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Migration of WinCC Projects from V6.2 SP3 to V8.0

SIMATIC WinCC

<https://support.industry.siemens.com/cs/ww/en/view/44029132>

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1 Introduction

1.1 Overview

If you open a project of the previous version with the current WinCC version, you will be prompted to migrate the project.

Note

This application example is divided into two manuals:

- This manual (part 2) includes the description for migrating WinCC projects created with **WinCC V6.2 SP3 or higher**.
- The first manual (part 1) of the application example includes the description for migrating older WinCC projects to WinCC V6.2 SP3.

Migration

In a migration, a WinCC project is ported from version X to version Y. The configuration data and runtime data are transferred to the new version, even if the new version has a different database.

Conversion

When upgrading WinCC projects V7.3 SE or higher, a conversion is sufficient - a migration is no longer required. Likewise, a conversion is required when switching to a new service pack.

1.2 Function

You can migrate a WinCC project on any computer on which you have installed WinCC.

The following holds here:

- You use the Project Duplicator to copy the configuration data of the project to the migration computer, or to create a backup.
- An upgrade of older WinCC projects is always done with the intermediate step via WinCC V7.3 SE, projects before WinCC V7.2 are migrated to UNICODE.
- The migration basically runs via the project Migrator.
- Projects from WinCC V7.2 can also be opened and converted directly in WinCC. You do not need the Project Migrator to do this.

Note

- The Project Migrator is part of the standard WinCC scope of installation.
- The Project Duplicator is part of the standard WinCC scope of installation.

2 General Information On Migration

2.1 Project Backup

Note Create a backup of the WinCC project after each migration step (from version to version).

Before migration, it is useful to save the original version of the project via a backup. Information on this is available in the WinCC Information System under "Working with WinCC > Working with Projects > Duplicating and Archiving Projects".

Project backup via file compression

Always create a backup of your WinCC project. If the WinCC project is not open, you can use WinZip, for example, to pack the project and save it this way.

Project backup by copying the project

Use the Project Duplicator to copy the configuration data of the project on the migration computer.

2.2 Compatibility

Note the compatibility of SIMATIC WinCC with the operating system used including Service Pack, STEP 7 and other SIMATIC products.

An overview of the compatibility of SIMATIC WinCC V5, V6, V7 and V8 is available at the following link:

<https://support.industry.siemens.com/cs/ww/en/view/64847781>

- Note**
- If you want to migrate a WinCC project from a different time zone to a new version of SIMATIC WinCC, then it is imperative to set the time zone on the migration computer to the time zone the project comes from originally.
 - In WinCC, the UTC time is used in the databases. This can be a source of errors when calculating this time if the time zone is set incorrectly.
 - If you want to migrate multiple projects in one step, the code page settings of the projects must be consistent.

2.2.1 Scripts and custom developments

Scripts and custom developments can increase and complicate the migration workload. These cannot be included in this description.

2.2.2 WinCC options

No options are considered in this migration description. If you are using options such as Advanced User Administrator, Web Navigator, etc., refer to the version releases on the Service and Support pages.

2.3 Overview of Upgrade from WinCC V6.2 SP3 to WinCC V8

With the "WinCC Project Migrator" you have the possibility of upgrading projects from V6.2 SP3 to the current version V7.5 SP2 / V 8.0.

For compatibility reasons, this requires an intermediate step via version V7.3 SE:

Table 2-1

Current WinCC version	Upgradable to version
V6.2 SP3	V7.0 SP0-3
V6.2 SP3 or V7.0 SP0-3	V7.3 SE
V7.2 / V7.3 SE and higher	V7.5 SP2 / V 8.0

Steps for migration from WinCC V6.2 SP3 and WinCC V7.0 to V7.3 SE

1. Backup of the SIMATIC WinCC project
2. Software update
3. License update
4. Project migration
5. Migration check
6. Project adjustments

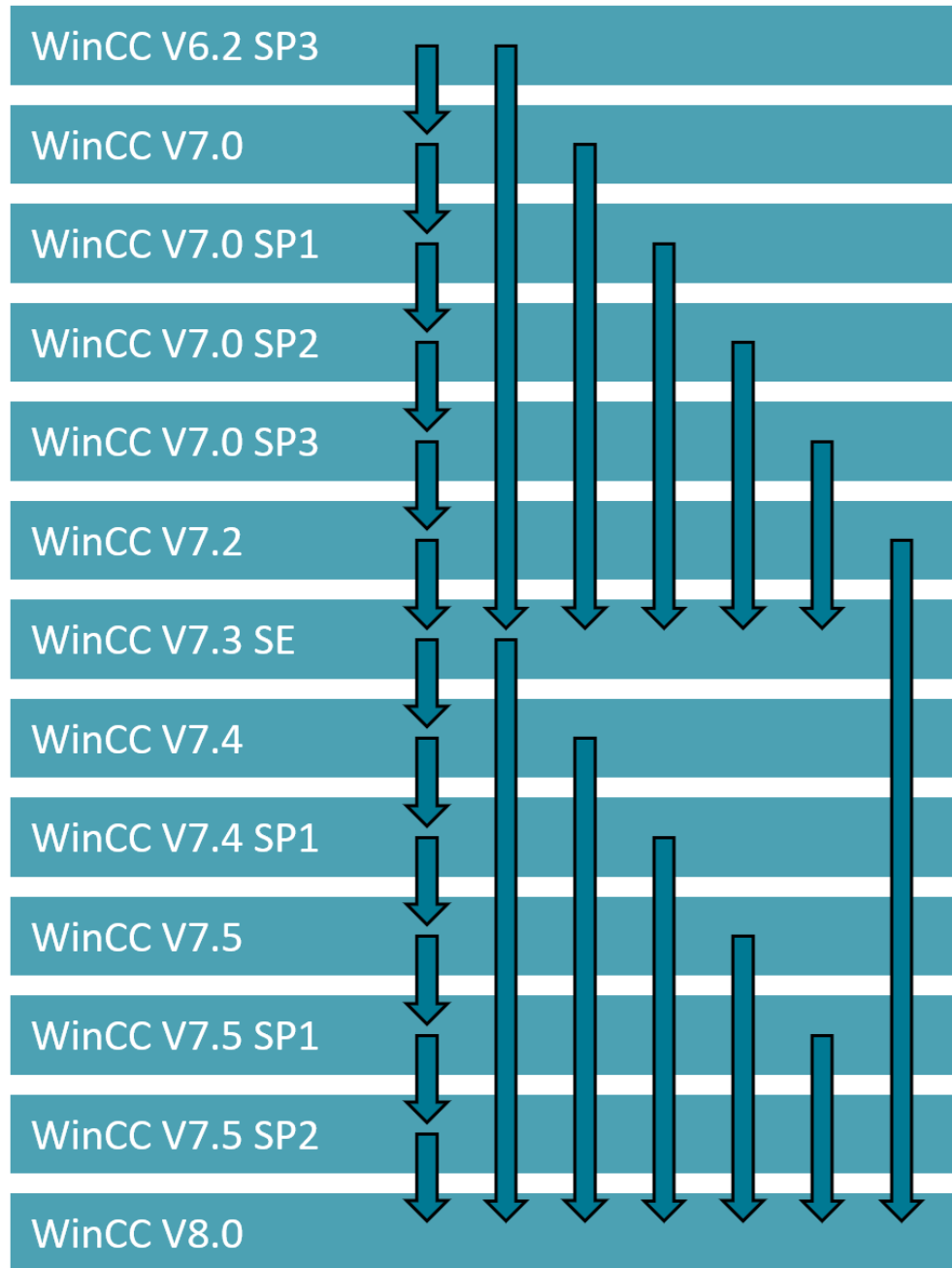
Note

Migrated projects need to be tested. The system operator is responsible for the proper function.

