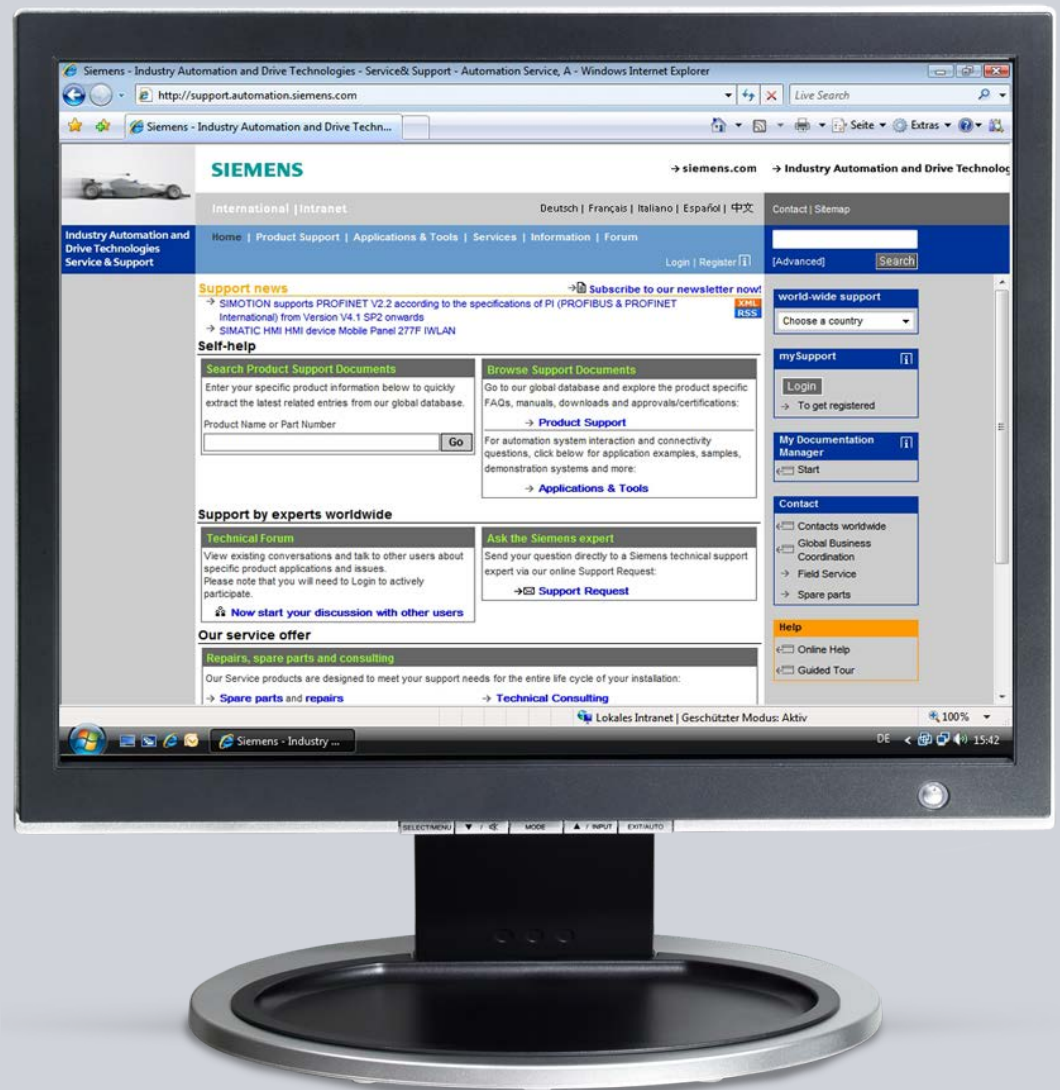


# What options are there in WinCC flexible for using a Multi Panel or Mobile Panel as an OPC server?

WinCC flexible

FAQ • March 2012



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Go to the following link to download this document.

<http://support.automation.siemens.com/WW/view/en/22701694>

## Question

What options are there in WinCC flexible for using a Multi Panel or Mobile Panel as an OPC server?

## Answer

Follow the instructions and notes listed in this document for a detailed answer to the above question.

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# 1 Introduction

Multi Panels and Mobile Panels **as from the 270 series** can also act optionally as OPC XML DA servers. Communication via DCOM with the OPC XML DA server of the Multi Panel or Mobile Panel is not possible, because the realtime operating system Windows CE has **no** DCOM interface. Therefore, an OPC XML gateway is always required for communication between a PC (OPC DA client) and a multi panel or mobile panel (OPC XML DA server). The OPC XML gateway implements communication from XML to COM or DCOM.

As from WinCC V6.0, it is also possible to communicate **directly** via XML as OPC XML DA client with a Multi Panel or Mobile Panel that is working as an OPC XML DA server.

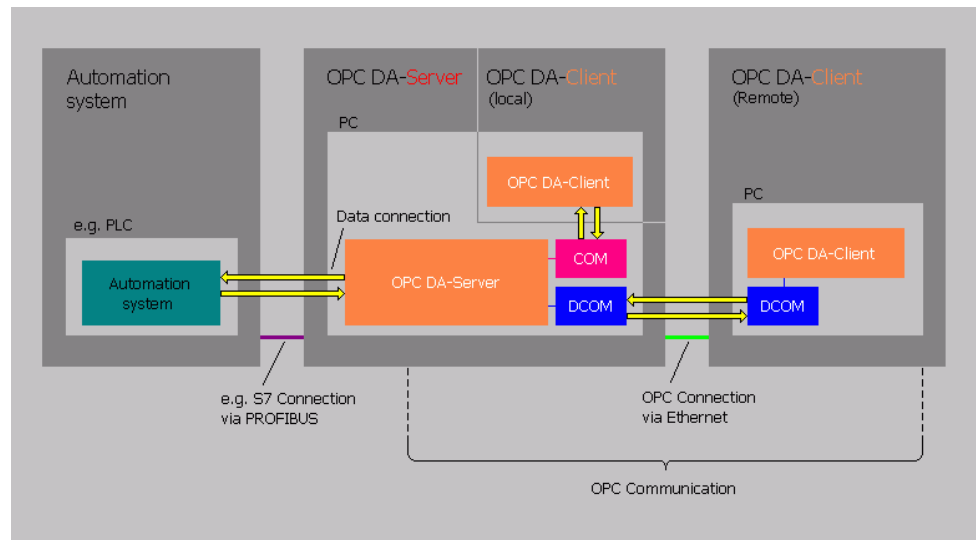
## 2 What are OPC and OPC XML?

OPC (**O**LE for **P**rocess **C**ontrol) has become a standard interface family for connecting together different automation systems via these open interfaces. In principle, communication via OPC is a server-client form of communication. All OPC servers have one or more data connections via which the system-specific data of the automation or visualization system is made available to the OPC server. The OPC server converts this data in compliance with the OPC standard and makes it available via the OPC interface.

Other systems working as OPC clients can exchange data with the OPC server via this common interface.

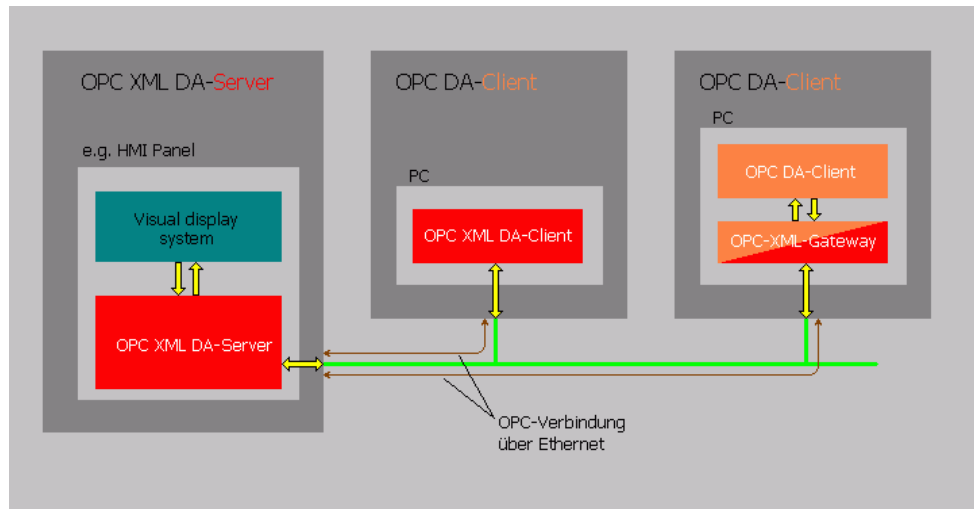
Data exchange between an OPC DA server and an OPC DA client runs on the same PC (local) via the COM interface. In the case of different PCs, OPC communication runs via the DCOM interface of the system.

Figure 2-1



OPC XML (**E**xtensible **M**arkup **L**anguage) has been added to OPC. Data exchange with OPC XML is via the SOAP protocol (**S**ingle **O**bject **A**ccess **P**rotocol). This provides platform-independent data exchange and also enables data transfer via the Internet. The server-client architecture of OPC XML is retained. You need an OPC XML gateway for exchanging data between an OPC DA client and an OPC XML DA server.

