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Migration of WinCC Projects from V4 to V6.2 SP3

SIMATIC WinCC

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Table of contents

1 Introduction

1.1 Overview

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

Note	This application example is divided into two manuals: • In this manual (part 1), you will find the description of the migration of WinCC projects that were created **before WinCC V6.2 SP3**. • In the second manual (part 2) of the application example, you will find the description of the migration of newer WinCC projects to WinCC V7.x.

Migration

During a migration a WinCC project will be 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.

1.2 Principle of Operation

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

The following applies here:

- Use Project Duplicator to copy the project configuration data to the migration machine or to create a backup.
- The migration is basically carried out via the Migrator project.

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

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 back up the original version of the project. Information about this may be found in the WinCC Information System at "Working with WinCC > Working with projects > Copy and duplicate projects".

Project backup per file compression

Create a backup of your WinCC project. If the WinCC project is not open, you may use, e.g., WinZip to pack the project and save it.

Project backup per project copy

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

2.2 Compatibility

Please observe the compatibility of SIMATIC WinCC with the used operating system incl. Service Pack, Step7 and other SIMATIC products.

An overview for the compatibility of SIMATIC WinCC V5, V6 and V7 can be found under the following link.
https://support.industry.siemens.com/cs/ww/en/view/64847781

Note

- If you want to migrate a WinCC project from another time zone to a newer SIMATIC WinCC version, it is absolutely necessary to set the time zone on the migration computer to the time zone from which the project originates.
- In WinCC, the UTC time is used in the databases. Errors may occur in the calculation of this time if the time zone is set incorrectly.
- The code page settings of projects that you want to migrate in a single step must be uniform.

2.2.1 Scripts and In-House Developments

Scripts and in-house developments can increase and complicate the migration effort. These cannot be taken into account in this description.

2.2.2 WinCC Options

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

2.3 Upgrade Overview from SIMATIC WinCC V3 to WinCC V6.2 SP3

With the "WinCC Project Migrator", you have the possibility to upgrade projects from V3.x to version V6.2 SP3.

Because of software and compatibility, some intermediate steps are necessary. These can be seen in the following table.

Table 2-1

WinCC current version	Upgradeable to version
V3.x	V4.02 SP3
V4.02 SP3	V5.0 SP2 or 5.1 SP2
V5.0 SP2 or 5.1 SP2	V6.0 SP1-4 or V6.2 SP2-3

Migration steps from WinCC V4 to V5

1. Saving the SIMATIC WinCC V4 Project
2. Testing the SIMATIC WinCC V4 project
3. Software update
4. License update
5. Project migration
6. Migrate backup archive
7. Migration testing
8. Project adaptations

Migration steps from WinCC V5 to V6

1. Saving the SIMATIC WinCC V5 Project
2. Software update
3. License update
4. Project migration
5. Migrate backup archive
6. Migration testing
7. Project adaptations

Note	Migrated projects need to be tested. The system operator himself is responsible for proper functioning!

Graphical overview for the upgrade of WinCC V6.x

The following graphic shows which intermediate steps you must take to migrate WinCC V6.x projects.