Graphical overview of the WinCC V6.2 SP3 / V8 upgrade

The following graphic shows which intermediate steps you have to take to migrate WinCC projects.

Figure 2-1, WinCC V6.2 SP3 / V8 upgrade



3 Migration from SIMATIC WinCC V6.2 SP3

3.1 Requirements

For an upgrade to WinCC V7.5 SP2 / V 8.0 we recommend the intermediate step via WinCC V7.3 SE.

Note

- Refer to the [Installation Notes](#) when installing WinCC V7.3 SE.
- The released operating systems for SIMATIC WinCC V7.x / V8 are available in the Online Support at the following link:
<https://support.industry.siemens.com/cs/ww/en/view/64847781>.

- Screens may only be converted if they do not contain any "Unknown Objects". "Unknown Objects" are screen objects whose associated object server is not installed, for example, unregistered ActiveX controls.
- Once screens have been saved or converted with a more recent version of WinCC, it is no longer possible to open the screens with a predecessor version.
- Conversion of screens and libraries cannot be undone. A downward conversion of WinCC V7.3 SE screens back to WinCC V6.2 screens is not possible.
- If you select an unconverted screen in Runtime, this may cause WinCC to behave incorrectly.

3.2 Source Versions

You can upgrade the following versions directly to WinCC V7.3 SE:

- WinCC V6.2 SP3
- WinCC V7.0
- WinCC V7.0 SP1
- WinCC V7.0 SP2
- WinCC V7.0 SP3
- WinCC V7.2

3.3 Software Requirements

Table 3-1

Product	Article number	Note
WinCC V7.3 SE and the last available update	https://eb.automation.siemens.com/	
Microsoft SQL Server 2008 R2 SP2 / SP3		Included with WinCC V7.3 SE.
MS Message Queuing		Part of the operating system, may have to be installed later. A detailed description for the installation can be found in the WinCC Information System " How to Install Microsoft Message Queuing ".

3.4 Preparations

General

- Create a backup of your WinCC project.
- Convert screens and libraries only when Runtime is not active.
- For multi-user systems, you perform the conversion on the server.
- You cannot interrupt the conversion of screens during migration.
- After 18 hours, the conversion of screens and libraries is stopped during migration.
- If an error occurs during the migration of screens and libraries via Project Migrator, the migration is not interrupted. Project Migrator writes an error message to a diagnostic file and processes the next component. When the migration is finished, Project Migrator reports the error.

C scripts and Unicode

The Microsoft C compiler used in WinCC does not support Unicode. Therefore, although C scripts can be stored in Unicode format, they are converted to multibyte character strings (MBCS) when compiled.

- To get the (variable) setting "Dynamic: Project Setting", you have to select "English (USA)" as migration language in the Project Migrator.
- The central project language setting for C scripts (WinCC Explorer > Project name > Properties > Options > C scripts with language setting "Dynamic" in Runtime:) can be set to "Each set WinCC Runtime language".

In this way, the C scripts work based on the selected Runtime language. This allows C scripts to process the texts from the text library correctly.

If a language other than English (USA) is selected in the Project Migrator, all C scripts/actions will be migrated in the corresponding language. The latter may lead to incompatibilities with respect to the previous C script functionality.

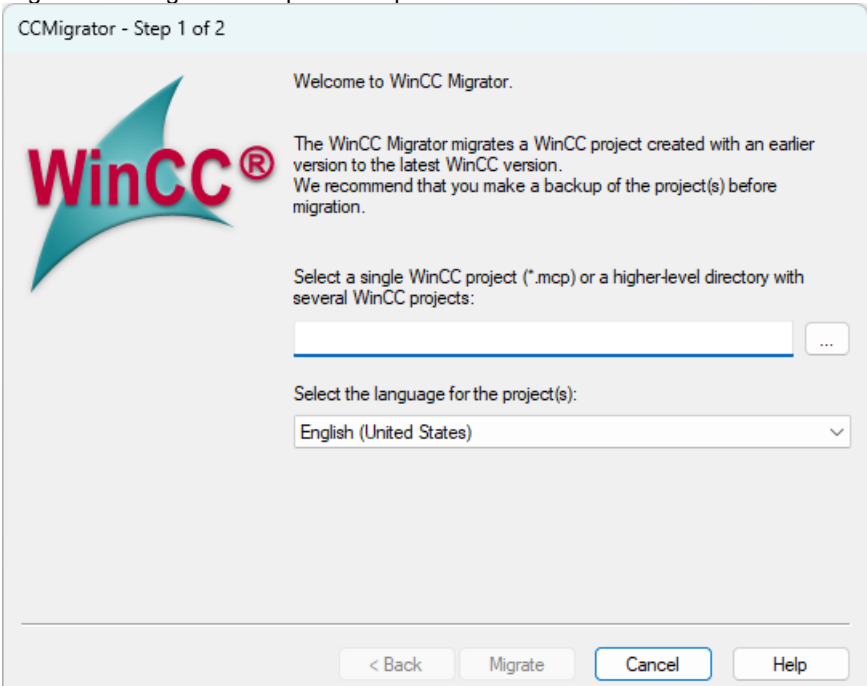
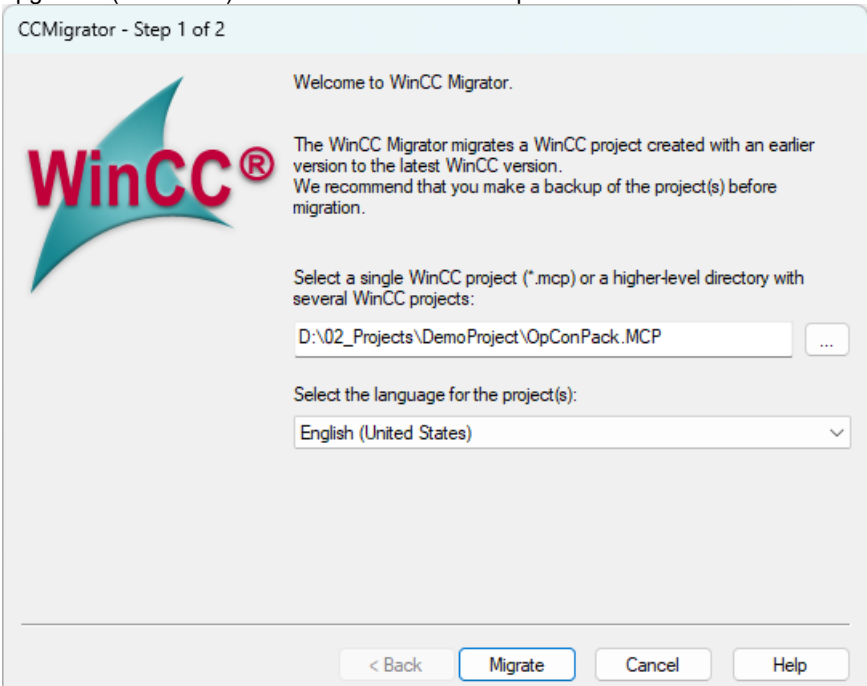
3.5 Migration Procedure