Figure 2-2



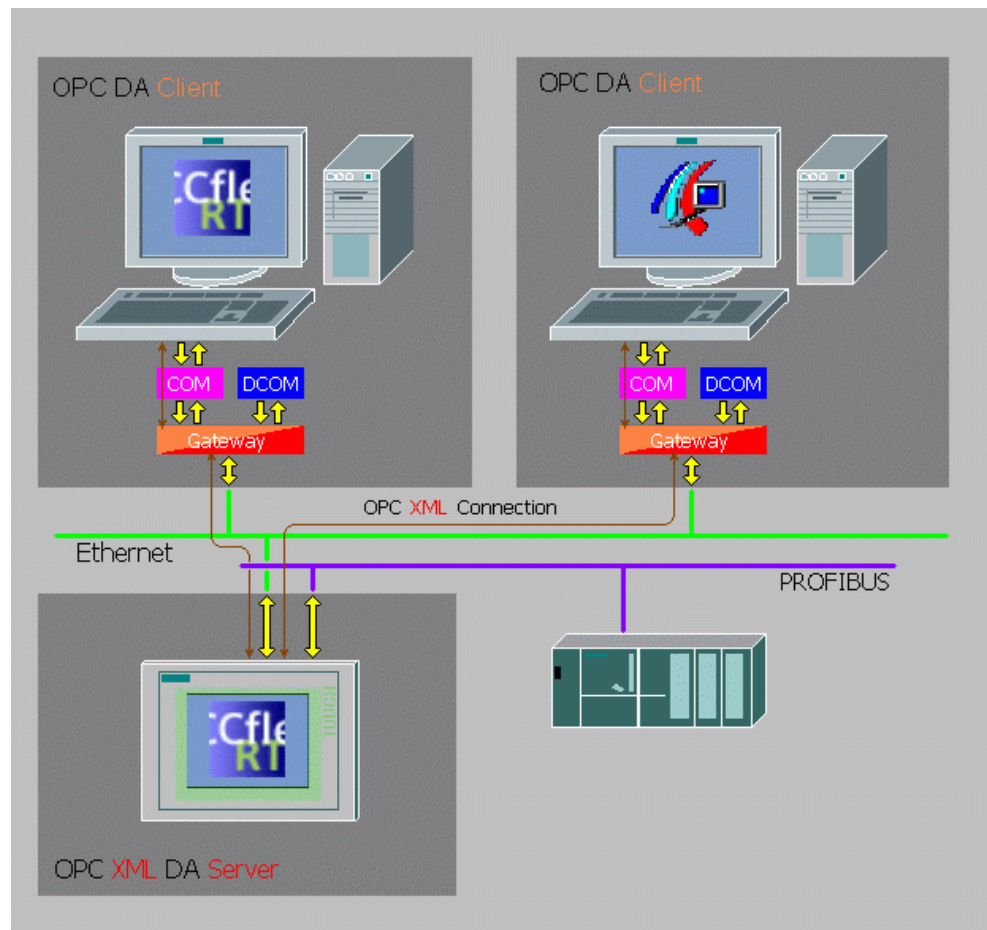
### 3 OPC XML versions with a Multi Panel or Mobile Panel

There are three ways of using a Multi Panel or Mobile Panel as OPC XML DA server.




#### 3.1 Version A - OPC DA client with OPC XML gateway via COM

Communication between a Multi Panel or Mobile Panel (OPC-XML DA server) and a PC (OPC DA client) is via the OPC XML gateway. In this version, the OPC XML gateway and the OPC DA client are on the same PC. Data exchange between the OPC XML gateway and the OPC DA client is via the COM interface of the OPC XML gateway.

Figure 3-1




The following **SIMATIC** visualization systems can communicate as an **OPC DA client** via the OPC XML gateway with the OPC XML DA server on the Multi Panel or Mobile Panel:

-  ProTool/Pro PC Runtime (as from ProTool/Pro V5.2)
-  WinCC flexible PC Runtime (as from WinCC flexible 2004 Advanced)
-  WinCC Runtime (as from WinCC V6.0)

In principle, you can use all automation and visualization components that can work as an OPC DA client.

**Note**

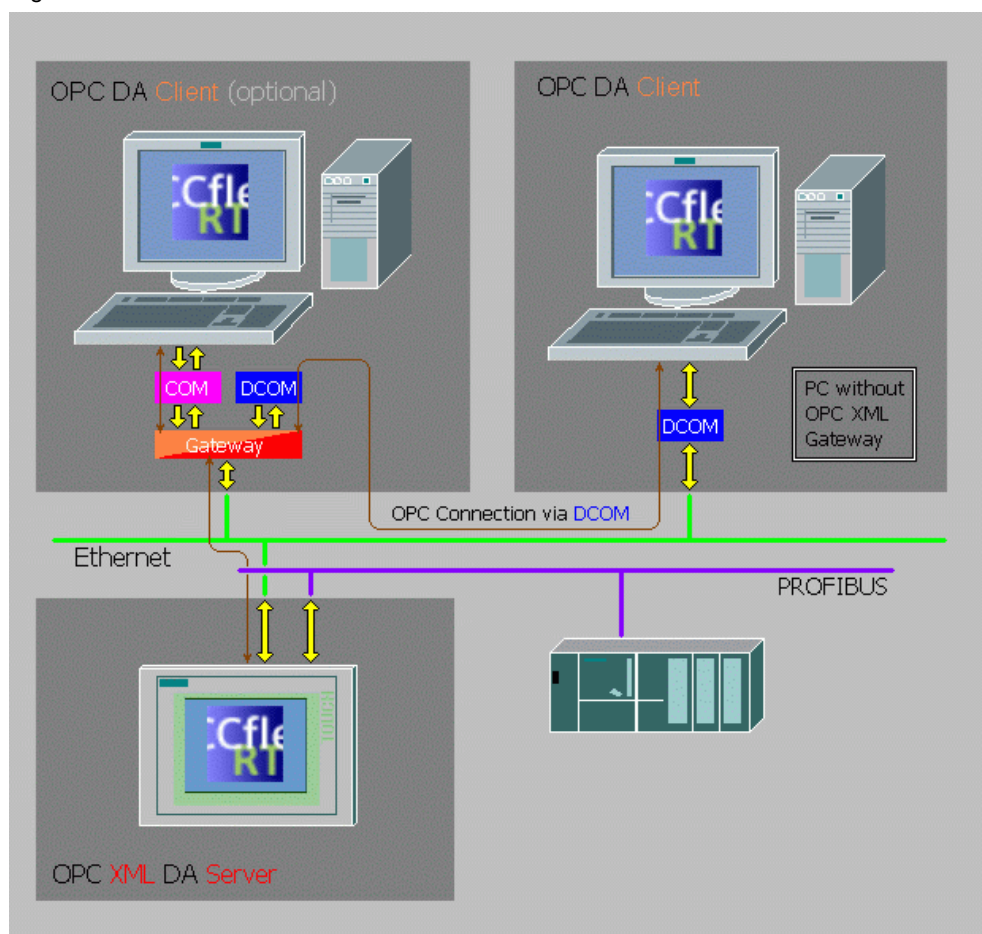
An  Excel macro is available on the WinCC flexible Installation CD or DVD or in the download (Attachment 2), which sets up a connection as an OPC DA client to an OPC DA server or to the OPC XML gateway.



### 3.2 Version B - OPC DA client with OPC XML gateway via DCOM

Communication of a Multi Panel or Mobile Panel (OPC XML DA server) to another PC is via a so-called gateway PC. In this version, the OPC XML gateway and the OPC DA client are on separate PCs. Data exchange between the OPC XML gateway and the OPC DA client on the second PC is via the DCOM interface. The OPC DA client on the gateway PC is optional.


Figure 3-2



The following **SIMATIC** visualization systems can communicate as an **OPC DA client** via the OPC XML gateway with the OPC XML DA server on the Multi Panel or Mobile Panel:

- ProTool/Pro PC Runtime (as from ProTool/Pro V5.2)
- WinCC flexible PC Runtime (as from WinCC flexible 2004 Advanced)
- WinCC Runtime (as from WinCC V6.0)

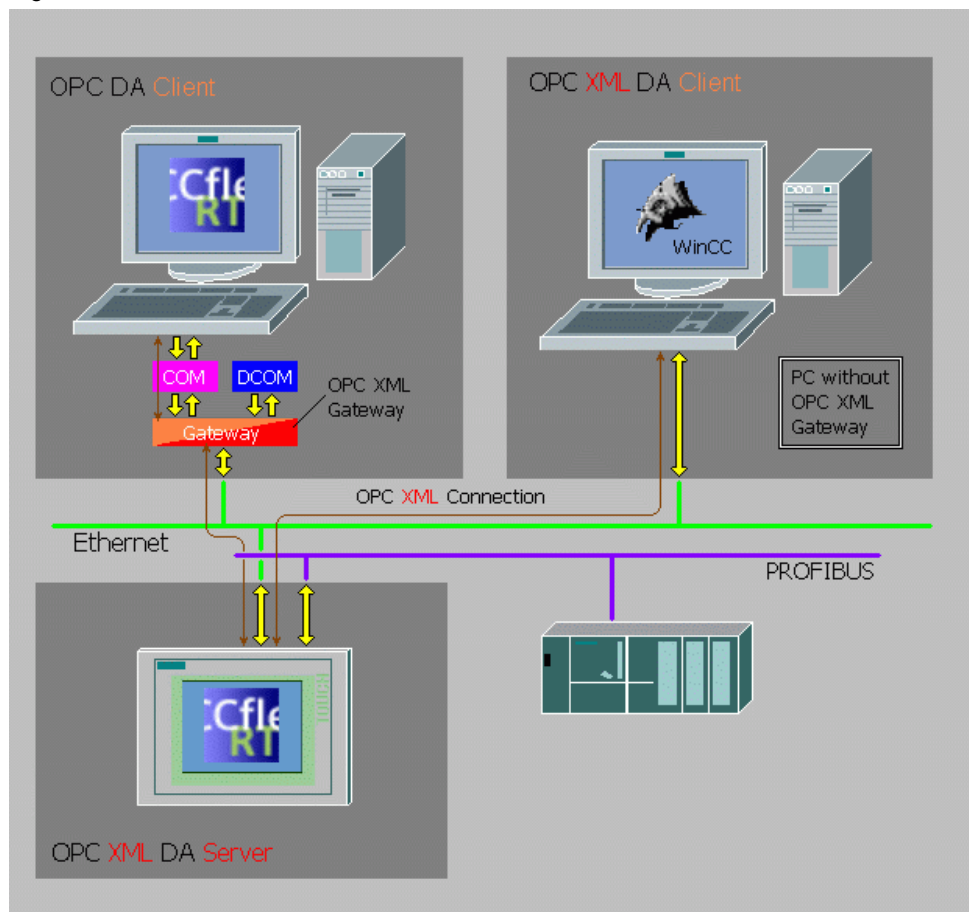
In principle, you can use all automation and visualization components that can work as an OPC DA client.