Figure 2-1, Upgrading of V6.x

WinCC V6.0	
WinCC V6.0 SP1	
WinCC V6.0 SP2	
WinCC V6.0 SP3	
WinCC V6.0 SP4	
WinCC V6.2	
WinCC V6.2 SP2	
WinCC V6.2 SP3	
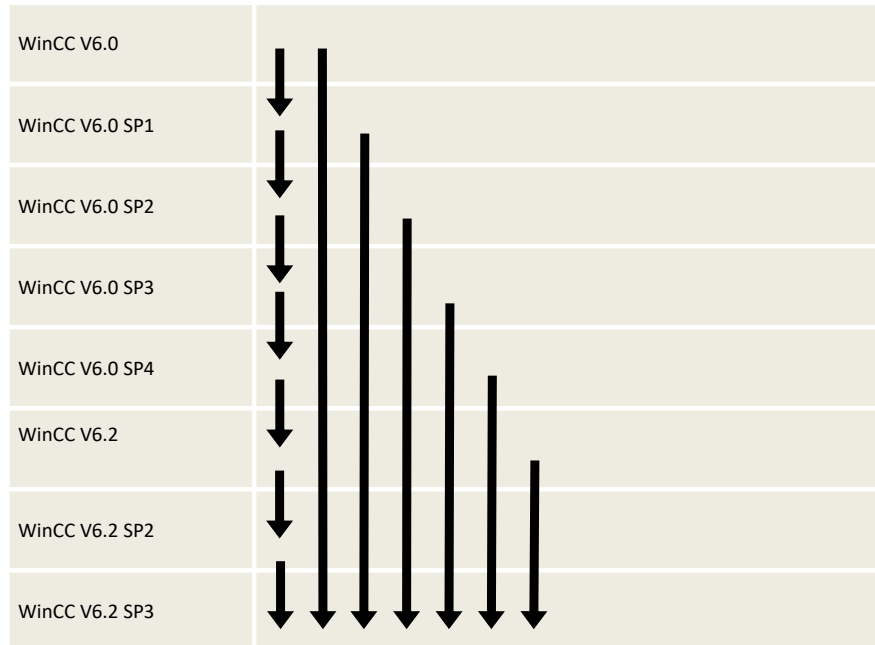
3 Transferring Project Versions before V4.02 SP3 to WinCC V5

3.1 Requirements

- The WinCC V3.x project must be migrated at least to V4.02 SP3/SP4.

- Before upgrading to a newer version, it should be ensured in multi-user projects that the computer on which the upgrade is carried out is also entered as a server in this project.
  If this is not the case, the project can be opened with the same WinCC version before the upgrade and the computer performing the upgrade can be entered as the server.

- If two or more users have been entered in the User Administrator under V3.1, which differ only in upper and lower case, they must be deleted or renamed – except for one before conversion to V4.x.

3.2 Required Software

Table 3-1

Product	Order number	Note
WinCC V4.02 SP3 and the latest available Update/Hotfix	6AV6381-1AA04-0EX4	This package cannot be delivered. You only need the WinCC V4.02 SP3 version to migrate the WinCC V3.X project to V4.02 SP3, the CD can be sent to you via your Specialist support if required.

Note	The SIMATIC WinCC V3 licenses are also valid in SIMATIC WinCC V4.

3.3 Preparatory Activities

Activities
If you have created a project with version 4.00, you must perform an screen conversion. The API of the Report Designer has been revised and contains, among other things, considerably more functions. Users who have used this API in older WinCC versions must recompile their application.
The database is converted with the program "WinCC Database Upgrade".
The screen data is converted with the Graphics Designer.
If you use the Basic Process Control option in an existing project, the following steps are necessary to convert the project: • Using the Split Screen Wizard • Using the Alarm Logging Wizard • Converting the Global Library • Converting the Project Library • Converting Graphic Screens • Open Tag Logging and exit with Save

Activities
• Open Global Script and select "Options" in the menu • Compiling all functions • Generate header anew • Open Screen Tree Manager and exit with Save. • Under the menu item "Options", "Recalculate collective display hierarchy completely when saving" must be set.
WinCC system messages (without using the Basic Process Control option) • Some new WinCC system messages were inserted and already existing system messages were adapted in text and number. • In order to receive these extensions/corrections in the system message window, the system messages of existing projects must be re-imported. • Proceed as follows: • Start the Alarm Logging editor. • Select "WinCC system messages..." from the "Tools" menu. • In the "WinCC System Messages" dialog box activate "Create new system messages, overwrite existing ones". • Click the "Create" button.

3.4 Conversion Details within SIMATIC WinCC V4

When switching to a new version or after installing a service pack, the projects must be converted.