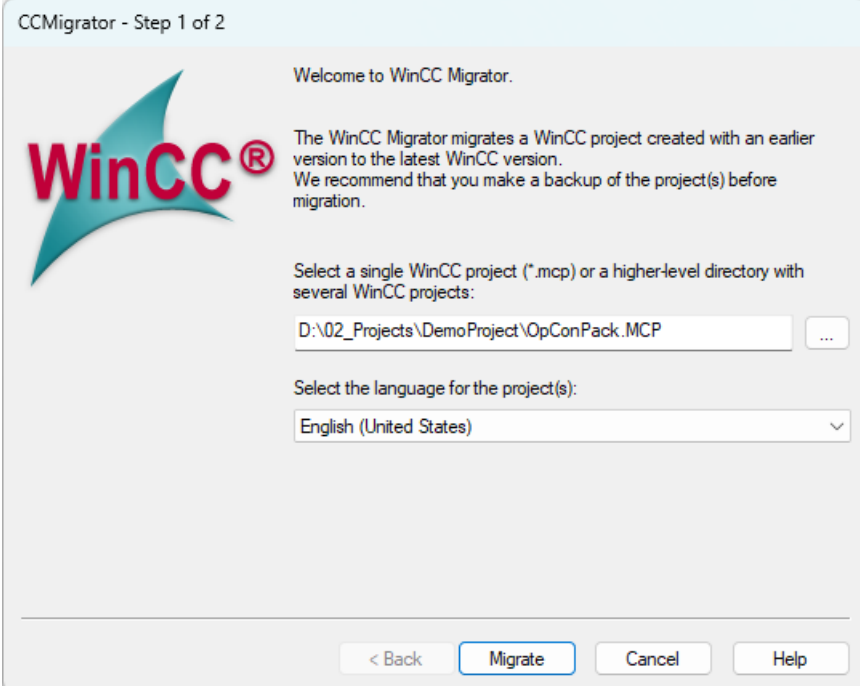
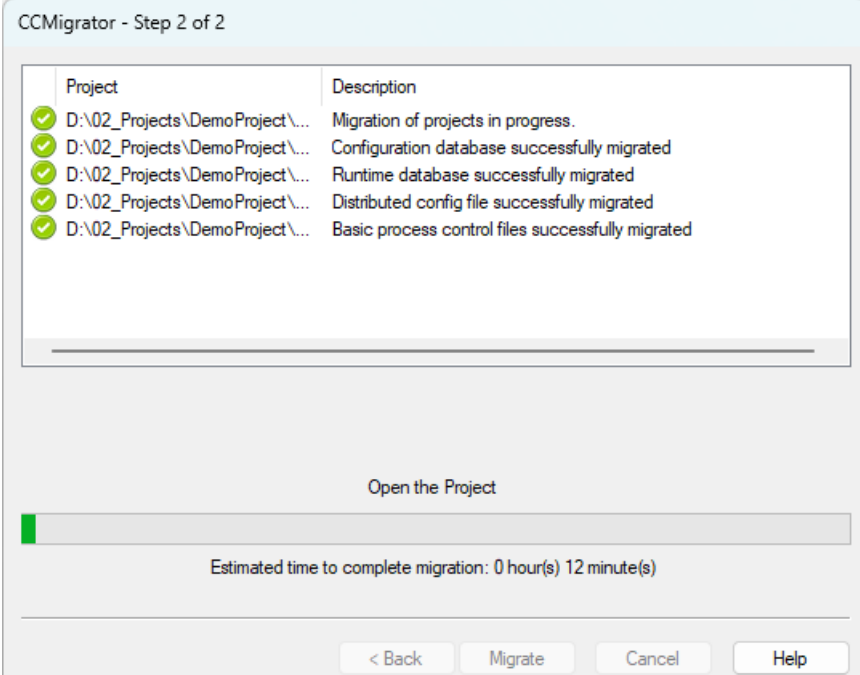
- Migration of the project to WinCC V7.5 SP2 / V8.0 includes
 - The configuration data
 - The Runtime data
 - The conversion of screens and libraries
- The configuration data and runtime data of a project are migrated automatically when you open the old project.
- You can convert screens and libraries as follows:
 - With the Project Migrator you can perform the conversion in one step.
 - Project Migrator automatically detects the version of the source project and depending on it disables certain options for the conversion.
- You can also convert screens and libraries manually and individually by selecting the following function in the pop-up menu of the Graphics Designer in the WinCC Explorer:
 - Convert project library
 - Convert global libraries
 - Convert screens
- With WinCC V7.2 and higher, select the menu item "Tools > Convert Project Data" in the WinCC Explorer. Select the components you would like to migrate.

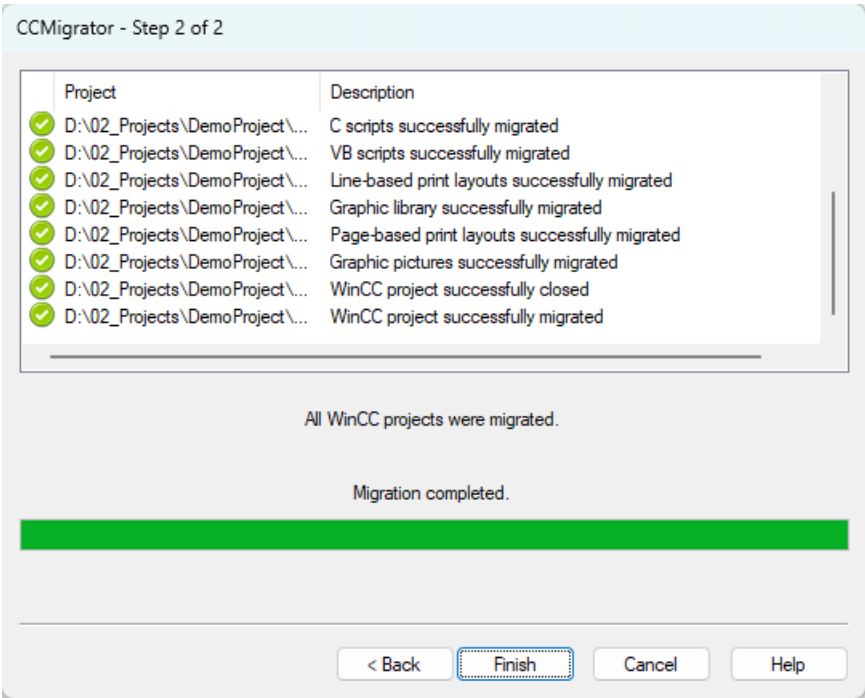
Note

Backup archives do not have to be migrated when migrating from SIMATIC WinCC V6 to SIMATIC WinCC V7 / V8.

