>The screenshot shows the 'Client 1' interface. Under 'Connection Settings', the 'Server address' is 192.168.1.1 and the 'Server password' is 12345. A red box highlights the 'Ask for connection' button. A yellow dialog box titled 'Ask for operation rights' is open, asking for operation rights as 'Sm@rtClient to Sm@rtServer'. It has 'Ask for' and 'Cancel' buttons. A red arrow points from the 'Ask for connection' button to the dialog box.</p> <p>Enter the password you have assigned for the connection establishment to the server. (To make an entry you have to be logged on as administrator: User: operator, password: operator) Click the "Request operation" button. A toolbox opens in which you can decide how to proceed. Click the "Request" button and send a request to the server.</p>
3.	 <p>The screenshot shows the 'WinCC flexible - Audit' interface. A red 'Warning' dialog box is displayed, asking 'Client 1 would like to take on the operation. How would you like to react?'. It has 'Accept', 'decline', and 'decline with info to client*' buttons. Below the dialog box, there is a note: 'If you agree, you will be logout and the client takes on the operation. An automatic registration will hold in 3 s.' There are also 'Show all Users' and 'Hide all Users' buttons.</p> <p>A client request appears. In the displayed menu you can see which client it is and how much time until the automatic acceptance remains. You can accept this request or decline it and a reply is automatically sent to the client. Click the "decline" button.</p>	

No.	Server	Client
4.	<div><div>Server 1</div><div><div>WinCC flexible - Audit</div><div><div>non-GMP-Tag 1</div><div><div></div><div>+</div></div></div><div><div>non-GMP-Tag 2</div><div><div>0</div><div>+</div></div></div><div><div>GMP-Tag 3 (Signature)</div><div><div>0</div><div>+</div></div></div><div><div>GMP-Tag 4 (Signature)</div><div><div>0</div><div>+</div></div></div><div><div>More about WinCC flexible / Audit you will find her:</div><div>http://support.automation.siemens.com/WW/view/en/36969886</div></div><div><div>WinCC flexible - User Administration</div><div><div>User</div><div>admin</div><div>SET</div></div><div><div>Login</div><div>admin</div><div>RESET</div></div><div><div>Username: Admin</div><div>Password: admin</div></div><div><div>Show all Users</div><div>Hide all Users</div></div></div><div><div>home</div><div>actually user</div><div>UK</div></div></div><div>A connection was not established.</div></div>	<div><div>Remote Access</div><div>Client 1</div></div> <div><div>Connection Settings:</div><div><div>Server address</div><div>192.168.1.1</div></div><div><div>Server password</div><div>12345</div><div>Ask for connection</div></div><div><div>Ask for operation rights</div><div>Ask for Operation rights as Sm@rtClient to Sm@rtServer.</div><div><div>Ask for</div><div>Cancel</div></div><div><div>Status: Selection ...</div><div>The connection request was rejected.</div></div></div><div><div>home</div><div>actually user</div><div>UK</div></div></div> <div><div>A connection was not established.</div><div>The dialog closes automatically after ten seconds.</div></div>

8 Links & Literature

Internet link specifications

This list is by no means complete and only presents a selection of suitable information.

Table 8-1

	Topic	Title
\1\	Reference to this document	http://support.automation.siemens.com/WW/view/en/49368600
\2\	Siemens I IA/DT Customer Support	http://support.automation.siemens.com
\3\	HMI Operator devices	Manuals on the operator devices http://support.automation.siemens.com/WW/view/en/10805558/133300
\4\	Comparison of the HMI Operator devices	http://support.automation.siemens.com/WW/view/en/40227286
\5\	WinCC flexible	http://support.automation.siemens.com/WW/view/en/16502685/133300
\6\	Print WinCC flexible/Audit	http://support.automation.siemens.com/WW/view/de/36969886
\7\	Panels and WinCC flexible Licences	http://support.automation.siemens.com/WW/view/de/27005215
\8\	Update operating system on panels	http://support.automation.siemens.com/WW/view/de/19701610

9 History

Table 9-1

Version	Date	Modification
V1.0	09.06.2011	First issue