**Note** An  Excel macro is available on the WinCC flexible Installation CD or DVD or in the download (Attachment 2), which sets up a connection as an OPC DA client to an OPC DA server or to the OPC XML gateway.


### 3.3 Version C - OPC XML DA client without OPC XML gateway

Communication of a Multi Panel or Mobile Panel (OPC XML DA server) can be made directly via XML with a WinCC Runtime (OPC **XML** DA client) **as from** WinCC V6.0. In this case, the OPC XML gateway is **not** needed, because there is no conversion necessary between the OPC XML DA server and the OPC XML DA client.

Figure 3-3



The following **SIMATIC** visualization systems can communicate as an OPC **XML** DA client **directly** with the OPC XML DA server on the Multi Panel or Mobile Panel:

-  WinCC Runtime (as from WinCC V6.0)

You can use all automation and visualization components that can work as an OPC XML DA client.

**Note**

In principle, only eight OPC connections are possible with an OPC XML DA server. You can get around this restriction by using the OPC XML gateway. It is not possible to use an OPC XML DA client via the OPC XML gateway!

## 4 Requirements

Below is a list of the software and hardware requirements for the separate versions.

### 4.1 Hardware and software requirements

- SIMATIC WinCC flexible ES  
(for OPC XML DA server as from WinCC flexible 2004 Standard)
- License "WinCC flexible / OPC Server for Multi Panels"  
(can also be used for Mobile Panels)
- OPC XML-compatible panel (see point 3.2)
- Ethernet connection between Multi Panel or Mobile Panel and PC  
(see Entry ID [13336639](#))
- Versions A and B: at least one PC with OPC XML gateway and OPC DA client  
(for example, ProTool/Pro as from V5.2 or WinCC flexible as from version 2004 Advanced)

**Note**

The OPC XML gateway is one the WinCC flexible Installation CD or DVD. Information on installing the OPC XML gateway is available in point 4.2.






- Version C: one PC as OPC XML DA client (e.g. SIMATIC WinCC as from V6.0)

**Note**

Check the compatibility between the versions of WinCC flexible and the Microsoft Windows operating systems in Entry ID [64847781](#). This also applies for all other visualization software products that you use with the OPC XML DA server of WinCC flexible.

The table below shows which SIMATIC visualization software is supported by which OPC servers and clients.

Table 4-1

PC Runtime	Server		Client	
	OPC DA	OPC XML DA	OPC DA	OPC XML DA
 ProTool/PRO PC Runtime	X <sup>2)</sup>	--	X <sup>2)</sup>	--
 WinCC flexible PC Runtime	X	--	X	--
 WinCC PC Runtime	X	X <sup>1)</sup>	X	X <sup>1)</sup>
 Excel-Makro <sup>3)</sup>	--	--	X	--
Multi Panel / Mobile Panel with  WinCC flexible Runtime	--	X	--	--

<sup>1)</sup> WinCC V6.0 onwards

<sup>2)</sup> ProTool/Pro V5.2 onwards

<sup>3)</sup> Excel macro in the download (Attachment 2)

## **4.2 OPC XML-compatible panels**

- MP270B
- MP277
- MP370
- MP377
- Mobile Panel 277
- Mobile Panel 277 IWLAN
- Mobile Panel 277F IWLAN


## 5 Configuration of the different versions

This entry describes how to configure a PC (OPC DA client) with WinCC, ProTool/Pro and WinCC flexible in conjunction with a Multi Panel (OPC XML DA server) in the versions shown above. Configuration with a Mobile Panel is identical.

### 5.1 Configuration of the OPC XML DA server (Multi Panel / Mobile Panel)

Only Multi Panels and Mobile Panels **as from** the 270 series can be configured as OPC XML DA servers.

Table 5-1

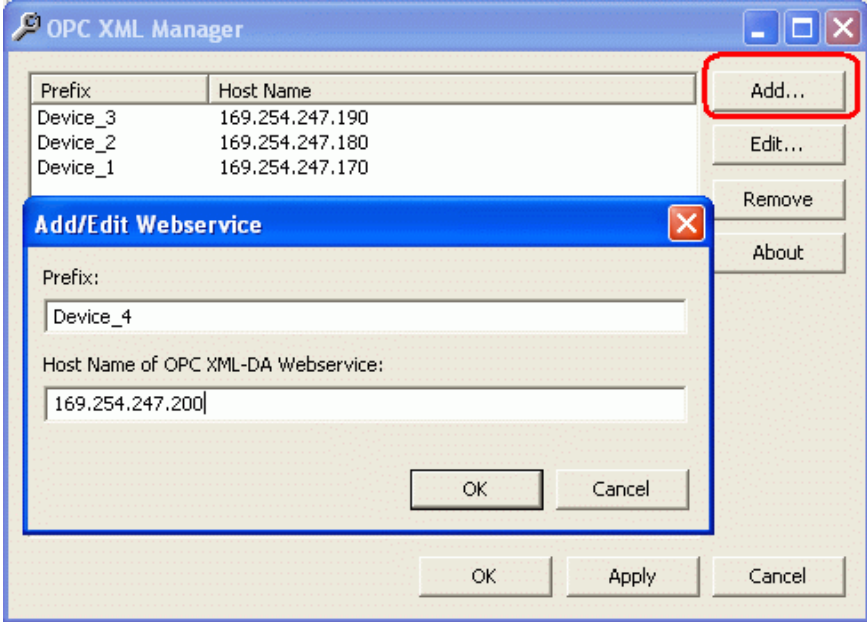
No.	Procedure
1.	<p><b>Information on the OPC XML DA server</b></p> <p>Configuration of the Multi Panel or Mobile Panel as OPC XML DA server is identical for all versions.</p> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>• The OPC server for the Multi Panel or Mobile Panel is always an OPC XML DA server.</li> <li>• The OPC communication with a Multi Panel or Mobile Panel as OPC XML DA server can only be implemented via Industrial Ethernet.</li> <li>• Multi Panels and Mobile Panels can only be used as OPC XML DA servers, not as OPC DA clients or OPC XML DA clients.</li> <li>• WinCC flexible Runtime must be started on the Multi Panel or Mobile Panel with the OPC XML DA server so that the OPC XML DA server is activated.</li> </ul>
2.	<p><b>Procedure for configuring the OPC XML DA server</b></p> <ul style="list-style-type: none"> <li>• Open the WinCC flexible project in which the Multi Panel or Mobile Panel is configured.</li> <li>• Configure the interface to the controller (e.g. S7 300/400) in "Communication &gt; Connections".</li> <li>• Create an "INT" data type tag ("Tag_1"), for example, in "Communication &gt; Tag".</li> <li>• Double-click "Device settings" in the project window.</li> <li>• Activate the "Act as OPC server" option in "Services in Runtime".</li> <li>• Transfer the WinCC flexible project to the Multi Panel or Mobile Panel.</li> </ul> 

## 5.2 Configuration of the OPC XML gateway

Table 5-2

No.	Procedure
1.	<p><b>Configuration and installation of the OPC XML gateway</b></p> <p>The OPC XML gateway is informed of the IP address of the OPC XML DA server via the setting for the OPC XML manager on the PC.</p> <p>The settings are required in the two configuration versions A and B.</p> <p><b>Note:</b></p> <p>You can also use multiple OPC XML gateways on multiple PCs for communication between an OPC XML DA server and multiple OPC DA clients.</p> <p><b>WinCC flexible 2004:</b></p> <ul style="list-style-type: none"> <li>• Copy the program "OPCXmlManager.exe" from the directory "\Disk2\Support\OPCXML" on the installation CD into a directory of your choice on the relevant PC.</li> </ul> <p><b>As of WinCC flexible 2005:</b></p> <ul style="list-style-type: none"> <li>• The Setup for installing the "OPC XML Gateway" is on the WinCC flexible CD 2 under "WinCCflexible\setup\OPCXMLWrapper\Disk1".</li> <li>• Double-click on the "Setup.exe" file.</li> <li>• Under "Language", select the interface language of the Setup program.</li> <li>• Select "Installation" to start the installation.</li> <li>• Run the installation following the instructions on the monitor.</li> </ul>
2.	<p><b>Opening the OPC XML manager</b></p> <p><b>WinCC flexible 2004:</b></p> <ul style="list-style-type: none"> <li>• Open the "OPC XML Manager" in your chosen directory by double-clicking on "OPCXmlManager.exe". In the OPC XML Manager click on the "Add..." button (see Fig. 07).</li> </ul> <p><b>WinCC flexible 2005:</b></p> <ul style="list-style-type: none"> <li>• In the "Start" menu, select the program "SIMATIC &gt; WinCC flexible &gt; WinCC flexible Runtime &gt; XmlMuxConfig". In the OPC XML Manager click on the "Add..." button (see Fig. 07).</li> </ul> <p><b>As from WinCC flexible 2007:</b></p> <ul style="list-style-type: none"> <li>• In the "Start" menu, select the program "SIMATIC &gt; OPC-XML Gateway &gt; OPC XML Manager". In the OPC XML Manager click on the "Add..." button (see Fig. 07).</li> </ul>