Table 3-2

No.	Procedure
1.	**Converting the "Global Library"** In the Control Center, open the context menu of the Graphics Designer and activate the entry "Convert Global Library".
2.	**Converting the Project Library** Open the context menu of the Graphics Designer in the Control Center and activate the entry "Convert project library".
3.	**Converting Graphic Screens** In the Control Center, open the context menu of the Graphics Designer and activate the entry "Convert screens".
4.	**Split Screen Wizard** In the Control Center, open the context menu of the Split Screen Wizard in Base Data and activate the "Open" entry.
5.	**Alarm Logging Wizard** In the Control Center, open the context menu of the Alarm Logging Wizard and activate the "Open" entry.

No.	Procedure
6.	**Converting the user archive** The conversion of the user archive is accomplished in two steps: • Converting the archive structure • Converting the runtime data To convert the archive structure, proceed as follows: • Start the "User Archive" editor in the Control Center. • In the menu bar of the started editor, select "Project"/"Convert...". • In the "Convert old archives" dialog box, select the user archive to be converted and start the conversion with the "Convert" button. • Exit the dialog window with the "Close" button after the conversion has been completed. • Save the converted archive structure. To convert the runtime data, proceed as follows: • In the menu bar of the started editor, select "Project"/"Convert...". • In the "Convert old archives" dialog box, open the "Convert RT data" dialog box with the "RT data..." button. • Select the old and the new converted archive and start the conversion with the "Convert" button. • Close the "Convert RT data" dialog window with the "Close" button. • Close the "Convert old archives" dialog window with the "Close" button.

4 Migration from SIMATIC WinCC V4.02 SP3 to SIMATIC WinCC V5.1

4.1 Requirements

- Check your WinCC V4 project for special characters in the name of before the upgrade:
  - Archives
  - Archive tags
  - Trends
  - Trend window
  - Columns
  - Table windows

  If necessary, you must remove the special characters from the names with WinCC V4.02 in the Logging tag.
- When installing V5.1 SP2, please refer to the Installation Notes.
- The released operating systems for SIMATIC WinCC V5.x can be found in the article https://support.industry.siemens.com/cs/ww/en/view/64847781.

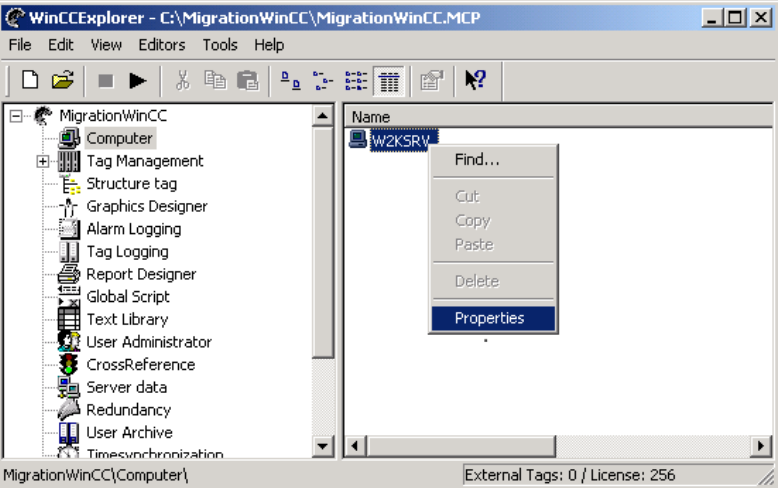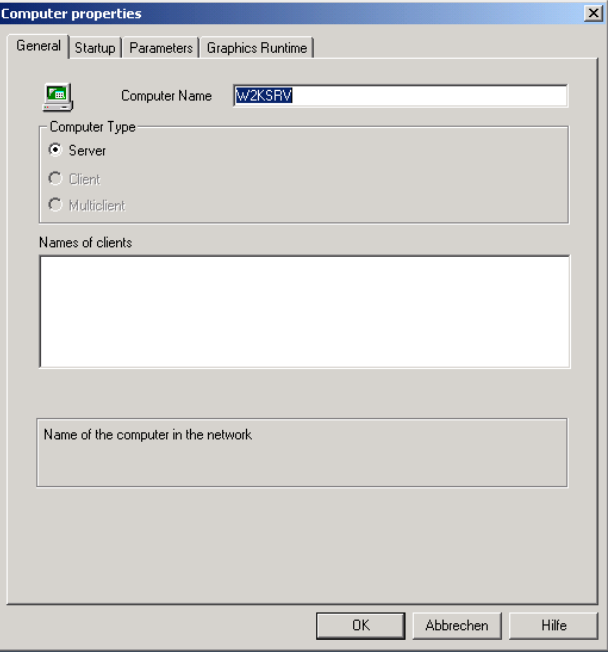| Note | More information about allowed special characters may be found at the system overview at "Configuration with WinCC > Disallowed characters". |

