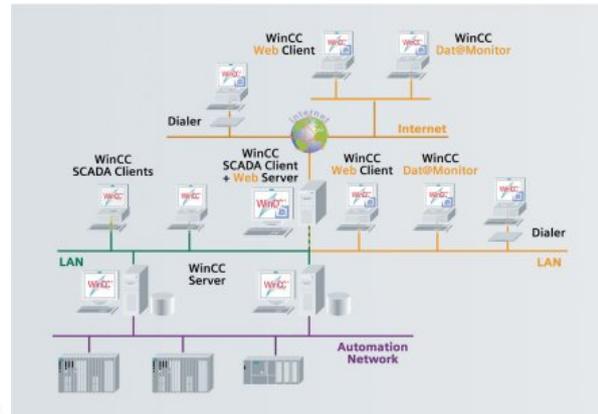


WinCC Web Navigator Client / Server


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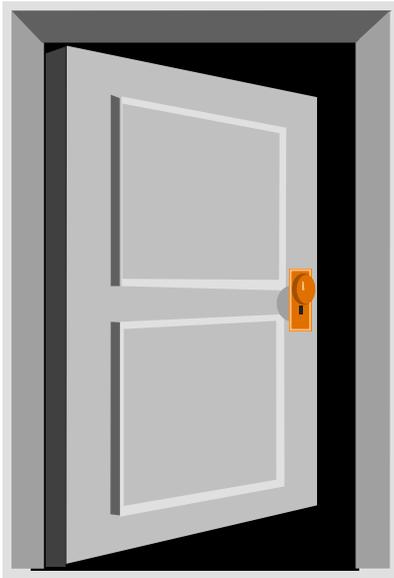
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Training aims



- WinCC in the Web
- Licensing of Web Navigator
- Diagnostic Client
- System configurations
- Creating a Web project
- Load balancing

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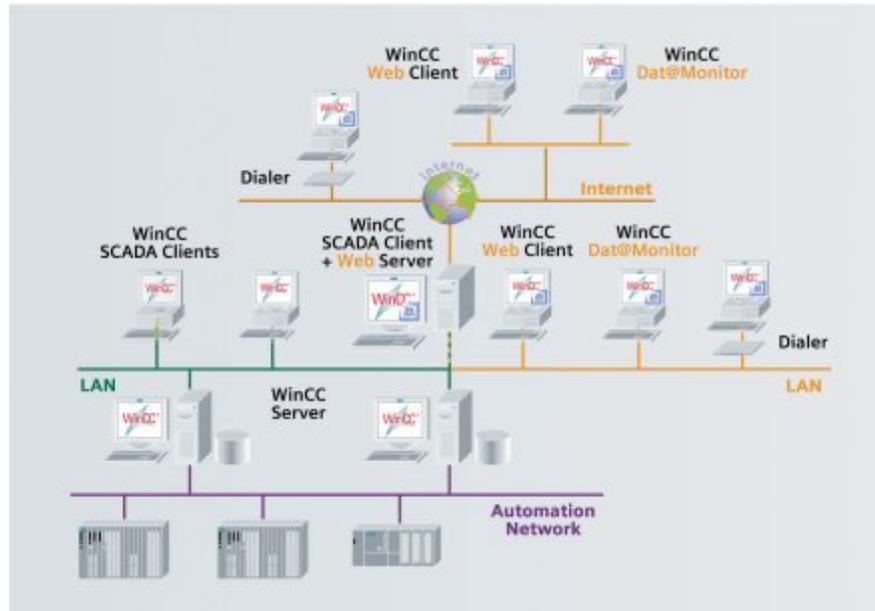
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Training aims

The participant will:

- Learn about the advantages of WinCC in the Web.
- Learn about the system requirements for the Web Navigator.
- Learn about the licenses for the Web Navigator.
- Learn how to use the Diagnostic Client.
- Understand the system configuration possibilities.
- Learn how to create a Web project.
- Understand the load balancing functions.

WinCC in Web


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WinCC in the Web

The Internet is gaining in importance with companies as an access medium for data acquisition in the operation and monitoring of plants despite the considerable concerns regarding data security and access protection. Using the Internet, it is possible to scan up-to-date process data and to intervene in the control of the process from any location. The opportunities that this presents for remote maintenance can considerably reduce costs for a company because fewer qualified personnel are necessary on site and in the event of a problem, process information can be called up in preparation for repair work. It is also possible to obtain a worldwide overview of the data of the complete production plant and compare it from a central point.

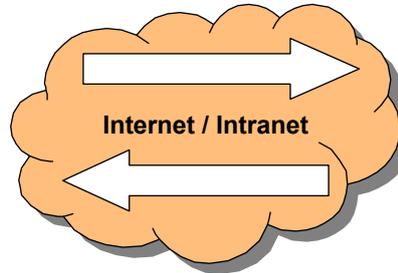
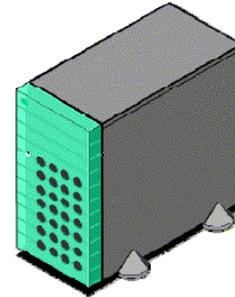


WinCC Web Navigator

WinCC Web clients



WinCC Web server



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WinCC Web Navigator

The WinCC option pack "WinCC Web Navigator" allows you to develop a solution for the topic of "Controlling and Monitoring" via the intranet/Internet. You can use the standard tools of WinCC to distribute the operation and monitoring functions of your automation system quickly and easily using the Internet or Intranet. The WinCC Web Navigator supports current Internet security methods and provides Wizards to assist you in your task.

WinCC uses Internet browser technology to interface its client-server architecture to the World Wide Web. The Internet browser "MS Internet Explorer" is used to interface to the "WinCC Web Navigator Server". Up-to-date information about software versions can be found in the WinCC compatibility list, see FAQ21927773.

Using this technology, it is possible to work with a minimum installation of ActiveX elements on the "WinCC Web Navigator client" (approx. 18 MB).

Data is exchanged over the Web connection by means of TCP/IP and is based on event-driven communication in accordance with the HTTP (Hyper Text Transfer Protocol) standard. In contrast to the usual, cyclic request, the advantage of event-driven data transfer is that the communication channel is only occupied when a signal change takes place. Utilities are provided to support you with setting up the Web connection and adapting existing process screens.

To allow interested users to **try out the Web Navigator/Data Monitor client mode**, SIEMENS installed a WinCC Web Navigator/Data Monitor system with a demonstration access. The demonstration access is intended to give you an overview of the functionality and capabilities of the WinCC Web Navigator and WinCC Data Monitor. **You will find the access data for the system in the FAQ with the entry ID: 45027800.**



Web Viewer WinCCViewerRT

Web Viewer WinCCViewerRT

- Is installed along with the Web Navigator client
- Alternative to the Internet-Explorer
- Configuration file in XML format for the following settings:
 - General settings (Web Navigator server address, user login and password)
 - Parameters (runtime language, blocked key combinations)
 - Graphics settings (start picture, configuration file for picture navigation, window attributes and prohibited user actions (e.g. Alt+F4))
 - Runtime settings (automatic logout, screen keyboard, change to operating system and key combination for WinCCViewerRT configuration dialog)

Security-relevant WinCCViewerRT functions

- Automatic logout after a defined time period
- System message when logging on with the Web Navigator server
- Blocking of key combinations

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Web Viewer WinCCViewerRT

The Web Viewer is a display program for Web projects that is installed with the WebNavigator client. Following installation of the Web Navigator or Data Monitor, the "WinCCViewerRT.exe" file is located in the directory "...\\SIEMENS\\WINCC\\WebNavigator\\Client\\bin".

You run the "WinCCViewerRT.exe" application on the Web Navigator client instead of the Internet Explorer. In the Web Viewer you specify the Web Server address and the settings for the Graphics Runtime. You can access the parameter assignment of the Web viewer WinCCViewerRT, when necessary, in runtime mode using the key combination "CTRL-ALT-P".

The settings are stored by default in the "WinCCViewerRT.xml" configuration file. You can modify the name, for example "Operator1.xml". You can start the Web Viewer by using the command line and specifying a user-specific configuration file: "WinCCViewerRT.exe Operator1.xml". This allows different configurations to be used, depending in the logged-on user. The interface language of the Web Viewer is taken from WinCC.

For the exercises, a link was also created on the desktop. The Web viewer can also be started using this link.

Note on the "load balancing" function

The "load balancing" function is not supported by the "WinCCViewerRT.exe" application.

The load distribution using load balancing is controlled through a Web page. Since clients do not select Web pages via WinCCViewerRT, participating in load balancing is not possible.



Thin Client



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Thin Client

Technology

A Thin Client is a terminal component with reduced hardware that establishes a connection to the server over a network.

SIMATIC THIN CLIENT

The SIMATIC THIN CLIENT is equipped with a Samsung processor (200 MHz ARM) and has no local applications or installations, no hard disk and no fan. The SIMATIC THIN CLIENT uses a 10/100 Mbps network adapter for communication. Communication is possible via

- A Sm@rtAccess client to a Panel or Panel PC
- RDP (Remote Desktop Protocol) to MS Office, SAP or WinCC
- HTML and HTTP as a WEB connection

Variants

The SIMATIC THIN CLIENT is supplied in two variants.