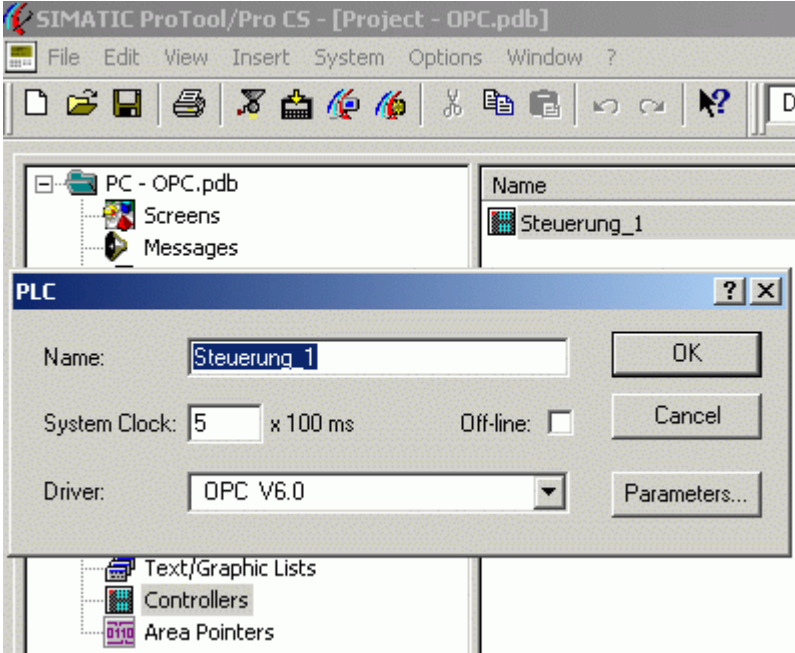


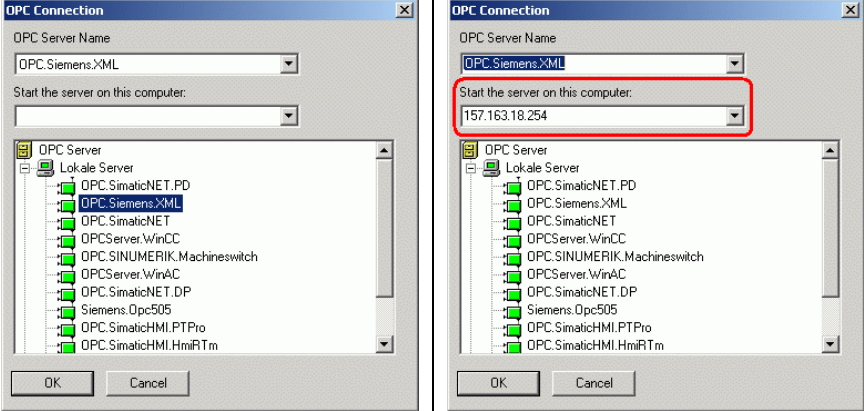
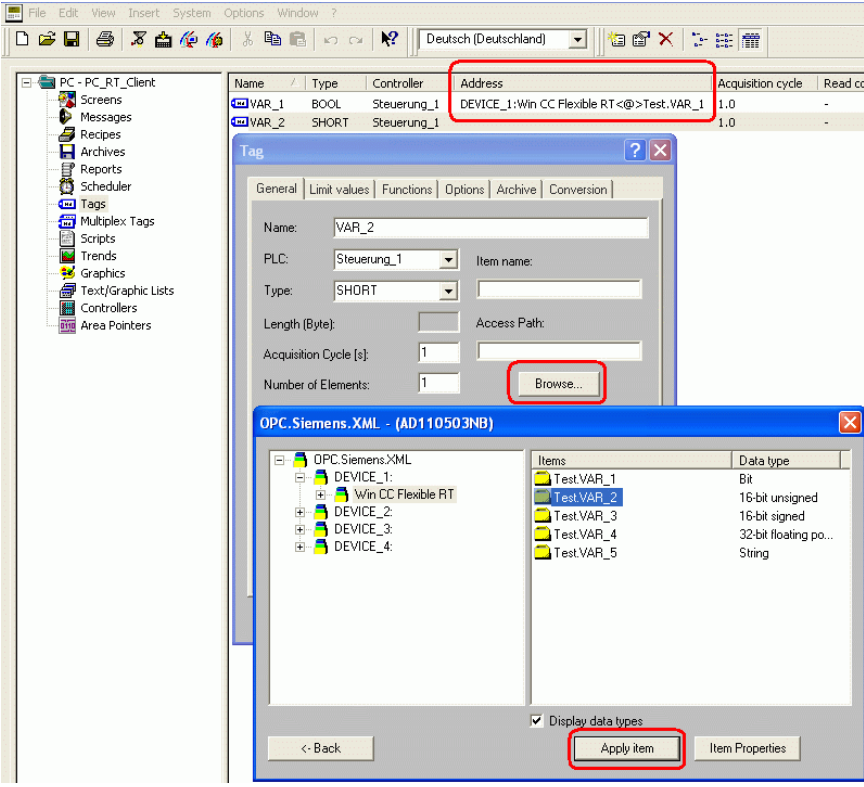
No.	Procedure
3.	<p><b>Add the prefix and host name</b></p> <p><b>WinCC flexible 2004:</b></p> <ul style="list-style-type: none"> <li>• Enter the host name or the IP address (such as 150.150.150.20).</li> <li>• Confirm the input with the "OK" button.</li> <li>• Close the OPC XML manager.</li> <li>• Open "OpcXml Settings" in the "Control Panel".</li> <li>• Enter the computer name or the IP address of the operator panel.</li> <li>• Close "OpcXml-Settings" with "OK".</li> </ul> <p><b>As from WinCC flexible 2005:</b></p> <ul style="list-style-type: none"> <li>• Enter the prefix ("Prefix" for example) and host name or IP address (such as 150.150.150.20). Explanation of parameters: [Prefix] The prefix specifies which OPC XML DA server the tag is assigned too. [Host Name] Device name or IP address of the OPC XML DA server.</li> <li>• Confirm the input with the "OK" button. Close the OPC XML manager.</li> </ul> <p><b>Note:</b> You can incorporate several OPC XML DA servers via the OPC XML Manager.</p> 

### 5.3 Configuration of an OPC DA client with ProTool/Pro

The following procedure is for versions A and B. Configuration of ProTool/Pro as OPC DA client is possible as from V5.2.

Table 5-3

No.	Procedure	
1.	<p><b>Open the ProTool project</b></p> <ul style="list-style-type: none"> <li>• Open a ProTool/Pro PC project.</li> <li>• Select "Controllers" and double-click on the existing controller in order to open the Properties dialog.</li> <li>• Select "OPC V6.0" as the protocol - for ProTool/Pro V6.0 - and then open the "Parameters...".</li> </ul> 	
2.	<p><b>Version A - OPC XML gateway on the same PC</b></p> <p><b>Select the OPC server</b> If you have installed the OPX XML gateway on a separate PC, then you can skip this step and go directly to Step 3.</p> <ul style="list-style-type: none"> <li>• Select "OPC.Siemens.XML" as OPC server.</li> <li>• Click on "OK" to close the dialogs.</li> </ul>	<p><b>Version B - OPC XML gateway on a separate PC</b></p> <p><b>Select the OPC server</b> If you have installed the OPX XML gateway on the same PC, then you can skip this step and go directly to Step 4.</p> <ul style="list-style-type: none"> <li>• Select "OPC.Siemens.XML" as the OPC server and specify the IP address of the PC with an installed OPC gateway ("Start the server on this computer:").</li> <li>• Click on "OK" to close the dialogs.</li> </ul>

No.	Procedure
	
<p>3.</p>	<p><b>Create tags</b></p> <p>Once the OPC connection has been configured, you can create tags.</p> <p>If the OPC server is activated on the Multi Panel or Mobile Panel (Runtime is started on the panel), you can use "Browse" in the Tag dialog to access the OPC server tags.</p> <p><b>Note:</b></p> <p>If you are also using a gateway PC, then there must also be network connection between the gateway PC and the configuration PC when tag browsing.</p> <p>Otherwise, you can also use the following syntax for the OPC items:          [Prefix]:Win CC Flexible RT &lt;@&gt;[tag]</p> <p><b>Example:</b>          DEVICE_1:Win CC Flexible RT&lt;@&gt;Test.VAR_1</p> 

No.	Procedure
	<b>Note:</b> If you make changes to the configurations, e.g. add or change tags, you have to transfer the changed configuration to the Multi Panel or Mobile Panel before you can subsequently access the changed or extended tags.