4.2 Required Software

Table 4-1

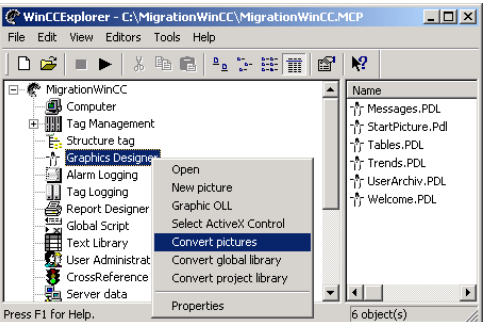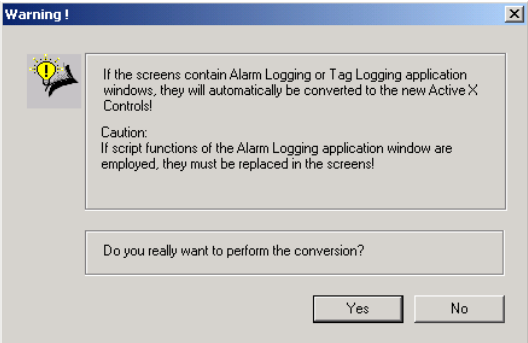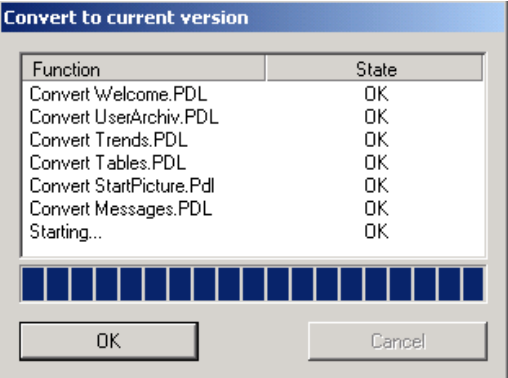| Product	Order number	Note
WinCC V5.1 SP2 and the latest available Update/Hotfix	6AV6381-1AA05-1CX4	