- 10" SIMATIC Thin Client: 6AV6646-0AA21-2AX0 => approx €900 list price
- 15" SIMATIC Thin Client: 6AV6646-0AB21-2AX0 => approx €1000 list price

The THIN CLIENTs and SIMATIC Multi Panels are compatible with regard to their installation.

Operation with WinCC For operation with WinCC, the Thin Client is used as a Terminal Client for a Microsoft Terminal Server. For this purpose, the Terminal Services and the WinCC WebNavigator server and WinCC Web client software must be installed under Windows 2003 Server. During operation, the Terminal client accesses the WinCC Web client terminal sessions. A terminal session reserves approximately 40 MB on the Terminal server.



System requirements for Web Navigator Client

Hardware

	Minimum	Recommended
CPU	Pentium II; 300 MHz	Pentium III; 1 GHz
Work memory	256 MB	512 MB

Software

Operating system:	XP Pro SP3, Windows 7, Server 2008 SP2, Server 2003 SP2, Server 2003 R2 SP2 via MS Terminal Services also other systems such as WinCE, Win95 Embedded XP in connection with Panel PC 477
Software	Internet Explorer (up-to-date information, see compatibility list WinCC WebNavigator V7 , FAQ6944907)
Miscellaneous	Access to Intranet/Internet or TCP/IP connection to the Web Server

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System requirements for Web Navigator Client



System requirements for Web Navigator Server

Hardware

	Minimum	Recommended
CPU	Pentium III; 1 GHz	Pentium 4, 2 GHz
Work memory	512 MB	1 GB

Software

Operating system: (with IIS, Internet Information Services)	Windows XP Professional SP3 (max. 3 clients) Windows 7, Server 2008 SP2, Server 2003 SP2 Server 2003 R2 SP2
Software	Internet Explorer, WinCC basic system (up-to-date information, see compatibility list WinCC WebNavigator V7 , FAQ6944907)
Miscellaneous (Other)	Access to Intranet/Internet or TCP/IP connection to the Web Server

When the Web Navigator server is used on a WinCC server or WinCC client with its own project, the system performance must be adapted accordingly. (RAM > >1 GB, server operating system)

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System requirements for Web Navigator server

WebNavigator server and DataMonitor server

If you want the WebNavigator server and DataMonitor server installed on the same computer, you only have to install the DataMonitor server, because the WebNavigator server is automatically installed with it.



Licensing

WinCC Web clients

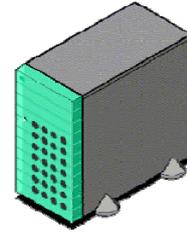


No licensing
Only Active X elements

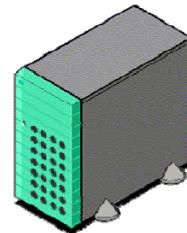


Diagnostics client
Separate license

WinCC Web server



Licensing:
3 / 10 / 25 / 50 clients



Diagnostics server
license



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Licensing

Web Navigator Client Thanks to the server-side licensing on the Web server, the computer running the Web Navigator client does not require a license.

Web Navigator Server

The WinCC RT basic license is a prerequisite for the WinCC basic system. No WinCC server license is required, if no local WinCC clients are operated. Even when operating a WinCC client as a dedicated Web server, no WinCC server license is required for the WinCC client.

The WinCC Web Navigator server runs without a license for 30 days in demo mode. A license is, however, required for continuous use of the WinCC Web Navigator server. Licenses are available for 3, 10, 25 or 50 clients that can simultaneously access the Web server.

If the number of licensed clients is exceeded during a login attempt by a Web client, a message is displayed and no further logins will be permitted.

Diagnostics client

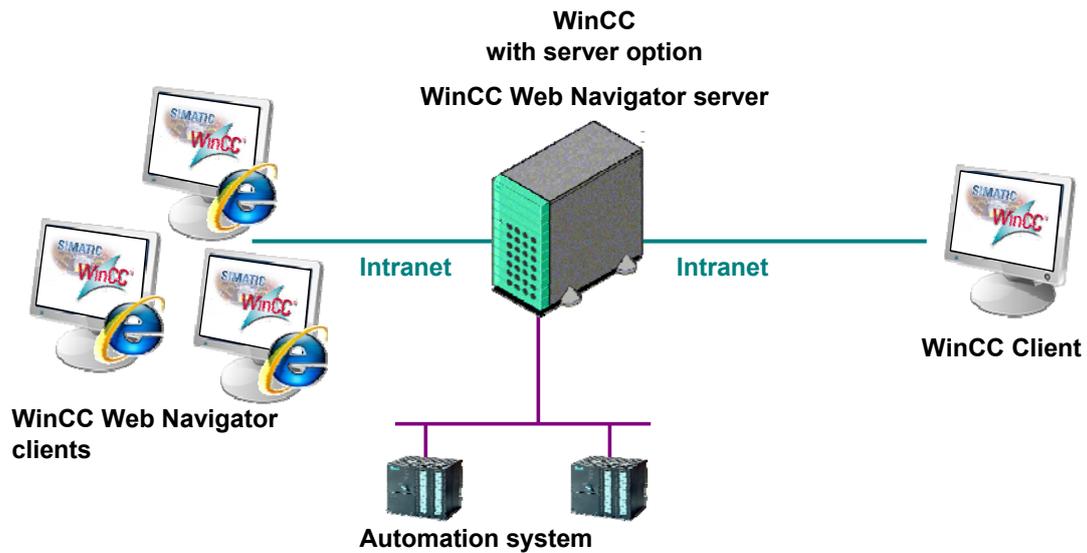
The Web Navigator diagnostics client of WinCC provides cost-effective access to large numbers of Web Navigator servers. Multiple diagnostics clients and regular clients can be run at the same time. This operation does not require a WebClient license of a Web server, the licensing takes place on the diagnostics client.

On the Web server, there must be either a WebClient license or the diagnostics server license!

Diagnostics server

The "Diagnostics server license" is extremely inexpensive. No Web client license is required (costs more) but only diagnostics clients with their own (less expensive) license have access.

Island solution



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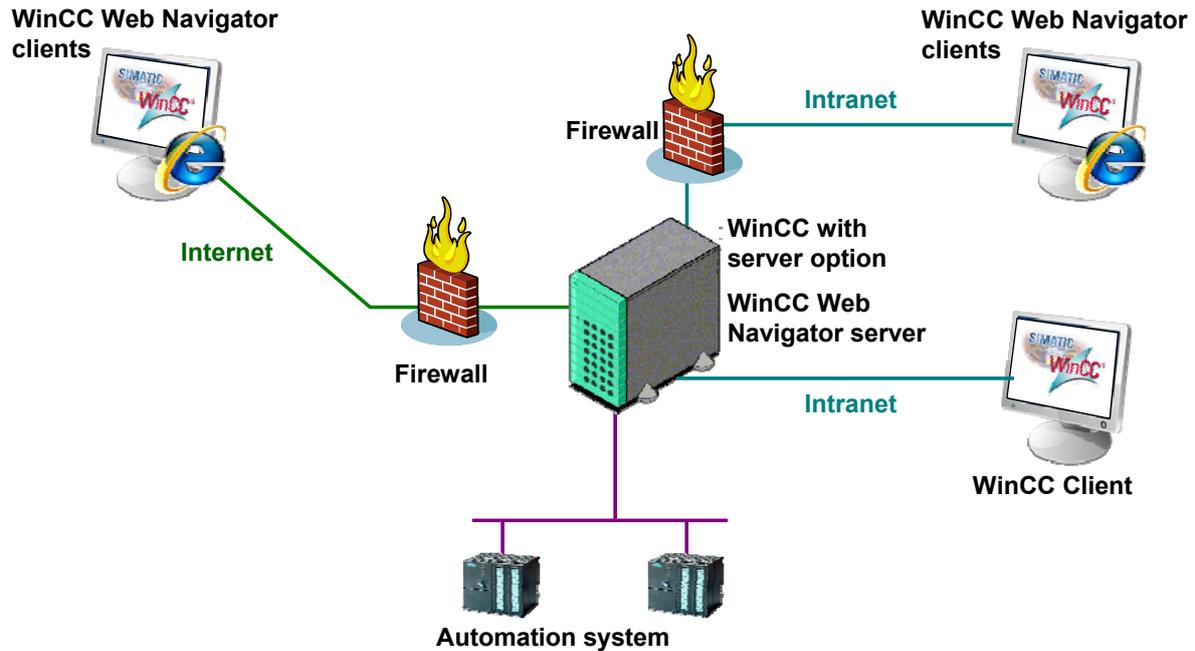
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Web Navigator as an island solution

In the slide, the Web clients are only connected to the Intranet. They are used for low-cost operation and monitoring of the running WinCC project. Flexible computer stations can therefore be set up economically for monitoring functions.

Intranet and Internet


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Web Navigator on the Intranet and Internet

The WinCC server and the server component of the WinCC Web Navigator are installed on one computer. The WinCC Web Navigator client can operate and monitor the running project via the Internet as well as via the local intranet. A client-server system can be expanded using WinCC Web Navigator clients.