Table 3-2

No.	Description
1.	<p>In the Start menu of the operating system you open "Siemens Automation > SIMATIC > WinCC > Tools > Project Migrator". The start window of the Project Migrator "CCMigrator - Step 1 of 2" opens.</p> 
2.	<p>Use the "..." button to select the project directory in which the project to be upgraded (V6.2-V7.2) is located. Select the *.mcp file.</p> 

No.	Description												
3.	<p>Click the "Migrate" button. The Project Migrator starts the migration and checks off all the steps of the project that have been migrated.</p>  <p>CCMigrator - Step 1 of 2</p> <p>Welcome to WinCC Migrator.</p> <p>The WinCC Migrator migrates a WinCC project created with an earlier version to the latest WinCC version. We recommend that you make a backup of the project(s) before migration.</p> <p>Select a single WinCC project (*.mcp) or a higher-level directory with several WinCC projects:</p> <p>D:\02_Projects\DemoProject\OpConPack.MCP</p> <p>Select the language for the project(s):</p> <p>English (United States)</p> <p>< Back Migrate Cancel Help</p>												
4.	<p>The "CCMigrator - Step 2 of 2" window opens. The Project Migrator displays the steps of the migration. The Project Migrator indicates the expected duration: "Estimated time to complete migration: XX hour(s) XX minute(s)". This figure is a rough guide. The migration of a project can take several hours.</p>  <p>CCMigrator - Step 2 of 2</p> <table border="1"> <thead> <tr> <th>Project</th><th>Description</th></tr> </thead> <tbody> <tr> <td>✓ D:\02_Projects\DemoProject\...</td><td>Migration of projects in progress.</td></tr> <tr> <td>✓ D:\02_Projects\DemoProject\...</td><td>Configuration database successfully migrated</td></tr> <tr> <td>✓ D:\02_Projects\DemoProject\...</td><td>Runtime database successfully migrated</td></tr> <tr> <td>✓ D:\02_Projects\DemoProject\...</td><td>Distributed config file successfully migrated</td></tr> <tr> <td>✓ D:\02_Projects\DemoProject\...</td><td>Basic process control files successfully migrated</td></tr> </tbody> </table> <p>Open the Project</p> <p>Estimated time to complete migration: 0 hour(s) 12 minute(s)</p> <p>< Back Migrate Cancel Help</p>	Project	Description	✓ D:\02_Projects\DemoProject\...	Migration of projects in progress.	✓ D:\02_Projects\DemoProject\...	Configuration database successfully migrated	✓ D:\02_Projects\DemoProject\...	Runtime database successfully migrated	✓ D:\02_Projects\DemoProject\...	Distributed config file successfully migrated	✓ D:\02_Projects\DemoProject\...	Basic process control files successfully migrated
Project	Description												
✓ D:\02_Projects\DemoProject\...	Migration of projects in progress.												
✓ D:\02_Projects\DemoProject\...	Configuration database successfully migrated												
✓ D:\02_Projects\DemoProject\...	Runtime database successfully migrated												
✓ D:\02_Projects\DemoProject\...	Distributed config file successfully migrated												
✓ D:\02_Projects\DemoProject\...	Basic process control files successfully migrated												

No.	Description
5.	<p>When the migration is completed successfully, the Project Migrator reports: "All WinCC projects were migrated."</p> 
6.	Click the "Finish" button to close the dialog.

4 Converting from SIMATIC WinCC V7.3 SE

4.1 Requirements

For an upgrade to WinCC V7.5 SP2 / V8.0 we recommend the intermediate step via WinCC V7.3 SE.

Note

- Refer to the [Installation Notes](#) when installing WinCC V7.5 SP2 / V8.0.
- The released operating systems for SIMATIC WinCC V7.x are available in the Online Support at the following link:
<https://support.industry.siemens.com/cs/ww/en/view/64847781>.

- Screens may only be converted if they do not contain any "Unknown Objects". "Unknown Objects" are screen objects whose associated object server is not installed, for example, unregistered ActiveX controls.
- Once screens have been saved or converted with a more recent version of WinCC, it is no longer possible to open the screens with a predecessor version.
- Conversion of screens and libraries cannot be undone. A downward conversion of screens of newer versions (e.g. WinCC V7.5 SP2 or WinCC V8.0) back to WinCC V6.2 is not possible.
- If you select an unconverted screen in Runtime, this may cause WinCC to behave incorrectly.

4.2 Source Versions

You can upgrade the following versions directly to WinCC V7.5 SP2 / V8.0:

- WinCC V7.2
- WinCC V7.3 SE
- WinCC V7.4
- WinCC V7.4 SP1
- WinCC V7.5
- WinCC V7.5 SP1
- WinCC V7.5 SP2

4.3 Software Requirements

4.3.1 WinCC V7.5 SP2

Table 4-1

Product	Article number	Note
WinCC V7.5 SP2 and the last available update	https://eb.automation.siemens.com/	
Microsoft SQL Server 2016 SP2		Included with WinCC V7.5 SP2.
MS Message Queuing		Part of the operating system, may have to be installed later. A detailed description for the installation can be found in the WinCC Information System " How to Install Microsoft Message Queuing ".

4.3.2 WinCC V8.0

Table 4-2

Product	Article number	Note
WinCC V8.0 and the last available update	https://eb.automation.siemens.com/	
Microsoft SQL Server 2019		Included with V8.0.
MS Message Queuing		Is already installed and configured during the installation of WinCC V8.0.

4.4 Preparations

General

- Create a backup of your WinCC project.
- Convert screens and libraries only when Runtime is not active.
- For multi-user systems, you perform the conversion on the server.
- You cannot interrupt the conversion of screens during migration.
- After 18 hours, the conversion of screens and libraries is stopped during migration.

C scripts and Unicode (V7.2 Update 7 and higher)

To be able to process strings in C scripts in different languages, you can change the language of the C scripts dynamically at runtime.