| Note | The SIMATIC WinCC V3 and V4 licenses are also valid in SIMATIC WinCC V5. |
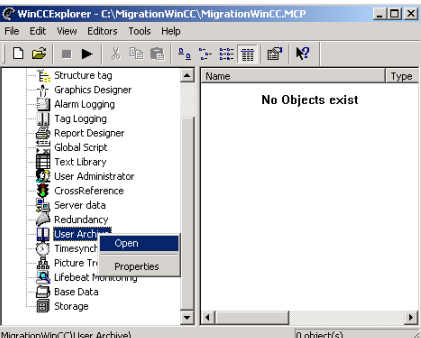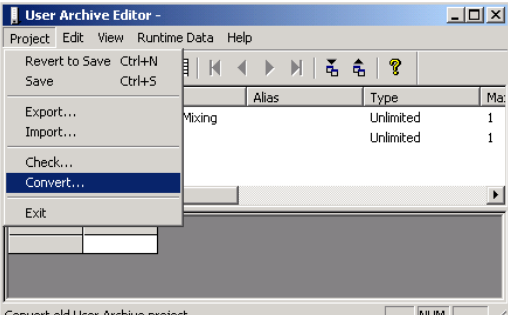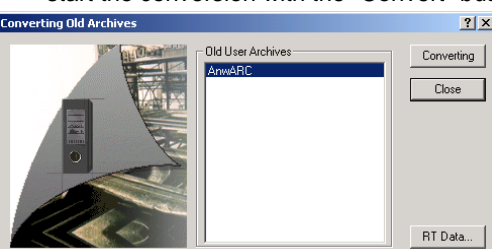
4.3 Migration Process
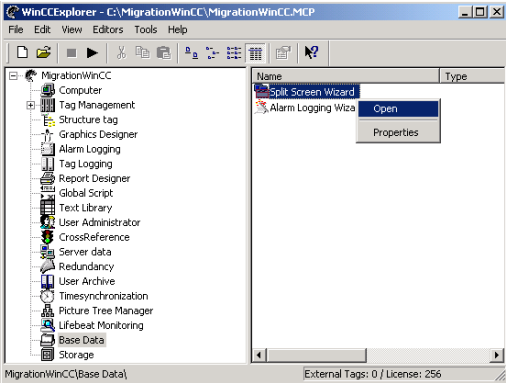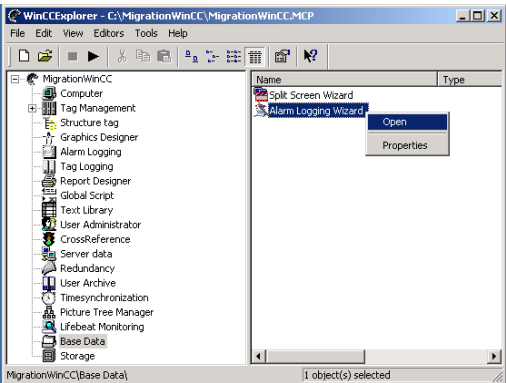
Table 4-2

No.	Procedure
1.	Open the WinCC V4 project on your WinCC V5.1 SP2 system.
2.	• In the "Computer" editor, adjust the computer name. • Open the properties dialog of the server computer. • Enter the name of your computer. • Close the dialog. • Close the WinCC Explorer and reopen the WinCC project.

No.	Procedure
3.	**Converting the Global Library** • In WinCC Explorer, open the context menu of the Graphics Designer and activate the entry "Convert Global Library".
4.	**Converting the Project Library** • In WinCC Explorer, open the context menu of the Graphics Designer and activate the entry "Convert project library".

No.	Procedure
5.	**Converting screens** • In WinCC Explorer, open the context menu of the Graphics Designer and activate the entry "Convert Screens". • Confirm the message that the trend and alarm controls will be replaced. • All screens of the WinCC project will be converted to the new version.
6.	The following restrictions apply when converting screens: • Screens may only be converted if they do not contain "Undefined Objects". These are screen objects whose associated object server is not installed, such as unregistered ActiveX controls. • Screens may only be converted if they do not contain grouped Alarm Logging and Tag Logging application windows. Before converting, the group must be resolved and the screen must be saved.

No.	Procedure
7.	**Converting User Archives** • Converting the archive structure: • Start the editor "User Archive" in the WinCC Explorer. • In the menu bar of the started editor, select "Project"/"Convert...". • In the "Convert old archives" dialog box, select the user archive to be converted and start the conversion with the "Convert" button. • Exit the dialog window with the "Close" button after the conversion has been completed. • Save the converted archive structure. **Converting the runtime data:** • In the menu bar of the started editor, select "Project"/"Convert...". • In the "Convert old archives" dialog box, open the "Convert RT data" dialog box with the "RT data..." button. • Select the old and the new converted archive and start the conversion with the "Convert" button. • Close the "Convert RT data" dialog window with the "Close" button. • Close the "Convert old archives" dialog window with the "Close" button.

No.	Procedure
8.	**Display in Runtime** • If data of a correctly imported user archive is not displayed in Runtime, then the configuration data must be linked again: • Open the Graphics Designer. • Reconnect the table controls to the user archive. • Save the screen.
9.	**User archives (before WinCC V4.02)** • The conversion of user archives created with WinCC older than V4.02 is not possible if the archive and field names are longer than 20 characters at the same time. • For problems related to converted user archives, it is recommended to create user archives with WinCC version V5.1 SP2.
10.	**Persistence** • A persistence configured in the tag logging is not transferred during conversion. The persistence must be newly configured in the converted project.
11.	**Split Screen Wizard** • In WinCC Explorer, open the context menu of the Split Screen Wizard in Base Data and activate the "Open" entry.
12.	**Alarm Logging Wizard** • In WinCC Explorer, open the context menu in Base Data of the Alarm Logging Wizard and activate the "Open" entry.