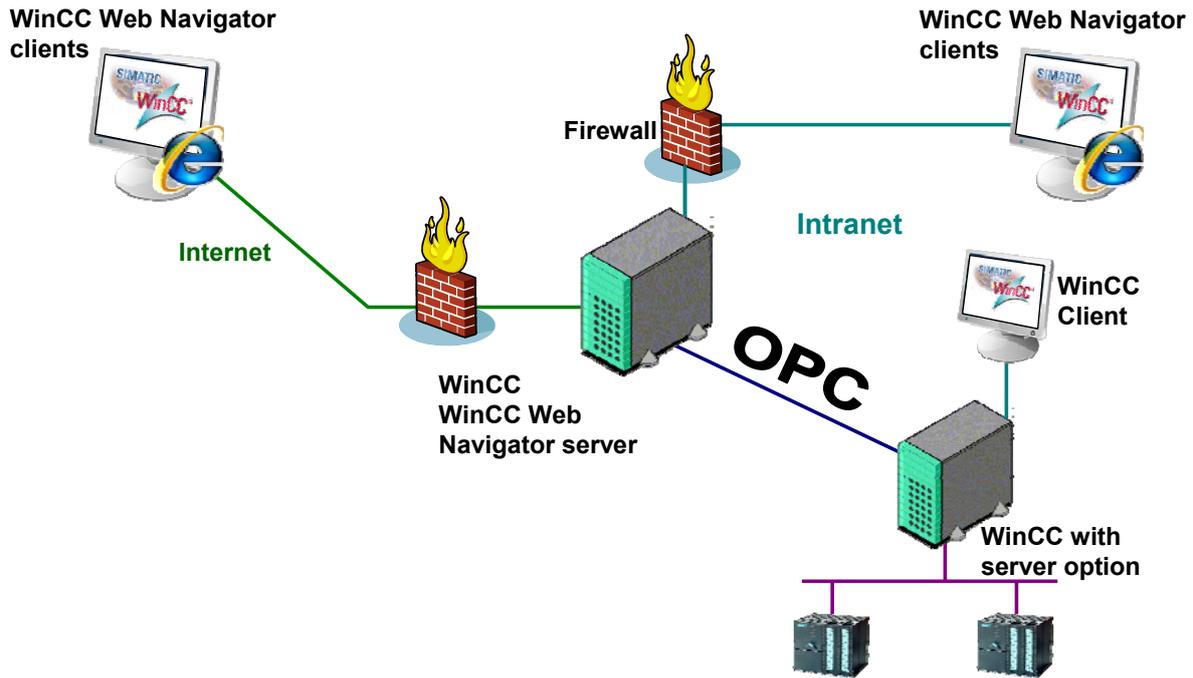
Firewall

To protect against attacks from the Internet and the intranet, firewalls are employed. The first firewall protects the WinCC Web Navigator server from Internet attacks, the second firewall provides additional security from/for the intranet.

Advantage

The tags for the WinCC Web server do not require any additional tag licenses. No special or additional hardware is required.

Isolation of WinCC Server from Web Navigator (1/2)


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Isolation of WinCC Server from Web Navigator (1/2)

Communication via OPC channel

Design

A group of automation devices is assigned to the WinCC Server. The project includes all data such as programs, configuration data and miscellaneous settings. On the computer with the WinCC Server and the WinCC Web Navigator server, the WinCC project is mirrored 1:1 and not networked with the automation system.

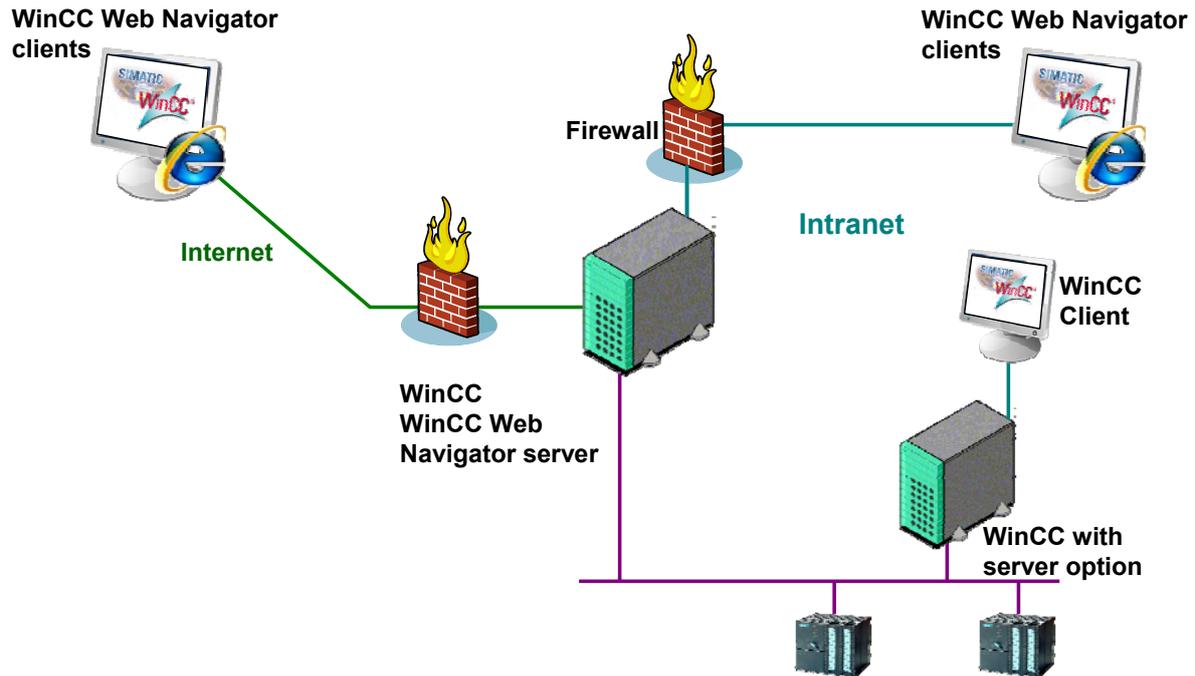
Data synchronization

The synchronization of the data takes place via the OPC channel (OPC = OLE Process Control). For this, the WinCC Web Navigator server requires a license for the number of OPC tags.

Firewall

Two firewalls are employed here to protect the system against unauthorized access. The first firewall protects the WinCC Web Navigator server from Internet attacks and the second firewall provides additional security for the intranet.

Isolation of WinCC Server from Web Navigator (2/2)


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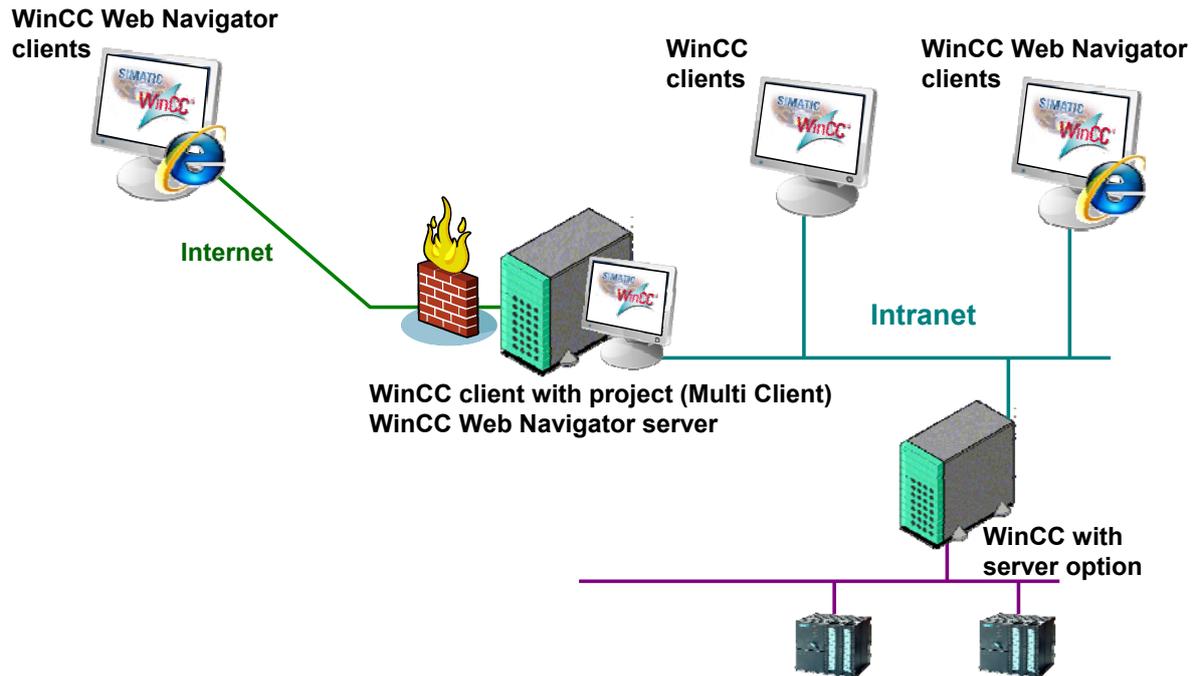
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Isolation of WinCC Server from Web Navigator (2/2)