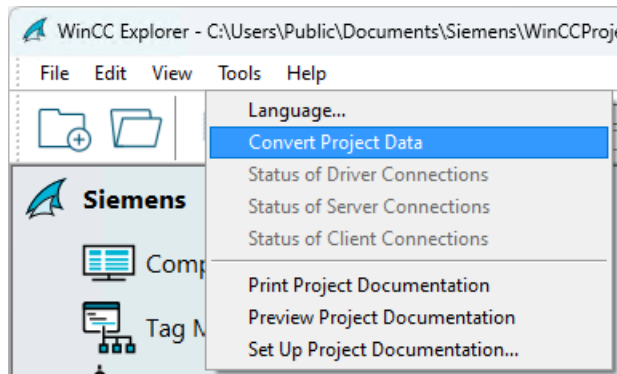
Proceed as follows to use the function:

1. Close WinCC Runtime.
2. Close all the open screens in the Graphics Designer.
3. Open "WinCC Explorer > Tools > Convert Project Data" and select
 - "Screens and Faceplates"
 - "C and VB Project Functions and Actions"
 - "C and VB Standard Functions"
 - and Standard/Project Functions".
4. For example, select "English (USA)" as the language for the project.
5. Press the "OK" button.

4.5 Conversion Procedure

Do not upgrade screens and scripts from previous versions by opening and saving them in the "Graphics Designer" and "Global Script" editors, but convert the project data beforehand.

1. Select the menu item "Tools > Convert Project Data" in the WinCC Explorer. Figure 4-1



2. Select the project data to be converted.
 - Screens and faceplates
 - Global libraries
 - Project libraries
 - Page layouts and line layouts
 - C and VB project functions and actions
 - C and VB standard functions
 - Data for Basic Process Control if used in the project
3. Select the configuration language of the WinCC project from which the project data originates.
4. Confirm with "OK".
5. The select data is converted for the current version of WinCC.

5 Additional Steps after Migration

In most cases, a simple migration is sufficient to be able to use the WinCC project in the target version.

Depending on the range of functions and the option packages used, additional steps may be required after the upgrade.

5.1 Customize Computer Name

If your migrated project was originally on a different computer, then the previous computer name is still entered.

- The first time you open the project on the new computer, the following dialog is displayed: "The configured server is not available. Do you want to open the project with the local computer as the server?"
- Select the "Start server locally" button.
- After opening the project, change the computer name in the "Computer Properties" dialog.

5.2 WinCC Users

The WinCC user no longer needs to be a member of the "SQLServerMSSQLUser\$<COMPUTER NAME>\$WINCC" user group.

If you migrate projects that were created before WinCC V7.2, then remove the WinCC users from this group.

In WinCC projects before V7.2 you can find the user group under the name "SQLServer2005MSSQLUser\$<COMPUTER NAME>\$WINCC".

5.3 Customize Remote Communication

As of WinCC V7.5, the remote communication settings must be activated for the remote maintenance and remote diagnostics tasks for distributed or multi-user systems.

- Open the SIMATIC Shell. These are listed in the File Explorer in the "Computer" directory.
- In the window that opens, right-click the "SIMATIC Shell" item and select "Settings" from the pop-up menu.
- Check the "Remote Communication" setting in the settings and assign a PSK (pre-shared key) in the window that opens. This PSK is required for communication with other devices in the SIMATIC network.

More information about this is available in this FAQ:

[With WinCC V7.5 and higher or WinCC Professional V16 and higher how do you activate the setting "Remote Communication" in the SIMATIC shell?](#)

5.4 Dynamization of Certain Object Properties in the Global Color Scheme

The object properties of the graphic objects, which are fixed when the global color scheme is enabled, cannot be changed by dynamizations.

- If you apply a new design to graphic objects of migrated projects in WinCC V7.5 / V8, the dynamizations related to the appearance of the objects no longer have the same effect as before.
- For this reason, the "Global Color Scheme" object property is set to "No" during migration.
- Only the newly inserted objects are created with "Yes".
- If you do not want to associate these objects with the color scheme from the global design, you can change the property for the desired objects.

5.5 Change Process-Controlled Archive Tag

If you use the "Compile OS" function, then the assignment of the process-controlled archive tags changes. The name of process-controlled archive tags is no longer determined based on the ID of the raw data tag. The name of the raw data tag is used instead. You need to convert these tags to customize the assignment in controls, for example.

- Open the "Properties" dialog of the archive tag once.
- Close the dialog without entering any changes.

Note

If you do not use the "Compile OS" function, then you can continue to use the process-controlled archive tags in the original structure in WinCC V7.x / V8.

5.6 Reconfigure Process Tags from Channels that are No Longer Supplied

If you use channels in your migrated project that are no longer included in the scope of delivery, then the corresponding connections with their process tags will not be displayed in the Tag Management after the migration.

When you open the Tag Management for the first time, a dialog is displayed with a corresponding note. You can install the required driver and also use it in WinCC V7.5 SP2 / V8.0.

- Windows DDE communication channel
The Windows DDE channel is included in the scope of delivery for compatibility with earlier WinCC versions. However, new connections should be created via the "OPC" channel.
- Communication channel "SIMATIC S5 Ethernet TF".
The "SIMATIC S5 Ethernet TF" channel, which you could use in Windows 2000 up to WinCC V6.2, is no longer included in the scope of delivery of WinCC V7.0 and higher. Change the configuration of this channel to the channel "SIMATIC S5 Ethernet Layer 4".
- On request, the channel DLL "Applicom Multi Protocol Suite" is available for WinCC V7.

5.7 Restore VBA Extensions via @GLOBAL.PDT File

- The file "@GLOBAL.PDT" in the directory "<WinCC installation directory>\Templates" contains your global VBA extensions such as custom menus.
- When you install WinCC V7.0, the name of the "@GLOBAL.PDT" file is automatically changed to "@GLOBAL.SAV" and replaced by a new "@GLOBAL.PDT" file.
- To access your VBA extensions after the upgrade installation, delete the new "@GLOBAL.PDT" file and change the name of the "@GLOBAL.SAV" file back again.

5.8 Multi-User Projects

After migrating a multi-user project, you must recreate the packages on the server and load them onto the clients. Information about this is available in the WinCC Information System under "Configuration > Multi-user Systems > Server Configuration" or "Client Configuration".

5.9 Adjust User Administration

If you have migrated a project with standard clients, then the clients are assigned the permissions "1000" and "1001" during the migration. Thus the project can be enabled and configured remotely from the clients.

If you change the permission of a client to "1002" in the User Administrator, then only observation is possible from this client.

5.10 Enter the User Archives Option in the Startup List of the WinCC Computer Properties

In WinCC V6.0 SP2 and higher, the User Archives option is entered in the WinCC computer properties instead of in the "Additional tasks/applications" field in the startup list.

- To apply these changes to your existing projects, open the User Archives editor and save your data.
- Alternatively, you can update the startup list in the WinCC Explorer in the "Computer Properties" dialog in the "Startup" tab:
 - In the "Additional tasks/applications" field, remove the "CCUsAcv.exe" item.
 - Enable the "User Archives" item in the "WinCC Runtime Startup Order" field.

5.11 Adjust Project Documentation

As of version V7.0, WinCC provides new layouts. During migration, however, only the layouts of the original project are transferred.