## 5.4 Configuration of an OPC DA client with WinCC flexible

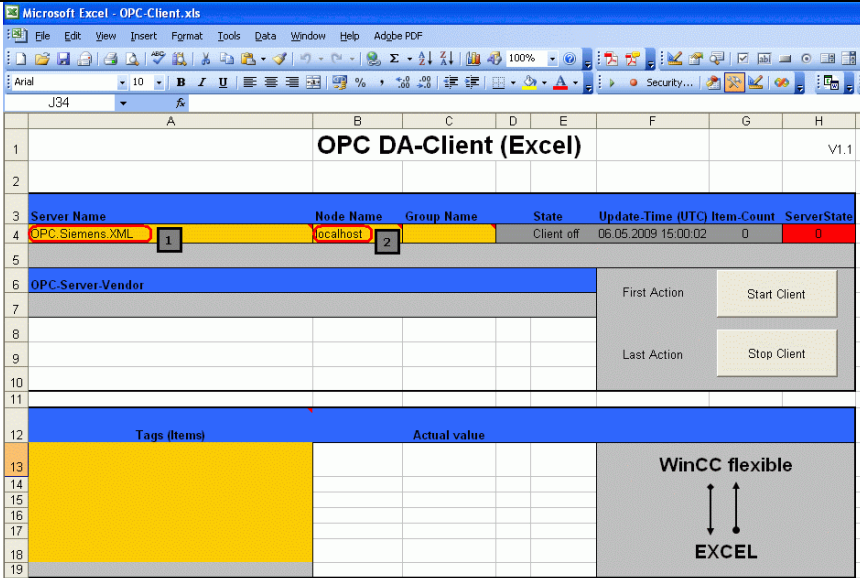
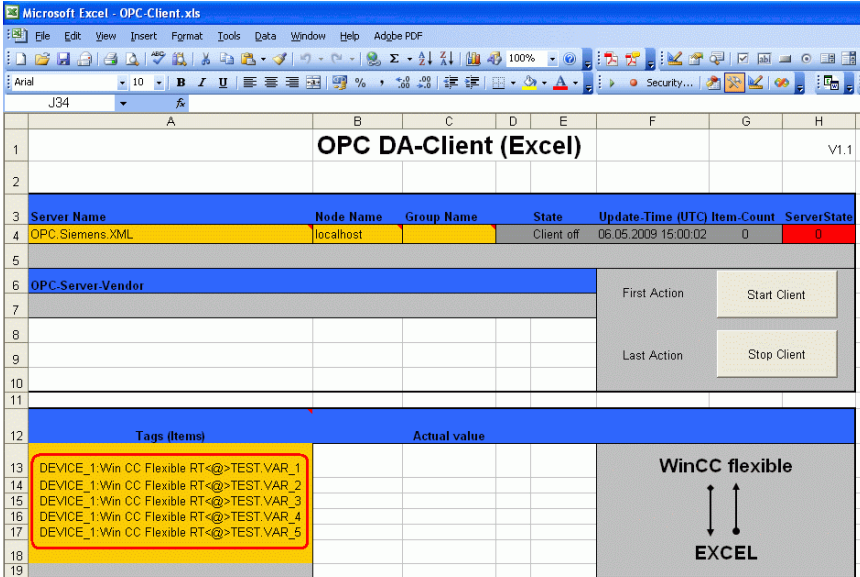
A detailed description of how to configure versions A and B of OPC XML with Windows 2000, Windows XP, Windows Vista and WinCC flexible is available in Entry ID [25677751](#).

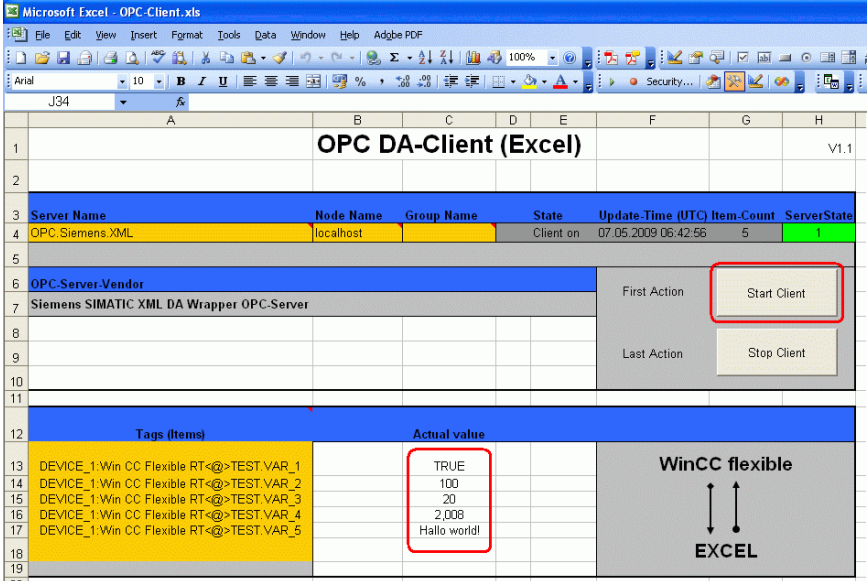
## 5.5 Configuration of an OPC DA client with the Microsoft Excel macro

Proceed as follows for versions A and B.

Table 5-4

No.	Procedure
1.	<p><b>Open the Excel macro</b></p> <p>The Excel macro is located in Attachment 2 that you can download at the end of this entry.</p> <ul style="list-style-type: none"> <li>• Download the compressed file in Attachment 2.</li> <li>• Unpack the compressed file.</li> <li>• Open the "OPC-Client_V1_1.xls" file with MS Excel.</li> </ul> <p><b>Note:</b></p> <p>In order to be able to use the Excel macro, you must activate the reference to "Siemens OPC DA Automation 2.0" in the menu "Tools &gt; References..." in the Visual Basic Editor of Microsoft Excel. If this reference is not registered, you cannot use the Excel macro on the PC.</p>
2.	<p><b>Define OPC server name, IP address and group name</b></p> <ul style="list-style-type: none"> <li>• For "Server Name" (1) you specify the OPC DA server or OPC XML DA server "OPC.Siemens.XML".</li> </ul> <p><b>Version A:</b></p> <ul style="list-style-type: none"> <li>• As an option (2), you specify the IP address "127.0.0.1" or the name "localhost".</li> </ul> <p><b>Note:</b></p> <p>Seeing that the OPC XML gateway is located on the same PC, the system does not require you to specify the IP address.</p> <p><b>Version B:</b></p> <ul style="list-style-type: none"> <li>• Specify the IP address (2) of where the OPC XML gateway is installed.</li> </ul> <p><b>Versions A and B:</b></p> <p>A group name is not required for communication with the OPC XML DA server.</p>

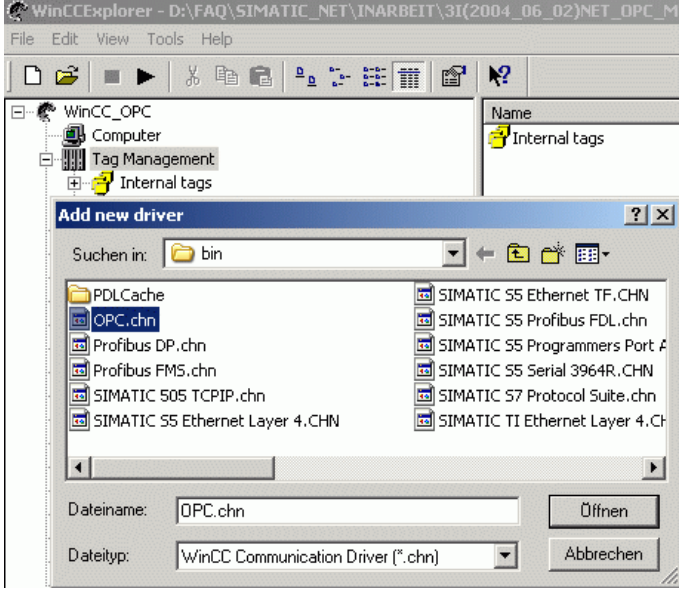
No.	Procedure
	
3.	<p><b>Define tags</b></p> <ul style="list-style-type: none"> <li>• Create all the relevant tags or OPC item using the following syntax: [Prefix]:Win CC Flexible RT&lt;@&gt;[Tag]</li> </ul> <p><b>Tag</b> WinCC flexible 2004: Folder.Variable WinCC flexible 2008: Folder/Variable</p> <p><b>Example</b> WinCC flexible 2004: DEVICE_1:Win CC Flexible RT&lt;@&gt;TEST.Var_1 WinCC flexible 2008: DEVICE_1:Win CC Flexible RT&lt;@&gt;TESTVar_1</p> 

No.	Procedure																										
4.	<p><b>Start/stop the OPC DA connection</b></p> <ul style="list-style-type: none"> <li>Click on the "Start" button to establish the OPC DA connection to the OPC XML gateway.</li> </ul> <p><b>Note:</b> If the connection to the OPC XML gateway has been established and there is a connection to the OPC XML DA server, you can change the tags both in Excel and on the OPC XML DA server.</p> <ul style="list-style-type: none"> <li>Click on the "Stop" button to disconnect the OPC DA connection to the OPC XML gateway.</li> </ul>  <p>The screenshot shows the following data in the spreadsheet:</p> <table border="1"> <thead> <tr> <th>Server Name</th> <th>Node Name</th> <th>Group Name</th> <th>State</th> <th>Update-Time (UTC)</th> <th>Item-Count</th> <th>ServerState</th> </tr> </thead> <tbody> <tr> <td>OPC.Siemens.XML</td> <td>localhost</td> <td></td> <td>Client on</td> <td>07.05.2009 06:42:56</td> <td>5</td> <td>1</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Tags (Items)</th> <th>Actual value</th> </tr> </thead> <tbody> <tr> <td>DEVICE_1-Win CC Flexible RT&lt;@&gt;TEST.VAR_1</td> <td>TRUE</td> </tr> <tr> <td>DEVICE_1-Win CC Flexible RT&lt;@&gt;TEST.VAR_2</td> <td>100</td> </tr> <tr> <td>DEVICE_1-Win CC Flexible RT&lt;@&gt;TEST.VAR_3</td> <td>20</td> </tr> <tr> <td>DEVICE_1-Win CC Flexible RT&lt;@&gt;TEST.VAR_4</td> <td>2,008</td> </tr> <tr> <td>DEVICE_1-Win CC Flexible RT&lt;@&gt;TEST.VAR_5</td> <td>Hallo world!</td> </tr> </tbody> </table>	Server Name	Node Name	Group Name	State	Update-Time (UTC)	Item-Count	ServerState	OPC.Siemens.XML	localhost		Client on	07.05.2009 06:42:56	5	1	Tags (Items)	Actual value	DEVICE_1-Win CC Flexible RT<@>TEST.VAR_1	TRUE	DEVICE_1-Win CC Flexible RT<@>TEST.VAR_2	100	DEVICE_1-Win CC Flexible RT<@>TEST.VAR_3	20	DEVICE_1-Win CC Flexible RT<@>TEST.VAR_4	2,008	DEVICE_1-Win CC Flexible RT<@>TEST.VAR_5	Hallo world!
Server Name	Node Name	Group Name	State	Update-Time (UTC)	Item-Count	ServerState																					
OPC.Siemens.XML	localhost		Client on	07.05.2009 06:42:56	5	1																					
Tags (Items)	Actual value																										
DEVICE_1-Win CC Flexible RT<@>TEST.VAR_1	TRUE																										
DEVICE_1-Win CC Flexible RT<@>TEST.VAR_2	100																										
DEVICE_1-Win CC Flexible RT<@>TEST.VAR_3	20																										
DEVICE_1-Win CC Flexible RT<@>TEST.VAR_4	2,008																										
DEVICE_1-Win CC Flexible RT<@>TEST.VAR_5	Hallo world!																										