Communication via the process bus

Design	The WinCC Web Navigator server is directly connected to the process bus as an additional server. The WinCC project of the server is mirrored on this computer. The data is compared over the process bus.
Firewall	Two firewalls are employed here to protect the system against unauthorized access. The first firewall protects the WinCC Web Navigator server from Internet attacks and the second firewall provides additional security for the intranet.
Licensing	For this configuration, the WinCC Web Navigator server requires a WinCC Runtime license for the number of connected process variables in addition to the Web Navigator license for the number of connected clients

Dedicated Web server


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Dedicated Web server

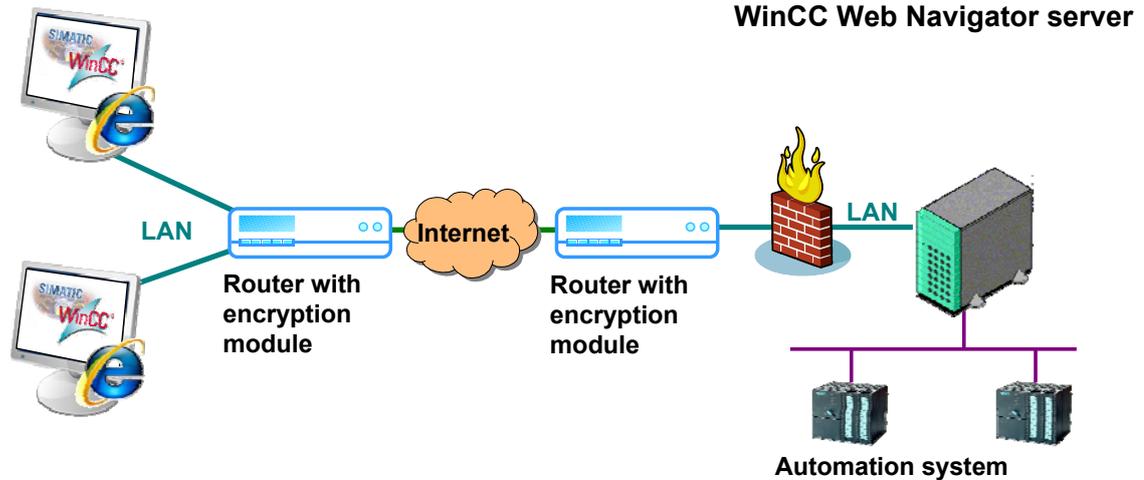
For the central supply of data to the Web clients, the installation of a dedicated Web server (WinCC client with project) is advantageous in larger systems. The dedicated Web server processes and optimizes the accesses of the Web clients and is available as a proxy of the WinCC servers to the clients. The dedicated Web server can simultaneously access multiple subordinated WinCC servers. In this case, the user gains access to multiple WinCC projects by logging onto the dedicated Web server (no individual project logons). The dedicated Web server supports the redundancy failover of two subordinate WinCC servers using WinCC Redundancy. The functionality of the dedicated Web server is made available on a WinCC client by installing the Web Navigator server.

Note:

The "Graphics Runtime" option must not be activated in the startup list of a WinCC project of a dedicated Web server.

Maximum security with VPN

Web clients



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Maximum security with VPN

The WinCC Web Navigator also supports all currently known security standards (used by the banking and insurance sector) ranging from user-specific logins and passwords, firewalls, secure ID cards with PINs to RAS (Remote Access Service) or the SSL coding and VPN technology.

Security is an essential aspect when controlling and monitoring via the Internet and is supported by the WinCC Web Navigator with all updated and known methods.

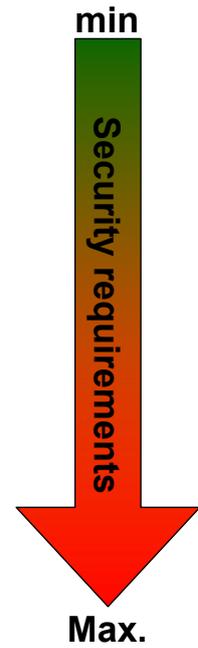
VPN

The VPN (Virtual Private Network) "tunnels" the standard HTTP communication and transfers the user data encrypted with any required encryption length. The standard Internet bandwidth is rather decimated by this, because the load increases due to the encryption and decryption.



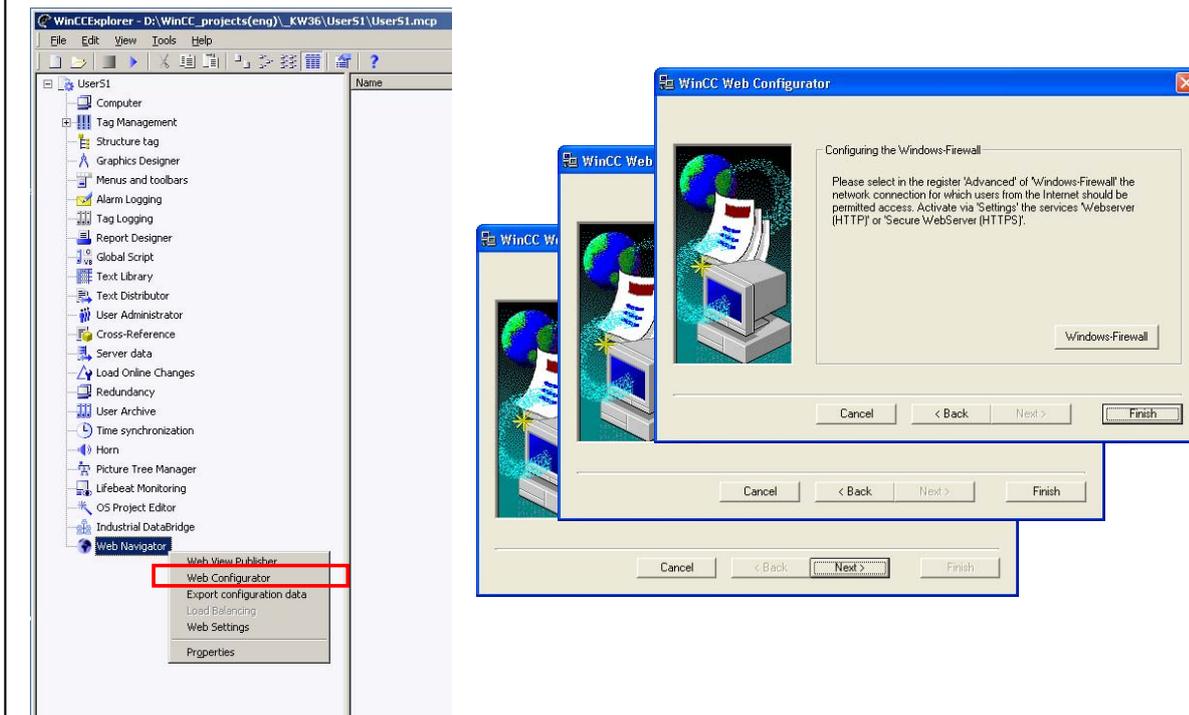
System configurations

- **Island solution – Web Client as a low-cost Thin Client**
 - Server and clients are in a system network
 - The system is not connected to the Intranet / Internet
- **System server and Web server are in a network**
 - Web server and system server are not isolated
 - Plant view via the Intranet (Firewall recommended)
- **Web server as stand-alone computer in the LAN**
 - Web server and system server are coupled, e.g. via OPC
 - Integration of data from various servers on the Web server
 - Same functionality on the client
- **Isolation of LAN/www and system network**
 - Coupling of the Web server over the process bus
 - Maximum security is necessary, because the system network is physically coupled



System configurations

Web Configurator


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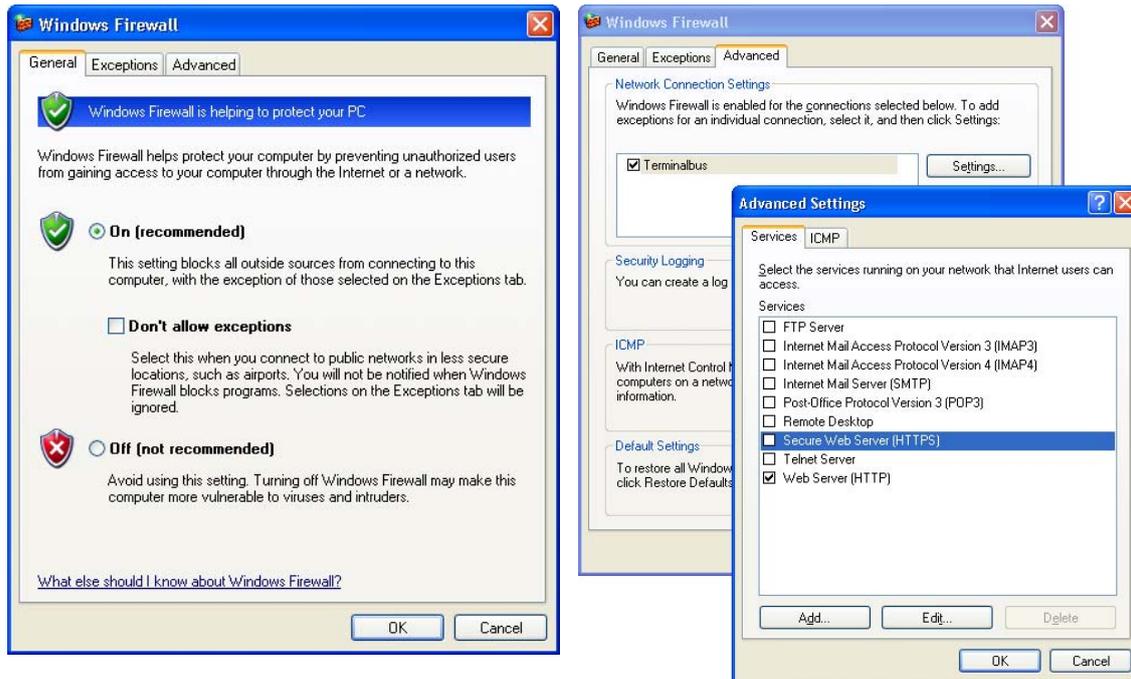
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Web Configurator