You can also use the layouts from WinCC V6.x in your migrated project. Copy the desired layouts from the "WinCC\Syslay" directory to the "<Project directory>\PRT" directory.

5.12 Adjustments for Basic Process Control

If you are working with Basic Process Control or a PCS7 OS, then you will need to run the OS project editor after the project has been fully migrated.

- Use the OS project editor to specify that the new message screens and the associated layouts are used in the project.
- In the "Basic data" tab, enable the "Apply as-supplied state" option under "Basic screens in the object differ from the as-supplied state".

5.13 Project Settings

If you want to prevent write access from other network partners to your project directory after migration, it is necessary to enable this.

This way, authorized participants can still view their project and copy it for local editing but cannot make any direct changes to your project.

- To do this, right-click your project in the project navigator and select "Properties" from the pop-up menu.
- In the project properties window that opens, select the "Options" tab.
- There, you enable the option "The project directory is shared for read-only access" and close the window by clicking the "OK" button.

5.14 Redundancy Settings

If you create a redundant project and migrate both projects, it is necessary to make both known to each other.

1. Double-click "Redundancy" in the WinCC Explorer to open the redundancy settings.
 2. Enable the "Enable redundancy" option.
 3. In the "Redundancy settings" under "Computer local setting", you select the network adapters intended for communication.
- If both partners are in the same network, select the "Dynamic" option in the "Redundancy settings" under "Network address of redundant partner".
 - If both partners are located in different networks, select the "Static" option in the "Redundancy settings" under "Network address of redundant partner". Enter the IP address of the partner and the communication port.

5.15 Standard Print Jobs

The following standard print jobs and layouts can no longer be used in WinCC V7.0 and higher:

- @Report Alarm Logging RT Revolving archive (print job)
- @Report Alarm Logging RT Sequence archive (print job)
- @alrtfoa.RPL (layout)
- @alrtuma.RPL (layout)

Instead, use the following print jobs with the corresponding layouts:

- @Report Alarm Logging RT Short Term archive New (print job)
- @Report Alarm Logging RT Sequence archive New (print job)
- @CCAlgRtShortTermArchive.RPL (layout)
- @CCAlgRtSequenceArchive.RPL (layout)

6 Checking the Migration

Introduction

In the following cases, error messages or abort may occur during migration:

- There is not enough free memory space on the migration computer.
- The project is not located on the migration computer.
- The project was created with a version of WinCC smaller than V6.0.

Errors during migration

An error during the migration of a component does not interrupt the migration. Project Migrator writes an error message to a diagnostic file and processes the next component.

After migration, go through the list of migrated components. Double-click in the list items with error or warning to display the error in a ".txt" file.

Migration after troubleshooting

- If the migration aborts, you can restart the migration after troubleshooting. For this purpose, do not use the already incorrectly migrated project, but a copy of the backup.
- The computer name must match the local computer.
- Select the menu item " Tools/Convert Project Data" in the WinCC Explorer.
- Select the components you would like to migrate.

6.1 Project Migrator Diagnostics Files

The Project Migrator creates two diagnostics files:

- CCMigrator.txt
- DTSPackages.log

The diagnostic files are located in the project directory of the migrated project. You can view the files with any text editor.

CCMigrator.txt

The "CCMigrator.txt" file contains general information:

- Project name
- Project type
- Type of the migrated data
- Start and end of migration

If the migration is successful, the file contains the indication: "Migration succeeded."

If an error occurs during migration, then the Project Migrator additionally writes an error message in the file.

Details are available in the "DTSPackages.log" file.

DTSPackages.log

The Project Migrator logs the migration of the individual components in the "DTSPackages.log" file.

The diagnostics file contains the following main items:

Message text	Meaning
Package Name	Migrated component
Package Description	Function of the migrated component
Execution Started / Execution Completed	Time of start of migration / Time of end of migration
Package Steps execution information	Migration steps of a component with indication of whether migration was performed successfully: "succeeded" = successful migration / "failed" = error during migration
Error Source / Error Description	Source and description of the error

6.2 Diagnostics File When Converting Screens

If you convert screens, then WinCC logs error messages and warnings in a log file named "CONVERT.LOG". The "CONVERT.LOG" file is located in the "GraCS" graphics directory of the current WinCC project.

7 License Overview

7.1 Licensing Options

- In WinCC version V6.2 and higher, the archive licenses are version-independent and countable.
As of WinCC V8, the archive licences are still version-independent. In addition to the behaviour, this is now also recognisable by the versionless licence in the Automation License Manager. The new archive licences can still be combined with previously purchased archive licences.
- Up to version WinCC V7.3 SE, the WinCC options and associated licenses are downward compatible.
- As of WinCC version V7.3 SE, the following licenses are version-independent and countable:
 - WinCC WebUX
- As of WinCC version V7.4, the following licenses are version-independent, countable and no longer downward compatible with WinCC <=V7.3 SE:
 - WinCC Web Navigator
 - WinCC Data Monitor
- SIMATIC Logon Upgrade to V1.6
The permissions of the versions previous to SIMATIC Logon V1.6 are no longer valid. You can upgrade these versions to version V1.6 with the SIMATIC Logon Upgrade V1.6, article no. 6ES7658-7BX61-0YE0.

7.2 Upgrade License

The license model as of WinCC V6.0 SP3 differs from the permissions of the previous versions. All licenses must be upgraded to V7.5 / V8. You need new RT licenses or RC licenses.

You can update the licensing during the installation of WinCC V7.5 / V8 or afterwards.

Note

If you use an upgrade license, the permissions for WinCC (\leq V6.0 SP2) are converted to V7.5 / V8 licenses when upgrading to WinCC V7.5 / V8.

If you have purchased a WinCC Upgrade Package V6.x, then upgrade your licenses with the enclosed Power Pack license data carrier with upgrade license. Your existing licenses will be upgraded to WinCC V7.x licenses.

Table 7-1

Step	Procedure
1.	Insert the USB stick of WinCC into the USB slot.
2.	Start the Automation License Manager via the Start menu: In the navigation window, select the drive where the license to be upgraded is located. Select this license in the table.
3.	Select the menu item "License Key > Upgrade...". The upgrade process starts.
4.	The upgrade process is finished when the upgraded license is transferred to the local drive.