## 5.6 Configuration of an OPC DA client with WinCC

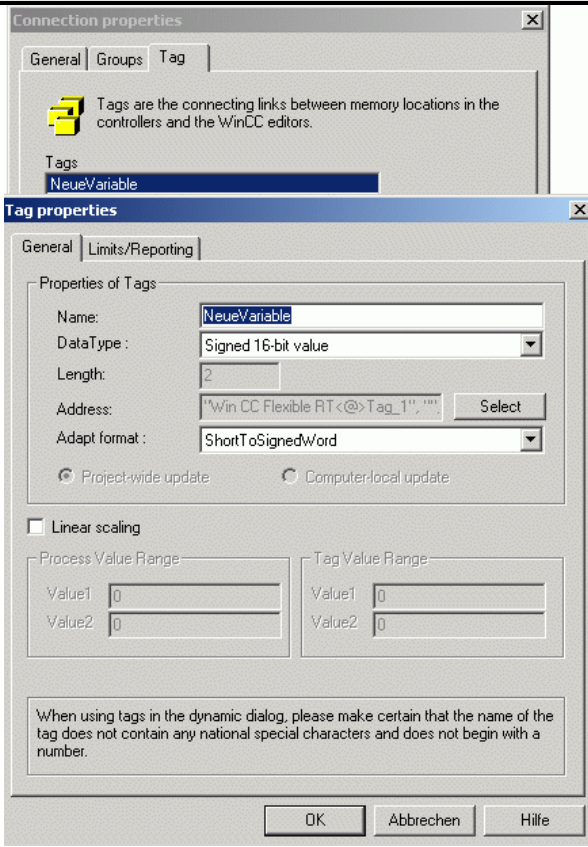
Proceed as follows for versions A and B.

Table 5-5

No.	Procedure	
1.	<p><b>Open the project and add an OPC driver</b></p> <ul style="list-style-type: none"> <li>Open the WinCC project and right-click on "Tag Management" to add the "OPC.chn" driver.</li> </ul> 	
2.	<p><b>Version A - OPC XML gateway on the same PC</b></p> <p><b>Add connection</b></p> <p>If you have installed the OPX XML gateway on a separate PC, then you can skip this step and go directly to Step 3.</p> <ul style="list-style-type: none"> <li>Then right-click on the OPC channel to add a new connection.</li> <li>The OPC server name "OPC.Siemens.XML" must be specified in the general properties for the connection.</li> </ul> <p><b>Note:</b> Do not select the property "XML DA server"!</p>	<p><b>Version B - OPC XML gateway on a separate PC</b></p> <p><b>Add connection</b></p> <p>If you have installed the OPX XML gateway on the same PC, then you can skip this step and go directly to Step 4.</p> <ul style="list-style-type: none"> <li>Then right-click on the OPC channel to add a new connection.</li> <li>The OPC server name "OPC.Siemens.XML" and the IP address of the PC with an installed OPC XML gateway must be specified in the general properties ("Start the server on this computer:").</li> </ul> <p><b>Note:</b> Do not select the property "XML DA server"!</p>



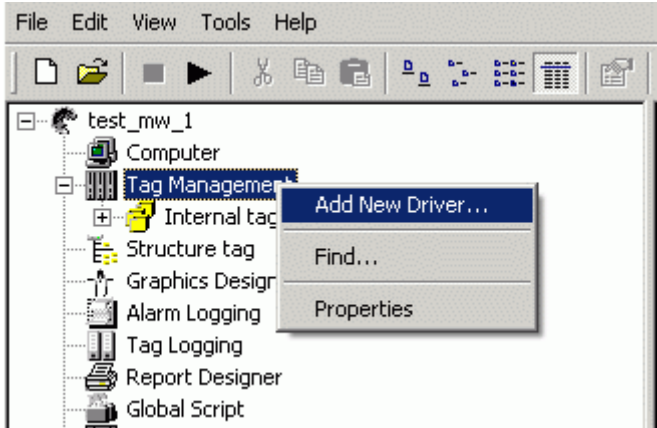
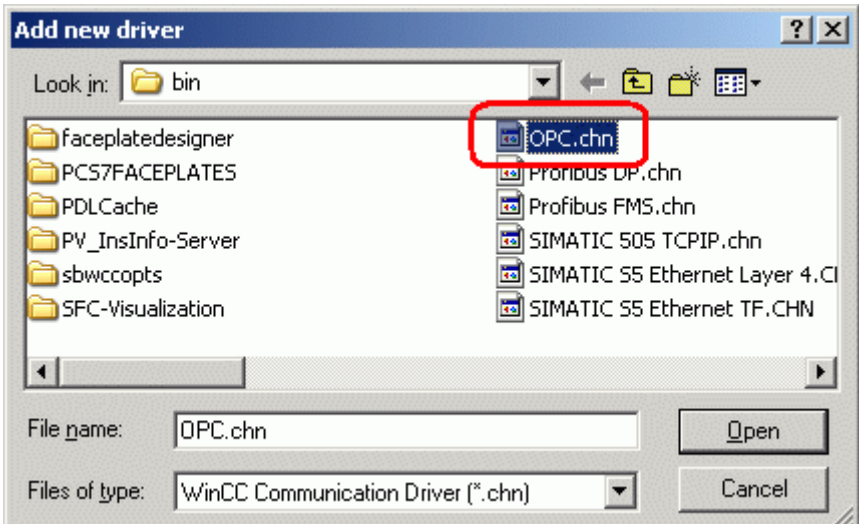
No.	Procedure
3.	<p><b>Create tags</b></p> <p>Once the connection has been configured, you can create tags in the "Tag" tab. Set the data type first of all. Then click "Select" to specify the item name for the tag. Here, you must observe the following syntax:</p> <p>[Prefix]:Win CC Flexible RT&lt;@&gt;[Variable]</p> <p><b>Tag</b>  WinCC flexible 2004: Folder.Variable  WinCC flexible 2008: Folder\Variable</p> <p><b>Example</b>  WinCC flexible 2008: DEVICE_1:Win CC Flexible RT&lt;@&gt;Test.VAR_1  WinCC flexible 2008: DEVICE_1:Win CC Flexible RT&lt;@&gt;TESTVar_1</p>

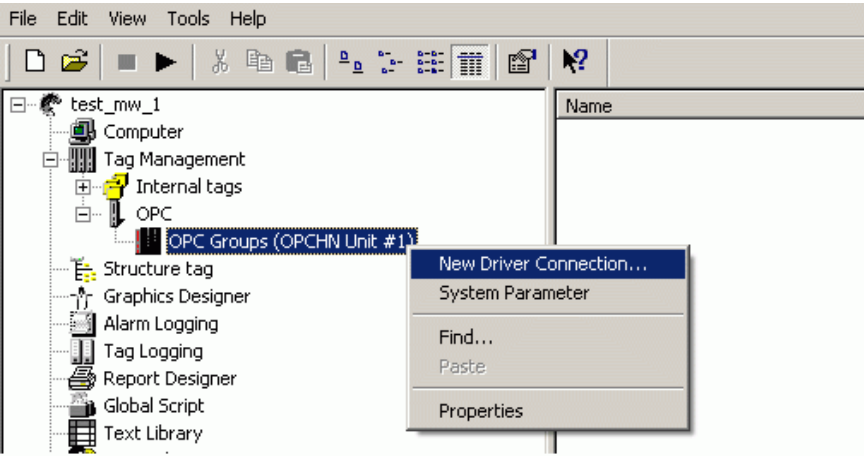
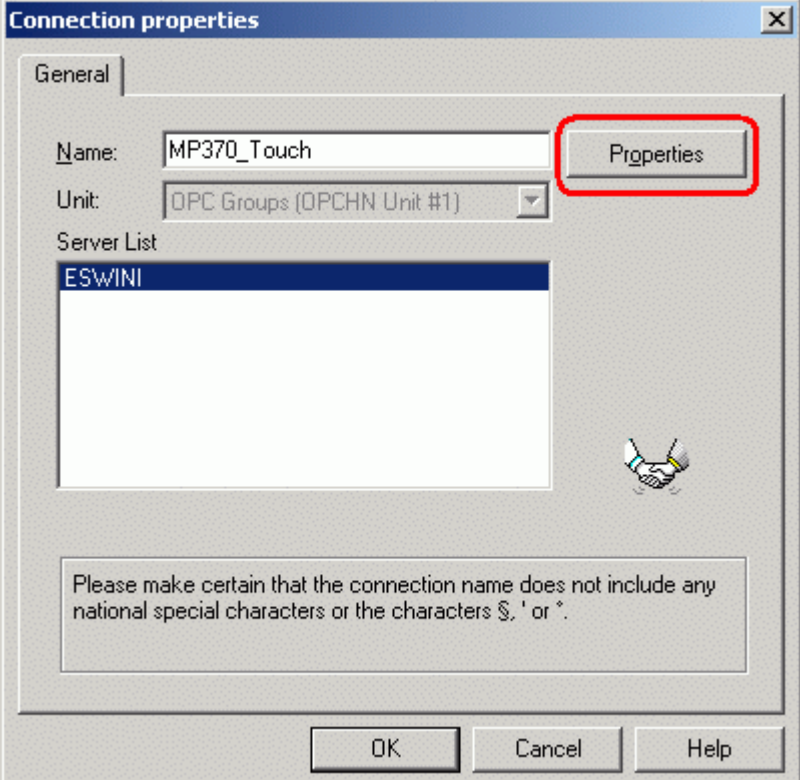
No.	Procedure
	 <p>The screenshot displays two overlapping dialog boxes from the WinCC software. The background dialog is 'Connection properties', with the 'Tag' tab selected. It shows a list of tags with 'NeueVariable' highlighted. The foreground dialog is 'Tag properties', also with the 'Tag' tab selected. It shows the configuration for the 'NeueVariable' tag. The 'Name' field contains 'NeueVariable', the 'DataType' is 'Signed 16-bit value', and the 'Length' is '2'. The 'Address' field contains '*Win CC Flexible RT&lt;@&gt;Tag_1', with a 'Select' button next to it. The 'Adapt format' is set to 'ShortToSignedWord'. There are radio buttons for 'Project-wide update' (selected) and 'Computer-local update'. Below this, there is a 'Linear scaling' section with two columns: 'Process Value Range' and 'Tag Value Range', each with 'Value1' and 'Value2' input fields, all currently set to '0'. At the bottom, there are 'OK', 'Abbrechen', and 'Hilfe' buttons. A note at the bottom of the dialog states: 'When using tags in the dynamic dialog, please make certain that the name of the tag does not contain any national special characters and does not begin with a number.'</p>