Overview	You can create the standard Web page using the WinCC Web Configurator. This will also set up the firewall settings.
Initial configuration	During the initial configuration, the first dialog of the WinCC Web Configurator allows you to specify the creation of a new default Web site or a new virtual folder.
Stand-alone	If you only wish to operate the WinCC Web Navigator Web on your server, activate the option "Create a new standard Web site (stand-alone)".
Virtual folder	If the WinCC Web Navigator Web is supposed to be added as a subdirectory to your existing Web, activate the option "Add to an existing Web site (virtual folder)".
Settings	The following settings are made in the subsequent dialog: Name of Web site, Port, IP address, selection box for standard Web site, reconnect interval, start Web site after configuration. You will find further information on the settings in the Help system for the Web Navigator.
Firewall	The Windows firewall can be set up directly from the Web Configurator (See following page).

Windows Firewall


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Web Configurator – Windows firewall

Settings

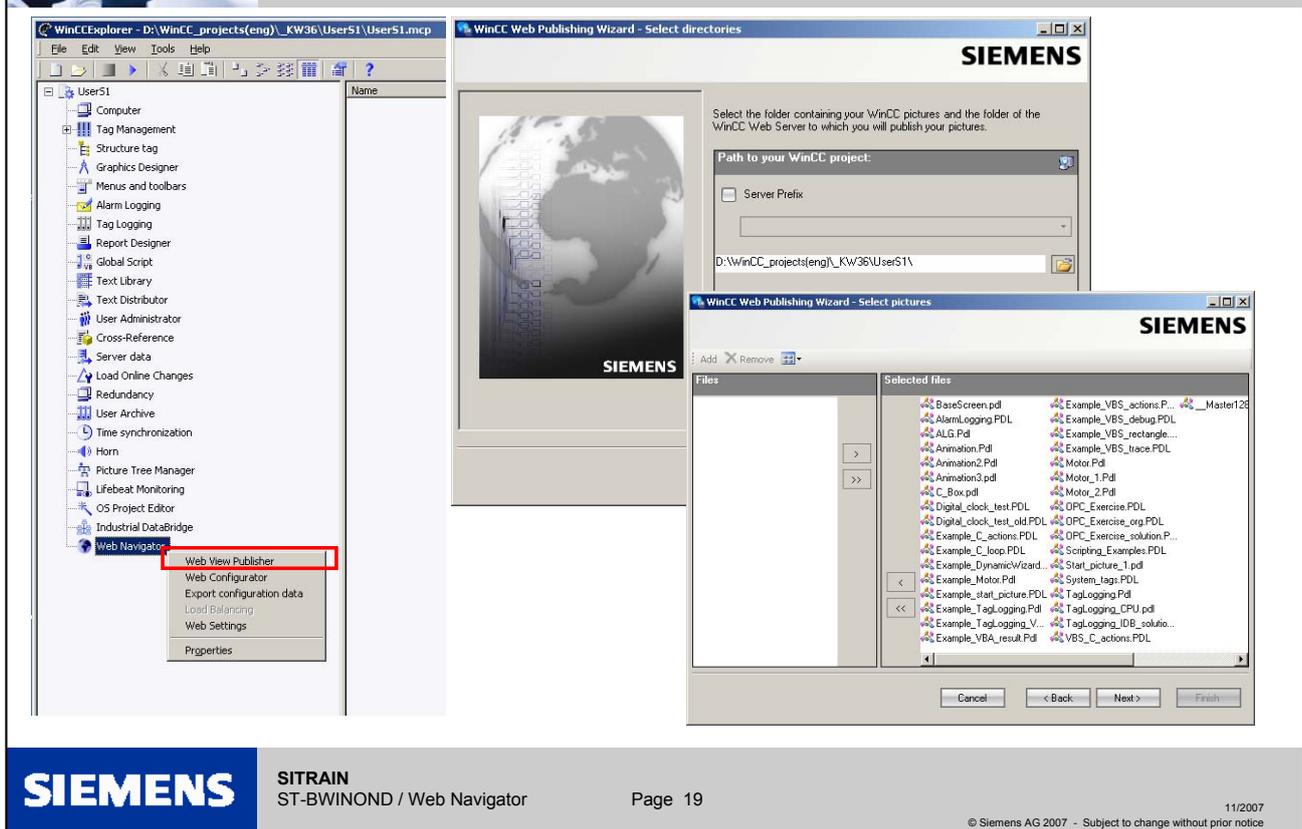
The following settings are recommended:

In the Windows firewall settings, select the desired network connection in the "Advanced" tab and click "Settings...". The "Advanced Settings" dialog will open.

Activate the entry "Secure Web server (HTTPS)" or "Web server (HTTP)". Select the button "Edit" to display the current service settings of the Web server.

Exit the open Windows dialogs with "OK" and the Web Configurator by clicking "Finish". The configuration of the server will be completed.

Publication of the pictures



Publication of the pictures

- Web View Publisher** When configuring a Web project, the WinCC process pictures are published so that they can run on the WinCC Web Navigator Client via the intranet/Internet. Publishing is performed with the Web View Publisher which automatically makes the necessary adaptations to the project data. You will find the Web View Publisher in the shortcut menu of the WinCC editor "Web Navigator"
- Path information** In the box "Path to your WinCC Project", select the project directory of the WinCC project with the pictures to be published, e.g. "D:\WinCC_projects(eng)\CWxx\User_xx" (xx = current calendar week). Use the "Publishing folder of the WinCC Web" field to select the target folder for the published pictures, e.g. D:\WinCC_projects(eng)\CWxx\User_xx\WebNavigator\, (xx = current calendar week). For the runtime of the Web Navigator, the folder suggested within the WinCC project folder must be kept as the target folder of the published pictures. The path specification should only be changed when pictures are to be transferred, e.g. to a different project.
- Selection of Picture** The WinCC pictures are then selected that the Web Publisher should publish on the Web. The pictures will be conditioned for the Web.
- Functions** A screen follows in which you can select project functions that you use in the pictures, so that these will be available on the Web clients.
- Referenced graphics** In the final screen, you can select the referenced graphics (emf, bmp, etc.) that are required for the "Web pictures".
- Finish** The selected settings are then processed. The process pictures are prepared for the Web and saved in the selected folder.
- Note** The names of the pictures used via the Web Navigator must not contain a double-underscore character, since the character string before the double-underscore is interpreted as a server prefix.