7.2.1 Software up to V7.3 SE

Software on DVD, license key on USB stick

Table 7-2

Station	Upgrade	Article number	Description
Server V6.2 → V7.3 SE	Runtime (RT)	6AV6381-2AA07-3AX4	SIMATIC WinCC RT Upgrade from V6.2 to V7.3 SE for SIMATIC WinCC Runtime (RT), incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load Balancing, Web Diagnostic Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
	Runtime & Configuration (RC)	6AV6381-2AB07-3AX4	SIMATIC WinCC RC Upgrade , from V6.2 to V7.3 SE for SIMATIC WinCC Runtime & Configuration (RC), incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load Balancing, Web Diagnostic Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V6.2 → V7.3 SE	Client (RT)	6AV6381-2CA07-3AX4	SIMATIC WinCC RT Client Upgrade from V6.2 to V7.3 SE, for WinCC RT Clients without RT 128
Client V7.x → V7.3 SE	Client (RT)	6AV6381-2CA07-3AX3	SIMATIC WinCC RT client upgrade from V7.X to V7.3 for WinCC RT Clients w/o RT 128
Client V6.2 → V7.3 SE	Client (RC)	6AV6381-2CB07-3AX3	SIMATIC WinCC RC client upgrade from V7.X to V7.3 for WinCC RC Clients w/o RC128

Software and license key as download

Table 7-3

Station	Upgrade	Article number	Description
Server V6.2 → V7.3 SE	Runtime (RT)	6AV6381-2AA07-3AK4	SIMATIC WinCC RT Upgrade from V6.2 to V7.3 SE for SIMATIC WinCC Runtime (RT), incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load Balancing, Web Diagnostic Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
	Runtime & Configuration (RC)	6AV6381-2AB07-3AK4	SIMATIC WinCC RC Upgrade , from V6.2 to V7.3 SE for SIMATIC WinCC Runtime & Configuration (RC), incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load Balancing, Web Diagnostic Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V6.2 → V7.3 SE	Client (RT)	6AV6381-2CA07-3AK4	SIMATIC WinCC RT Client Upgrade from V6.2 to V7.3 SE, for WinCC RT Clients without RT 128
Client V7.x → V7.3 SE	Client (RT)	6AV6381-2CA07-3AK3	SIMATIC WinCC RT client upgrade from V7.X to V7.3, for WinCC RT Clients without RT 128
Client V7.x → V7.3 SE	Client (RC)	6AV6381-2CB07-3AK3	SIMATIC WinCC RC client upgrade from V7.X to V7.3, for WinCC RC Clients without RC 128

7.2.2 Software V7.3 SE and Higher

Software on DVD, license key on USB stick

Table 7-4

Station	Upgrade	Article number	Description
Server V7.3 SE → V7.5	Runtime (RT)	6AV6381-2AA07-5AX3	SIMATIC WinCC RT SW Upgrade from V7.3 SE to V7.5 SP2 for SIMATIC WinCC Runtime (RT) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load Balancing, Web Diagnostic Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
	Runtime & Configuration (RC)	6AV6381-2AB07-5AX3	SIMATIC WinCC RC SW Upgrade from V7.3 SE to V7.5 SP2 for SIMATIC WinCC Runtime & Configuration (RC), incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load Balancing, Web Diagnostic Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V7.3 SE → V7.5	Client (RT)	6AV6381-2CA07-5AX3	SIMATIC WinCC RT Client Upgrade from V7.3 SE to V7.5 SP2 for WinCC RT Clients without RT 128
Client V7.4 → V7.5	Client (RC)	6AV6381-2CB07-5AX4	SIMATIC WinCC RC Client Upgrade from V7.4 to V7.5 SP2 for WinCC RC Clients without RC128
Server V7.4 → V7.5	Runtime (RT)	6AV6381-2AA07-5AX4	SIMATIC WinCC RT SW Upgrade from V7.4 to V7.5 SP2 For SIMATIC WinCC Runtime (RT) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnostics Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Server V7.4 → V7.5	Runtime & Configuration (RC)	6AV6381-2AB07-5AX4	SIMATIC WinCC RC SW Upgrade from V7.4 to V7.5 SP2 For SIMATIC WinCC Runtime & Configuration (RC), incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnostics Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V7.4 → V7.5	Runtime (RT)	6AV6381-2CA07-5AX4	SIMATIC WinCC RT Client Upgrade from V7.4 to V7.5 SP2 for WinCC RT clients w/o RT 128
Client V7.2/7.3 → V7.5	Client (RC)	6AV6381-2CB07-5AX3	SIMATIC WinCC RC Client Upgrade from V7.2/7.3 to V7.5 SP2 for WinCC RC clients w/o RC128

Continuation Table 7-4

Station	Upgrade	Article number	Description
Server V7.3/7.4 -> V8.0	Runtime (RT)	6AV6381-2AA08-0AX3	SIMATIC WinCC RT SW Upgrade from V7.3/7.4 to V8.0 for SIMATIC WinCC Runtime (RT) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnose Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
	Runtime & Configuration (RC)	6AV6381-2AB08-0AX3	SIMATIC WinCC RC SW Upgrade from V7.3/7.4 to V8.0 for SIMATIC WinCC Runtime & Configuration (RC), incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnose Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V7.3/7.4 -> V8.0	Client (RT)	6AV6381-2CA08-0AX3	SIMATIC WinCC RT Client Upgrade from V7.3/7.4 to V8.0 for WinCC RT Clients without RT 128
Client V7.3/7.4 -> V8.0	Client (RC)	6AV6381-2CB08-0AX3	SIMATIC WinCC RC Client Upgrade from V7.3/7.4 to V8.0 for WinCC RC Clients without RC128
Server V7.5 -> V8.0	Runtime (RT)	6AV6381-2AA08-0AX4	SIMATIC WinCC RT SW Upgrade from V7.5 to V8.0 for SIMATIC WinCC Runtime (RT) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnose Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
	Runtime & Configuration (RC)	6AV6381-2AB08-0AX4	SIMATIC WinCC RC SW Upgrade from V7.5 to V8.0 for SIMATIC WinCC Runtime & Configuration (RC), incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnose Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V7.5 -> V8.0	Client (RT)	6AV6381-2CA08-0AX4	SIMATIC WinCC RT Client Upgrade from V7.5 to V8.0 for WinCC RT Clients without RT 128
Client V7.5 -> V8.0	Client (RC)	6AV6381-2CB08-0AX4	SIMATIC WinCC RC Client Upgrade from V7.5 to V8.0 for WinCC RC Clients without RC128

Software and license key as download

Table 7-5

Station	Upgrade	Article number	Description
Server V7.3 SE → V7.5	Runtime (RT)	6AV6381-2AA07-5AK3	SIMATIC WinCC RT SW Upgrade from V7.3 SE to V7.5 SP2 for SIMATIC WinCC Runtime (RT) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load Balancing, Web Diagnostic Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
	Runtime & Configuration (RC)	6AV6381-2AB07-5AK3	SIMATIC WinCC RC SW Upgrade from V7.3 SE to V7.5 SP2 for SIMATIC WinCC Runtime & Configuration (RC) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load Balancing, Web Diagnostic Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V7.3 SE → V7.5	Client	6AV6381-2CA07-5AK3	SIMATIC WinCC RT Client Upgrade from V7.3 SE to V7.5 SP2 for WinCC RT Clients without RT 128
Client V7.4 → V7.5	Client (RC)	6AV6381-2CB07-5AK4	SIMATIC WinCC RC Client Upgrade from V7.4 to V7.5 SP2 for WinCC RC Clients without RC128
Server V7.4 → V7.5	Runtime (RT)	6AV6381-2AA07-5AK4	SIMATIC WinCC RT SW upgrade from V7.4 to V7.5 SP2 for SIMATIC WinCC Runtime (RT) incl. options redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnostics Client/Server, Data Monitor, Connectivity Pack, Connectivity Station, runtime/configuration software
Server V7.4 → V7.5	Runtime & Configuration (RC)	6AV6381-2AB07-5AK4	SIMATIC WinCC RC SW upgrade from V7.4 to V7.5 SP2 for SIMATIC WinCC Runtime & Configuration (RC) incl. options redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnostics Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V7.4 → V7.5	Runtime (RT)	6AV6381-2CA07-5AK4	SIMATIC WinCC RT client upgrade from V7.4 to V7.5 SP2 for WinCC RT clients w/o RT 128
Client V7.2/7.3 → V7.5	Client (RC)	6AV6381-2CB07-5AK3	SIMATIC WinCC RC client upgrade from V7.2/7.3 to V7.5 SP2 for WinCC RC clients w/o RC128