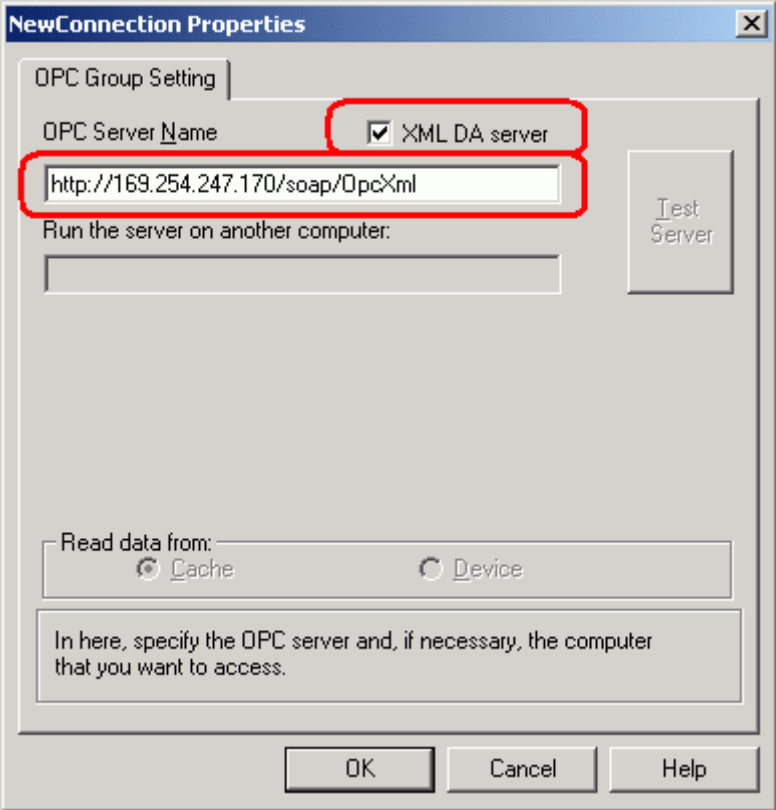
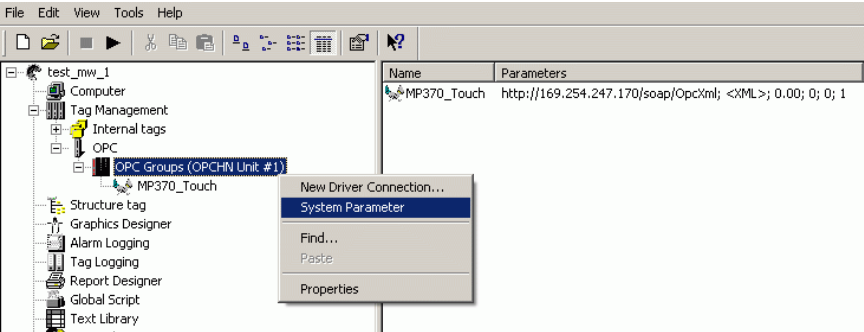
## 5.7 Configuration of an OPC DA client with WinCC

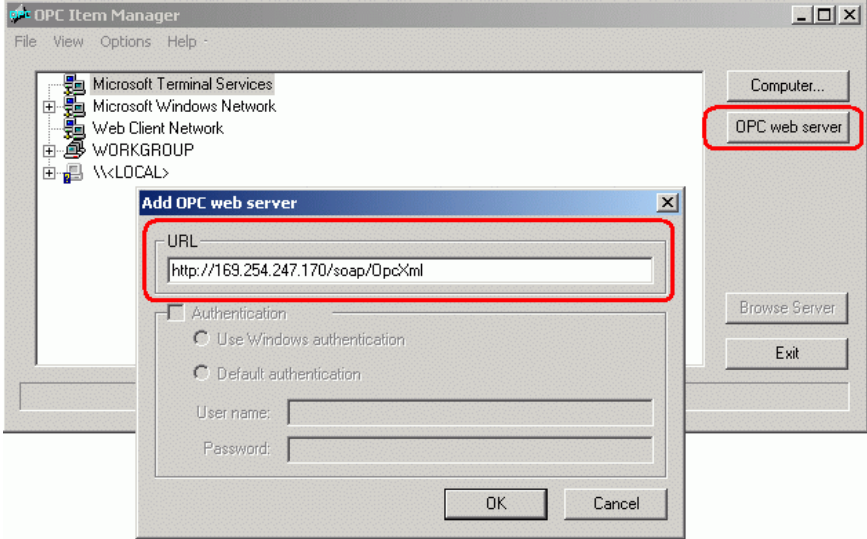
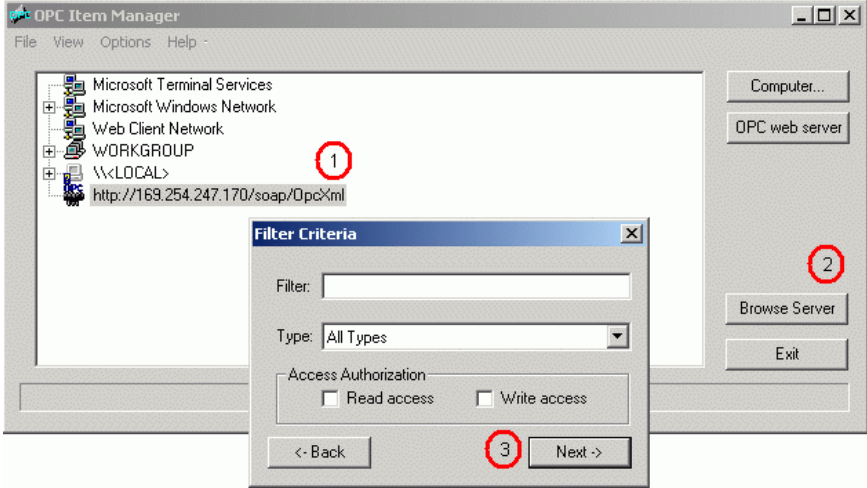
The following procedure is for version C and is possible as from WinCC V6.0.

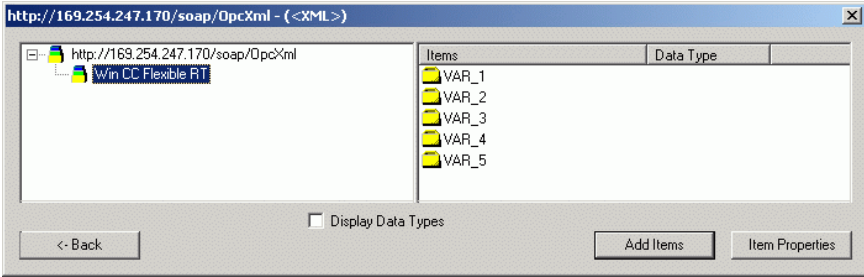
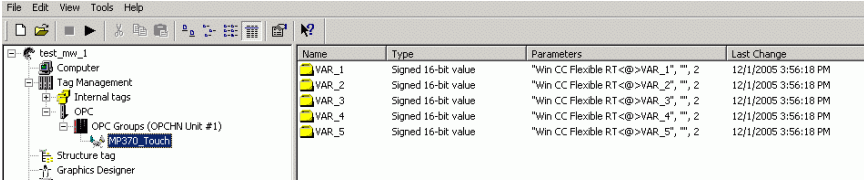
Table 5-6