Web Navigator server farms

WinCC Web Navigator server farm


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Web Navigator server farms

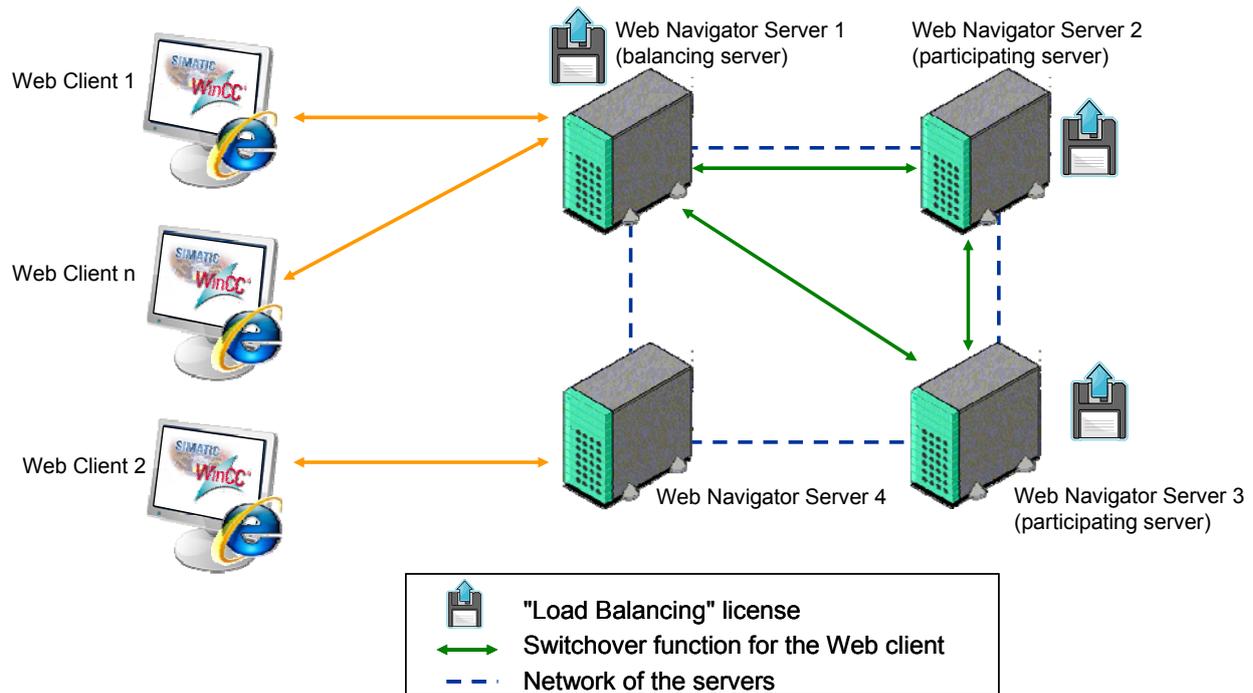
Server farms

When a large number of Web operator stations is required simultaneously, server farms can be established using dedicated Web servers that in some cases may all access the same project. This means that n x 50 WinCC Web clients are possible.

Load balancing

To avoid the need for the WinCC Web user to connect to different WinCC Web servers, it is recommended that the load balancing system option is installed between the Web servers. Then the Web user can log on to any system. The client system is then automatically routed on to the Web server system with the lowest load.

Load balancing (1/2)


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Load distribution on Web servers using the "Load Balancing" function

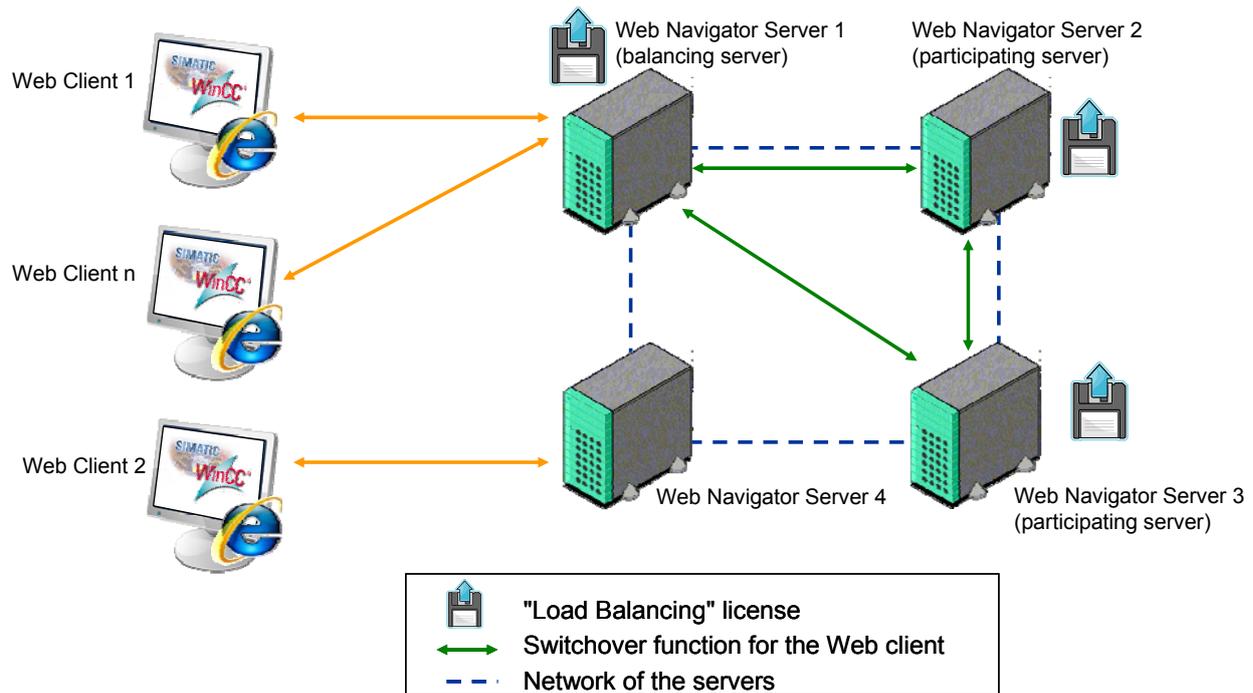
Overview

The "Load Balancing" function enables Web Navigator Clients to be distributed automatically to different Web Navigator servers evenly depending on the server license. Each Web Navigator server can implement load distribution using the "Load Balancing" function. A Web server can be configured as a distributing Load Balancing server or as a participating Web server. A Load Balancing server is automatically a participating Web server, too. Within a group of participating Web servers, several can also be configured as Load Balancing servers. When logging on from a Web client to a Load Balancing server, the Web client is forwarded to one of the participating Web servers with the least load and according to its server license. If the least number of Web clients are logged on to the Load Balancing server, the new Web client remains connected to it. If a participating Web server fails, the Web clients registered on it are automatically routed to one of the other participating Web servers. The address of a Web server is independent of the activation of the "Load Balancing" function. The address of a Web server used prior to activation continues to be valid. The function must be set up on each of the participating Web servers and Load Balancing servers. In this case, all Load Balancing servers and participating Web servers are recorded in a list. On a Load Balancing server, the query interval must also be set and its function as a Load Balancing server activated or deactivated. No configuration is necessary on the Web clients.

Licensing

A maximum of 32 Web servers connected to each other can be supported by the "Load Balancing" function. A "Load Balancing" license is required on every Web server and load balancing server involved. No license is necessary on the Web clients. In the case of WinCC computers with WinCC redundancy, a Load Balancing server or participating Web server can be operated with a "WinCC Redundancy" license and "Load Balancing Step-Up" license.

Load balancing (2/2)


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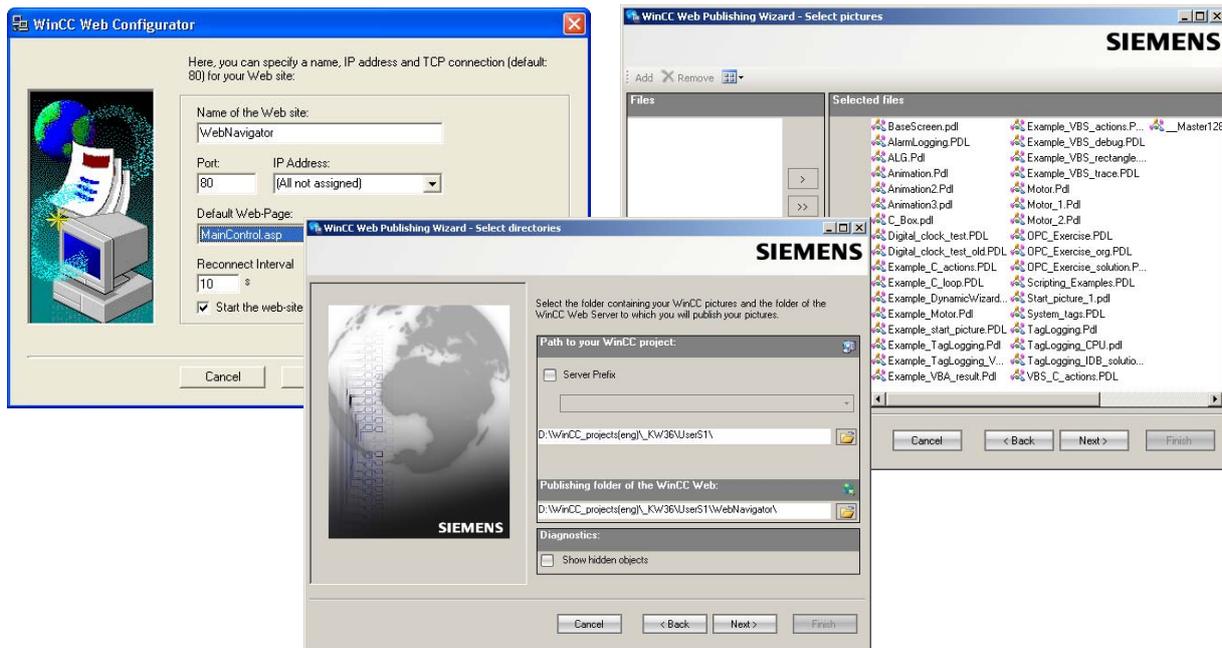
Load distribution on Web servers using the "Load Balancing" function

In the figure, the Web servers 1 to 3 are participating in the "Load Balancing" function. A "Load Balancing" license is installed on these Web servers. Web servers 1 and 2 are configured as Load Balancing servers. When Web client 1 logs on to Web server 1 or 2, the client is automatically forwarded to the Web server with the lowest load. If the Web server connected fails, Web client 1 is routed to one of the other two Web servers. Web server 4 is not participating in the "Load Balancing" feature. If Web client 2 logs on to this Web server, the logon fails due to a high load level of the server. If Web server 4 fails, the client is not forwarded to Web servers 1 to 3 despite the fact that a network connection exists.