Continuation Table 7-5

Station	Upgrade	Article number	Description
Server V7.3/7.4 -> V8.0	Runtime (RT)	6AV6381-2AA08-0AK3	SIMATIC WinCC RT SW Upgrade von V7.3/7.4 to V8.0 for SIMATIC WinCC Runtime (RT) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnose Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
	Runtime & Configuration (RC)	6AV6381-2AB08-0AK3	SIMATIC WinCC RC SW Upgrade from V7.3/7.4 to V8.0 for SIMATIC WinCC Runtime & Configuration (RC) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnose Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V7.3/7.4 -> V8.0	Client (RT)	6AV6381-2CA08-0AK3	SIMATIC WinCC RT Client Upgrade from V7.3/7.4 to V8.0 for WinCC RT Clients without RT 128
Client V7.3/7.4 -> V8.0	Client (RC)	6AV6381-2CB08-0AK3	SIMATIC WinCC RC Client Upgrade from V7.3/7.4 to V8.0 for WinCC RC Clients without RC128
Server V7.5 -> V8.0	Runtime (RT)	6AV6381-2AA08-0AK4	SIMATIC WinCC RT SW Upgrade from V7.5 to V8.0 for SIMATIC WinCC Runtime (RT) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnose Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
	Runtime & Configuration (RC)	6AV6381-2AB08-0AK4	SIMATIC WinCC RC SW Upgrade from V7.5 to V8.0 for SIMATIC WinCC Runtime & Configuration (RC) incl. options Redundancy, Server, User Archive, Web Navigator, Web NAV Load-Balancing, Web Diagnose Client/Server, Data Monitor, Connectivity Pack, Connectivity Station
Client V7.5 -> V8.0	Client (RT)	6AV6381-2CA08-0AK4	SIMATIC WinCC RT Client Upgrade from V7.5 to V8.0 for WinCC RT Clients without RT 128
Client V7.5 -> V8.0	Client (RC)	6AV6381-2CB08-0AK4	SIMATIC WinCC RC Client Upgrade from V7.5 to V8.0 for WinCC RC Clients without RC128

8 Information

WinCC database versions

Table 8-1

WinCC version	Database
V6.2	SQL Server 2005 SP1
V7.0	SQL Server 2005 SP1
V7.0 SP1	SQL Server 2005 SP2
V7.0 SP2	SQL Server 2005 SP3
V7.0 SP3	SQL Server 2005 SP4
V7.2	SQL Server 2008 R2 SP2
V7.3 SE	SQL Server 2008 R2 SP2/ SP3
V7.4	SQL Server 2014 SP1
V7.4 SP1	SQL Server 2014 SP2
V7.5	SQL Server 2016 SP2
V7.5 SP1	SQL Server 2016 SP2
V7.5 SP2	SQL Server 2016 SP2
V8.0	SQL Server 2019

9 Annex

9.1 Service and Support

Product Information and Industry Online Support

The SiePortal gives you round-the-clock access to the Product Catalogue, Manuals, Downloads, FAQs and Application Examples (Industry Mall and Online Support):

<https://support.industry.siemens.com>

Technical Support

The Technical Support of Siemens Industry supports you quickly and competently with all technical inquiries with a variety of customized offers, from basic support to individual support contracts.

The services offered by our Technical Support include in particular:

- Basic and Extended Support
- Priority Callback
- 24-hour availability
- Mature Products
- Managed System Services

Here you will also find the link for inquiries to Technical Support via the web form in the SiePortal (Support Request):

<https://www.siemens.com/global/en/products/services/digital-enterprise-services/support-services.html>

SITRAIN – Digital Industry Academy

With our trainings for our products and solutions available worldwide, we support you in a practical way, with innovative learning methods and with a customized concept.

You can find out more about the training courses and courses on offer, as well as their locations and dates, at:

<https://www.siemens.com/global/en/products/services/digital-enterprise-services/training-services/sitrain.html>

Service offering

Our service offering includes the following:

- Consulting Services
- Engineering and Integration Services
- Analytics and Artificial Intelligence Services
- Industrial Cybersecurity Services
- Training Services
- Field and Maintenance Services
- Spare Parts Services
- Repair Services
- Retrofit and Modernization Services
- Service Programs and Contracts

Detailed information about our service offering you will find here:

Digital Enterprise Services offering

<https://www.siemens.com/global/en/products/services/digital-enterprise-services.html>

Industry Online Support App

With the "Siemens Industry Online Support" app you have optimum support even when you are on the move. The app is available for iOS and Android:

support.industry.siemens.com/cs/ww/en/sc/2067

9.2 Links and Literature

Table 9-1

No.	Topic
\1\	Siemens Industry Online Support https://support.industry.siemens.com
\2\	Link to the entry page of the application example https://support.industry.siemens.com/cs/ww/en/view/44029132
\3\	Compatibility Tool for Automation and Drive Technology https://support.industry.siemens.com/cs/ww/en/view/64847781
\4\	Premium Add-ons / WinCC Competence Center https://new.siemens.com/global/en/products/automation/industry-software/automation-software/scada/pm-add-ons.html
\5\	Consulting and personal contact https://mall.industry.siemens.com/aspa_app
\6\	How can you avoid truncation of the decimal places when converting a character string into a floating-point number? https://support.industry.siemens.com/cs/ww/en/view/22277926

9.3 Change Documentation

Table 9-2

Version	Date	Change
V1.0	09/2010	First edition
V1.1	01/2014	Extension V7.2
V1.2	07/2017	Extension V7.4 SP1
V1.3	01/2019	Extension V7.5
V2.0	10/2020	Division into two documents for WinCC V6.2 SP3
V2.1	01/2022	Intermediate step changed from V7.2 to V7.3 SE; extension V7.5 SP2
V2.2	02/2022	Added order numbers software, chapter 7.2.1 and chapter 7.2.2
V2.3	04/2023	Extension V8.0 Updated product versions and links
V2.4	08/2023	Updated contact link