No.	Procedure
1.	<p><b>Open the WinCC flexible project</b></p> <ul style="list-style-type: none"> <li>Open a WinCC project (as from WinCC V6.0).</li> <li>Add a new driver under "Tag Management".</li> </ul>  <p>The screenshot shows the WinCC Tag Management tree for a project named 'test_mw_1'. The 'Tag Management' folder is selected, and a context menu is open with the 'Add New Driver...' option highlighted. Other options in the menu include 'Find...' and 'Properties'. The tree structure includes 'Computer', 'Internal tag', 'Structure tag', 'Graphics Design', 'Alarm Logging', 'Tag Logging', 'Report Designer', and 'Global Script'.</p>
2.	<p><b>Add an OPC driver</b></p> <ul style="list-style-type: none"> <li>Select the driver "OPC.chn".</li> </ul>  <p>The screenshot shows the 'Add new driver' dialog box. The 'Look in:' field is set to 'bin'. The file list contains several folders and files. The file 'OPC.chn' is selected and highlighted with a red rectangle. Other files in the list include 'Pronbus DP.chn', 'Profibus FMS.chn', 'SIMATIC 505 TCPIP.chn', 'SIMATIC S5 Ethernet Layer 4.C', and 'SIMATIC S5 Ethernet TF.CHN'. The 'File name:' field contains 'OPC.chn' and the 'Files of type:' dropdown is set to 'WinCC Communication Driver (*.chn)'. The 'Open' and 'Cancel' buttons are visible at the bottom right.</p>

No.	Procedure
3.	<p><b>Configure a connection</b></p> <ul style="list-style-type: none"> <li>Now right-click on the OPC channel to add a new connection.</li> </ul> 
4.	<p><b>Add a connection name</b></p> <ul style="list-style-type: none"> <li>Assign a name to this connection.</li> <li>Then click on the "Properties" of this connection.</li> </ul> 

No.	Procedure
5.	<p><b>Activate the XML DA server</b></p> <ul style="list-style-type: none"> <li>Select the property "XML DA server".</li> <li>For "OPC Server Name" you enter the following URL:  http://IP address of the Multi Panel/soap/OpcXml  Example:  <a href="http://169.254.247.170/soap/OpcXml">http://169.254.247.170/soap/OpcXml</a></li> </ul> <ul style="list-style-type: none"> <li>Click "OK" to apply the settings.</li> </ul> 
6.	<p><b>Open the System Parameters of the OPC channel</b></p> <ul style="list-style-type: none"> <li>Right-click the OPC channel to open the "System Parameters".</li> </ul> <p>=&gt; The "OPC Item Manager" opens.</p> 

No.	Procedure
7.	<p><b>Add an OPC web server</b></p> <ul style="list-style-type: none"> <li>• Add a new "OPC web server".</li> <li>• Assign the URL web address that you assigned in Step 5, see Fig. 23:  http://IP address of the Multi Panel/soap/OpcXml</li> </ul> <p>Example: http://169.254.247.170/soap/OpcXml</p> <ul style="list-style-type: none"> <li>• Acknowledge the setting with the "OK" button.</li> </ul> 
8.	<p><b>Open the tag browser</b></p> <ul style="list-style-type: none"> <li>• Click on the "URL address" set previously in the "OPC item manager".</li> <li>• Select the "Browse Server" button.</li> <li>• Then click on "Next" in the dialog that opens.</li> </ul> 

No.	Procedure																								
9.	<p><b>Add tags</b></p> <p>If the OPC server is activated on the Multi Panel or Mobile Panel and Runtime is started on the panel, you can now access the OPC XML DA server tags.</p>  <p><b>Note:</b> The tags are now available for further processing in WinCC.</p>  <table border="1" data-bbox="794 815 1364 913"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Parameters</th> <th>Last Change</th> </tr> </thead> <tbody> <tr> <td>VAR_1</td> <td>Signed 16-bit value</td> <td>"Win CC Flexible RT &lt;@&gt;VAR_1", ""</td> <td>12/1/2005 3:56:18 PM</td> </tr> <tr> <td>VAR_2</td> <td>Signed 16-bit value</td> <td>"Win CC Flexible RT &lt;@&gt;VAR_2", ""</td> <td>12/1/2005 3:56:18 PM</td> </tr> <tr> <td>VAR_3</td> <td>Signed 16-bit value</td> <td>"Win CC Flexible RT &lt;@&gt;VAR_3", ""</td> <td>12/1/2005 3:56:18 PM</td> </tr> <tr> <td>VAR_4</td> <td>Signed 16-bit value</td> <td>"Win CC Flexible RT &lt;@&gt;VAR_4", ""</td> <td>12/1/2005 3:56:18 PM</td> </tr> <tr> <td>VAR_5</td> <td>Signed 16-bit value</td> <td>"Win CC Flexible RT &lt;@&gt;VAR_5", ""</td> <td>12/1/2005 3:56:18 PM</td> </tr> </tbody> </table>	Name	Type	Parameters	Last Change	VAR_1	Signed 16-bit value	"Win CC Flexible RT <@>VAR_1", ""	12/1/2005 3:56:18 PM	VAR_2	Signed 16-bit value	"Win CC Flexible RT <@>VAR_2", ""	12/1/2005 3:56:18 PM	VAR_3	Signed 16-bit value	"Win CC Flexible RT <@>VAR_3", ""	12/1/2005 3:56:18 PM	VAR_4	Signed 16-bit value	"Win CC Flexible RT <@>VAR_4", ""	12/1/2005 3:56:18 PM	VAR_5	Signed 16-bit value	"Win CC Flexible RT <@>VAR_5", ""	12/1/2005 3:56:18 PM
Name	Type	Parameters	Last Change																						
VAR_1	Signed 16-bit value	"Win CC Flexible RT <@>VAR_1", ""	12/1/2005 3:56:18 PM																						
VAR_2	Signed 16-bit value	"Win CC Flexible RT <@>VAR_2", ""	12/1/2005 3:56:18 PM																						
VAR_3	Signed 16-bit value	"Win CC Flexible RT <@>VAR_3", ""	12/1/2005 3:56:18 PM																						
VAR_4	Signed 16-bit value	"Win CC Flexible RT <@>VAR_4", ""	12/1/2005 3:56:18 PM																						
VAR_5	Signed 16-bit value	"Win CC Flexible RT <@>VAR_5", ""	12/1/2005 3:56:18 PM																						

## 5.8 Download

The attached download contains an archived STEP 7 project with an MP370 Touch as OPC XML DA server, a ProTool PC station (OPC DA client) and a WinCC flexible PC station (OPC DA client).

### Program description

Using the ProTool or WinCC flexible PC station configuration, you can access the tags of the MP370 Touch configuration via the OPC XML manager.

The MP370 Touch has been displayed "symbolically" in the PC runtime in order to illustrate how this works.

Figure 5-1

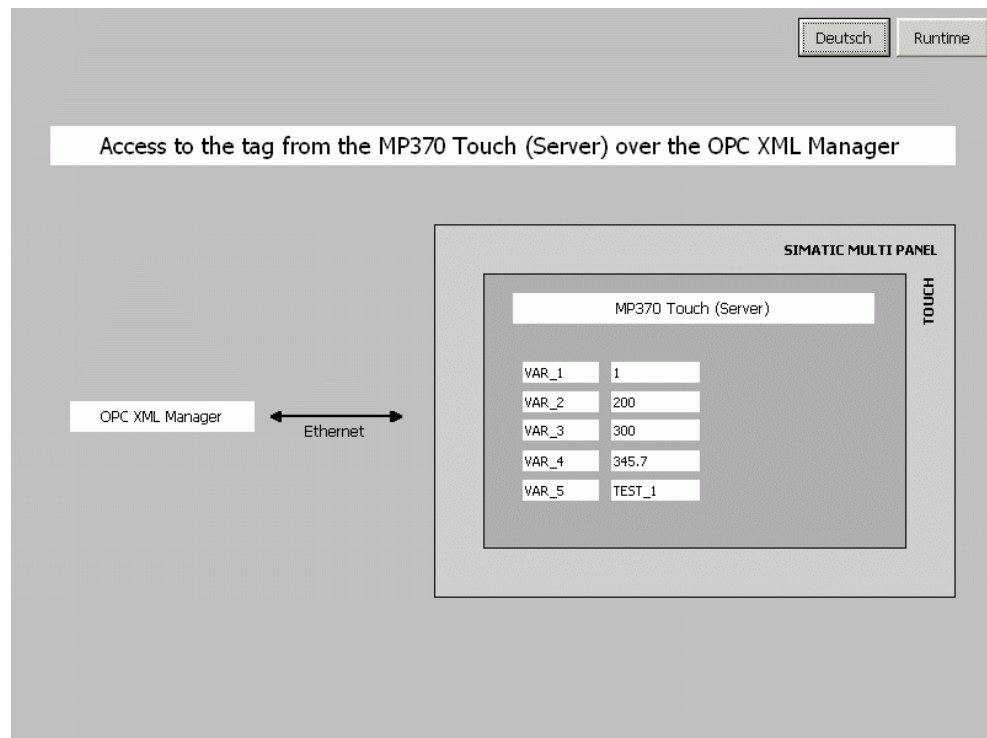


Table 5-7

Plant	Download
1.	OPC_XML_Project.zip
2.	OPC_Client_V1_1.zip Attachment 2 contains the Excel macro described, which sets up a connection as an OPC DA client to an OPC DA server or to the OPC XML gateway via COM or DCOM.

### Runnability and test environment

The following table lists the components that have been used to create this entry and verify the functions described.



Table 5-8, release 28.05.2009

Component	Product and version designation
PC operating system	Microsoft Windows XP SP2
Standard tools	STEP 7 V5.3 SP3
Office Tools	Microsoft Excel 2003
Engineering tools	--
HMI software	ProTool/Pro V6.0 SP3 WinCC flexible 2005
HMI devices	PC & MP370
Controllers	--

Tabelle 5-9, release 28.03.2012

Component	Product and version designation
PC operating system	Microsoft Windows 7 Professional SP1
Standard tools	STEP 7 V5.5 SP3
Office Tools	Microsoft Excel 2007
Engineering tools	--
HMI software	WinCC flexible 2008 SP2
HMI devices	PC & MP377 Key
Controllers	--