Internet options on Load Balancing servers and participating Web servers

Before the Load Balancing server can distribute the Web clients to other Web servers as they log on, the participating Web servers and the Load Balancing server must be capable of reaching each other via the URLs entered in the list of participating servers. If a proxy server is used, the target address of the participating Web server / Load Balancing server "http://<server_name>" can be replaced with "http://<server_name.proxy_name>", so the addressed Web server may not be found. To prevent this response, the target addresses for all participating servers must be entered on all servers participating in Load Balancing under "Tools > Internet Options > Connections > LAN Settings > Advanced" in the "Exceptions" field in Internet Explorer.

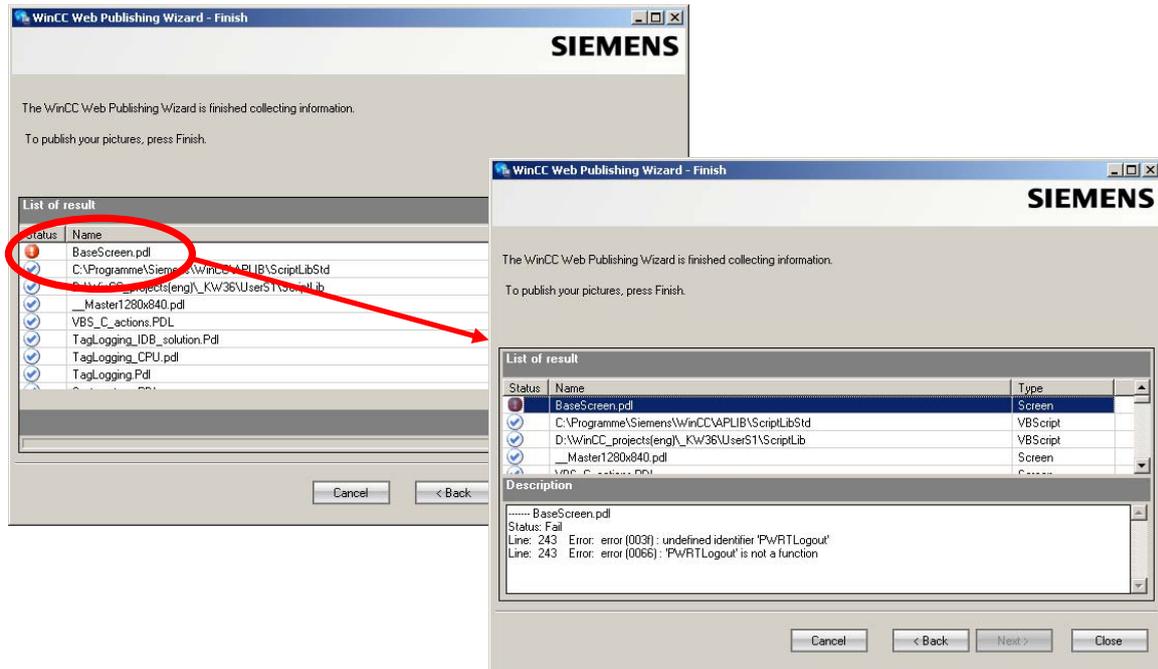
Exercise: Web Navigator server settings



Exercise: Web Navigator → server settings

- Task** The existing WinCC project (ServerSx.pdl) will be published on the Web.
- Step 1** Open the existing WinCC project **on the server** to prepare it for the Web.
- Step 2** Start the Web Configurator and navigate through the dialog windows. The default settings can be used. As the default Web page, select "webclient.asp" without the navigation user interface or "**MainControl.asp**" with a navigation user interface.
- Computer: Restart** On completion of the dialog, there **must be a restart** so that the settings for the Internet Information Service (ISS) are adopted.
- Step 3** Publish all pictures (including bmp and gif) with the WinCC Web Publishing Wizard.
- On the last page of the WinCC Web Publishing Wizard you will see:
 "To publish your pictures, press "Finish"
 At this point, click the "Exit" button!
- You will receive an error message (see next slide)
- Caution** If too many errors are displayed, simply repeat step 3 (sometimes, missing fonts are displayed as errors, the second time normally not).

Exercise: Web Navigator server settings



Exercise: Web Navigator → server settings

Task

The existing WinCC project will be published on the Web.

Error message via the message box of the Web Publishing Wizard.

Since commands were used in the "BaseScreen.pdl" picture that are not compatible with the Web, a message box with the text "Not all pictures and functions have been published successfully" is displayed.

Step 4

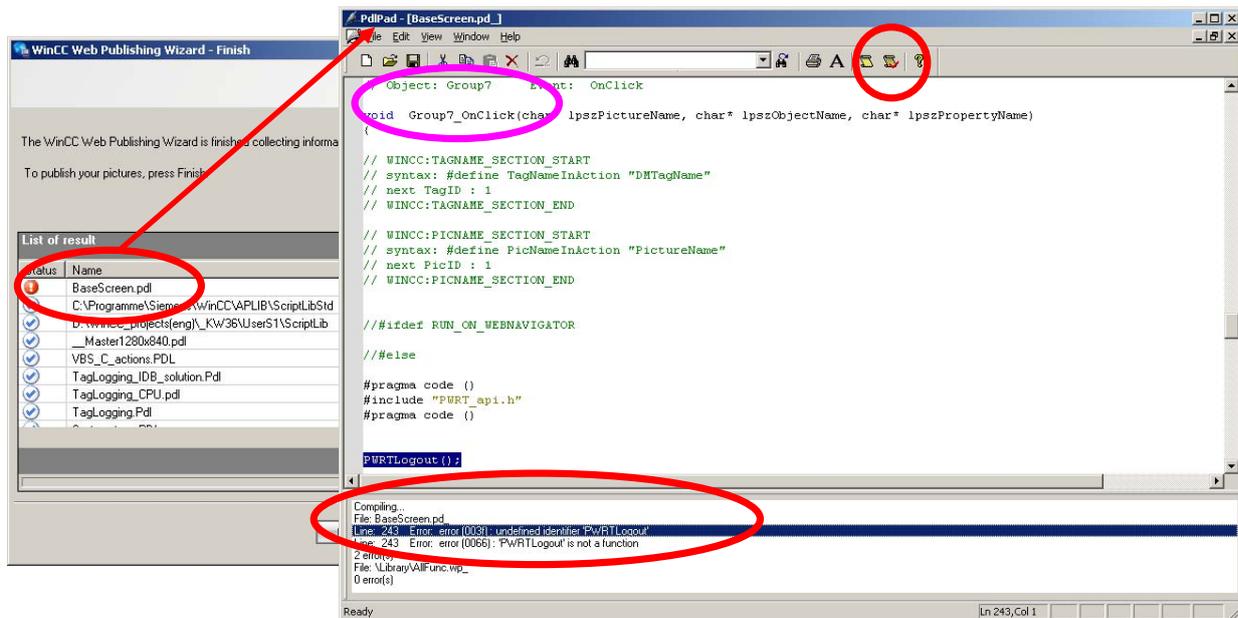
Close this message box by clicking the "OK" button. Following this, the "BaseScreen.pdl" with errors is displayed with a red symbol in the results list of the WinCC Web Publishing Wizard.

Step 5

For detailed information on the error, click on the "BaseScreen.pdl" entry to open the error description.

A window with the error description opens in the WinCC Web Publishing Wizard.

Exercise: Web Navigator server settings



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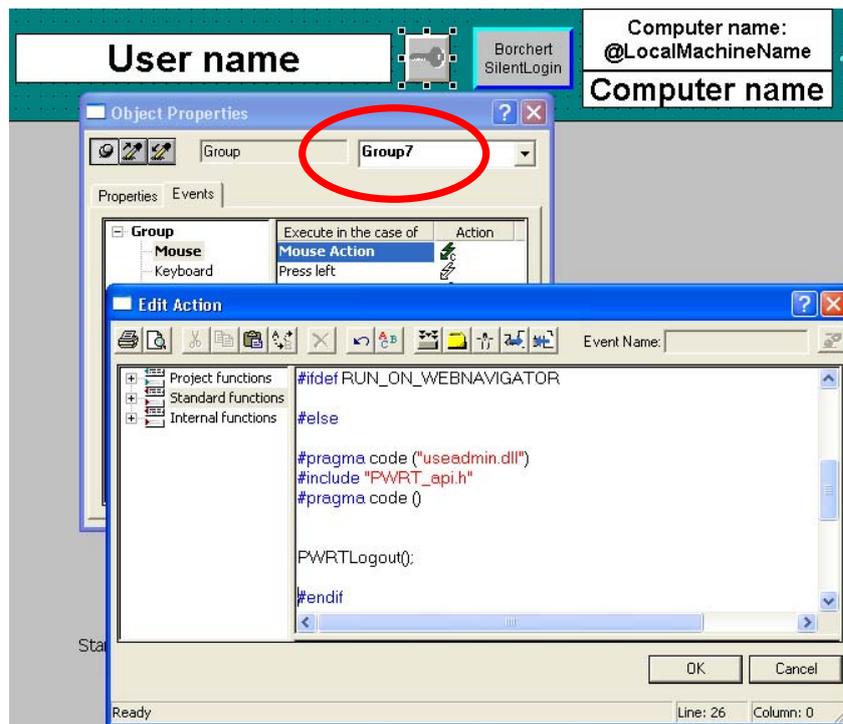
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Exercise: Web Navigator → server settings

- Task** The existing WinCC project will be published on the Web.
- Step 6** To localize the error, open the PdIPad editor by double clicking on the "BaseScreen.pdl" entry in the results list of the WinCC Web Publishing Wizard.
- Step 7** If you click on the CheckScripts icon (top right) in the PdIPad editor, you open the display window of the PdIPad editor. In this display window, you will see the line number of the error.
- Double-click the error message or use Edit – GoTo ... – Line 243 to find the error location.
- Somewhat above this, you will see "Group7" with "OnClick". This means that you will have to open the "BaseScreen.pdl" picture in the Graphics Designer and look for the "Group7" object (see next page)
- Note on the PdIPad editor:
Changes made in the PdIPad editor relate only to the published picture "BaseScreen.pdl_". The next time you publish, however, the original picture "BaseScreen.pdl" will be used so that the error shown above is reported again.

Exercise: Web Navigator server settings


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Exercise: Web Navigator → server settings

Task

The existing WinCC project will be published on the Web.

Step 8

Open the "BaseScreen.pdl" picture with the Graphics Designer. Select any object and open the object properties. Find the "Group7" object using the object list in the object properties dialog.

When you have selected the object properties of the "Group7" object, change to the "Event" tab and open the C script for the "Mouseclick" event.

Add the statements `#ifdef RUN_ON_WEBNAVIGATOR` `#else` `#endif` to the script, compile the C script, exit the C script editor by clicking the "OK" button. Save the "BaseScreen.pdl" picture. **Only publish the "BaseScreen.pdl" picture** with the WinCC Web Publishing Wizard.

Note:

API functions cause error messages on publication. Objects that are incompatible with the Web or parts of functions can be suppressed in Web mode using the following C script examples:

Object visibility:

```
#ifdef RUN_ON_WEBNAVIGATOR
return FALSE;
#else
return TRUE;
#endif
```

Lines in C scripts that are incompatible with the Web:

```
#ifdef RUN_ON_WEBNAVIGATOR
Code compatible with the Web
#else
Code incompatible with the Web
#endif
```

Step 9

In the WinCC User Administrator editor, create a user "**WebUserX**" (X = workplace name) in the "WebUser" group with the password "**123456**". Give this user the rights required to operate and monitor the WinCC project. **Specify the start picture (BaseScreen.pd_) on the top right in the User Administrator Editor.** Then close the User Administrator.

Step 10

Start the project (Runtime) on the Web server computer. (Check or reactivate firewall settings via:
 System control → Windows firewall)

Exercise: Web Navigator client settings

The screenshot illustrates the installation process for the SIMATIC WinCC / DataMonitor Client V7.0. It shows three overlapping windows:

- Connect to 217.91.8.166:** A dialog box for connecting to the server. The 'User name' is 'winccd' and the 'Password' is masked. The 'OK' button is highlighted with a red circle.
- File Download - Security Warning:** A dialog box asking if the user wants to run or save the file 'DataMonitorClient.msi' (17.8MB) from '217.91.8.166'. The 'Run' button is highlighted with a red circle.
- WinCC / DataMonitor - Windows Internet Explorer:** The main browser window showing the installation page. The page title is 'SIMATIC WinCC / DataMonitor Client V7.0'. The text on the page says: 'You need to update your DataMonitor Client software. The installation will take approximately 18 MB hard disk on your computer.' A link 'Click here to install' is highlighted with a red circle.

Red arrows indicate the flow of the process: from the 'OK' button in the first dialog to the 'Run' button in the second, and then to the 'Click here to install' link in the browser window.

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Exercise: Web Navigator → client settings

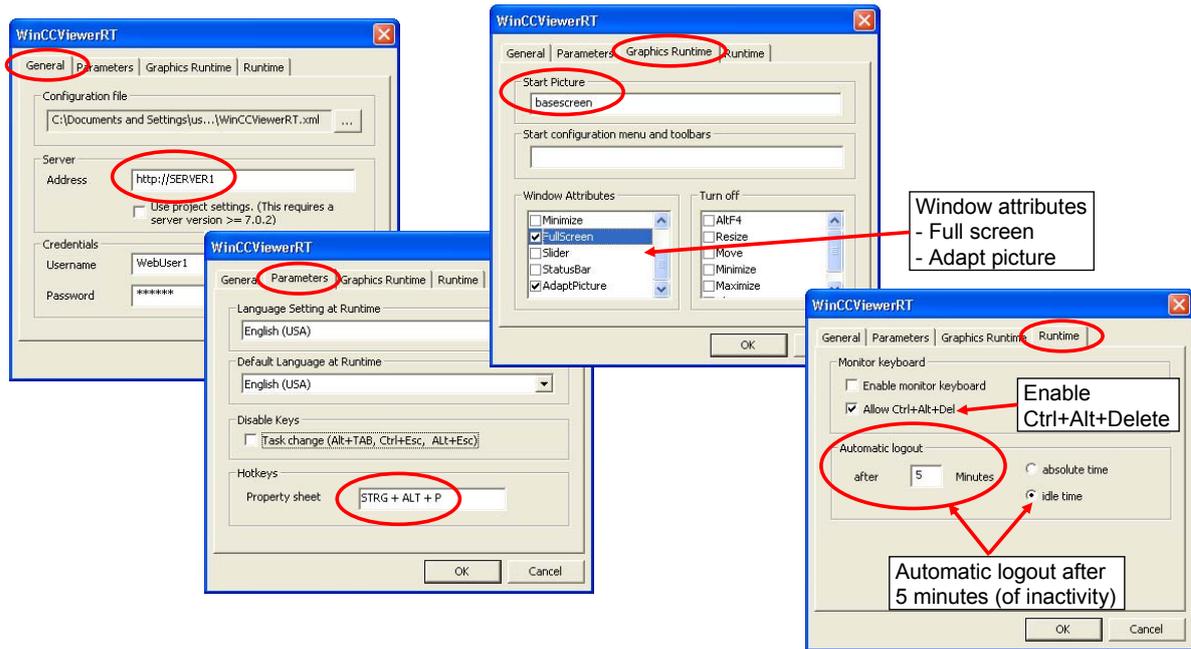
- Task** View the existing published WinCC project for Web mode with the Internet Explorer.
- Step 11:** Now switch to the Web client computer on your workstation. Start Internet Explorer here and enter "http://<computer name of the server>".
- Step 12:** Log on with a Web user, e.g. User Norbert password: 123456 or WebUserX password: 123456
- Step 13:** Navigate through the project displayed in the Internet-Explorer.
- Note:** When the Web client is used for the first time, the client software must be installed first. You will be prompted to do this by Internet Explorer. The installation files will be loaded directly by the server (approx. 18 MB). Install the software and log on to the project as the user created above and check the possible functions.
- Result:** You have now prepared a project for the Web and created a Web client.

If..... **MainControl.asp does not start via the WEB (but for example DataMonitor.asp)**

Then **Start – Control Panel – Administrative Tools – Internet Information Services : Find the !Websites" folder and delete the subfolder "WebNavigator".**

Then ... **Run the WebConfigurator in WinCC and publish again.**
Maincontrol.asp : On the WebClient : Properties - adapt process picture size

Exercise: Using Web Viewer WinCCViewerRT



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Exercise: Web Navigator → Web Viewer WinCCViewerRT settings

- Task** View the existing published WinCC project for Web mode **on the client** with the Web viewer WinCCViewerRT.
- Step 1:** Double-click "WinCCViewerRT.exe" in the installation directory "Siemens\WinCC\Webnavigator\Client\bin".
- Step 2:** Enter the data for logging on at the Web Server in the "General" tab: Server address (e.g.: http://Server3), user name and password.
- CAUTION:** If you omit the password, you always need to log on when the viewer is started, otherwise the password is saved and anyone who starts the viewer starts with the rights.
- Step 3:** In the "Parameters" tab specify the Runtime language and whether **shortcuts will be disabled (see note below)** that the user uses to change to other programs.
- Step 4:** On the "Graphics Runtime" tab, specify the properties of WinCC Runtime:
 - Start picture
 - Configuration file for picture navigation (optional)
 - Window attributes
 - prohibited user actions
- Step 5:** On the "Runtime" tab, specify further user actions:
 - Automatic logout
 - Activate screen keyboard
 - With <Ctrl+Alt+Del>, change to the Task Manager and to the operating system
 - Call the Web viewer with the keyboard shortcut You can change the default key shortcut of <Ctrl+Alt+P>.
- Step 6:** Close the dialog box with the "OK" button. The connection to the Web Server is established.
- Note:** If you disable a shortcut or hide the "Close" button, it is no longer possible to close Web Viewer.