No.	Procedure
13.	If you have used the Basic Process Control option in an existing project, the following steps are necessary to convert the project: • Using the Split Screen Wizard. • Using the Alarm Logging Wizard. • Converting the Global Library. • Converting the Project Library. • Converting Graphic Screens. • Open Tag Logging and exit with Save. • Open Screen Tree Manager and exit with Save. Under the menu item "Options", "Recalculate collective display hierarchy completely when saving" must be set.
14.	If it is a multi-user project with multi-client connections, all packages on the servers should be deleted, recreated and reloaded on the multi-clients.

4.4   Migration Backup-Archive

- Configuration data and Runtime data can be transferred from WinCC V5.0 SP1 and SP2 to WinCC V5.1 SP2 without additional processing.

- WinCC automatically upgrades the Runtime data.

- If direct access to the Runtime data has been configured, please note the following points:

  - Starting with the WinCC V5.0 Service Pack 1, Sybase version 7.0.3 is used for the Runtime database.

  - This has changed the name of the database tool "isql.exe".
    The new name is dbisqlc.exe.

  - While WinCC accesses a database, the parameter DSN=DataSourceName must be used when calling dbisqlc.

  - A call via a C program can look like this:

```
ProgrammExecute (dbisqlc -q -b -c &quot; uid=dba; pwd=sql;
dsn=CC_test_01-04-18_14:41:11R&quot; select * from msarclong;
output to c:\deldelde.txt)
```

4.5   Project adaptations

- The OnBtn… functions (with ActiveX Controls Trend and message display) are no longer supported by WinCC and are only offered for compatibility reasons. Only use the AXC_OnBtn... functions for new projects.

- The Global Script Diagnostic Control is no longer available as of WinCC V5.0 Service Pack 1. Use the Global Script application window instead.

- The function key F12 must not be configured as a system-wide hotkey.

5 Migration from SIMATIC WinCC V5.1 to SIMATIC WinCC V6.0/V6.2

5.1 Requirements

- When installing V6.2 SP3, please refer to the installation notes.

- The released operating systems for SIMATIC WinCC V5.x can be found in the Online Support:
  https://support.industry.siemens.com/cs/ww/en/view/64847781.

- Installation of the Sybase database of the SIMATC WinCC V5 version, for the migration.

- If you have previously been working with WinCC less than V5.0 SP2, you must first migrate your project to WinCC V5.0 SP2 or WinCC V5.1.

- In order to work with a project in WinCC V6.2, created in WinCC V5.0 Service Pack 2 or WinCC V5.1, the project data must first be correspondingly adapted through migration.

Note	You can only convert screens and libraries from one WinCC version to the next main versions. For example, if you want to convert screens from WinCC V5.0 SP2 to V6.2, you must first convert the screens to WinCC V5.1, then to WinCC V6.0, and then to WinCC V6.2.

WinCC V6.2 provides the Project Migrator for this purpose which automatically migrates the project's configuration data, Runtime data and swapped data.

5.2 Required Software

Table 5-1

Product	Order number	Note
WinCC V5.1 SP2 CD	6AV6381-1AA05-1CX4	to Sybase Database Installation
WinCC V6.2 SP3 and the latest available Update/Hotfix	https://eb.automation.siemens.com/	Microsoft SQL Server (included with WinCC V6.x)
MS Message Queuing		Part of the operating system, must be installed if necessary. A detailed description for the installation can be found in the WinCC Information System "Installing Microsoft Message Queuing".

5.3 Preparatory Activities

General information

- Create a backup of your WinCC project.
- Only convert screens and libraries if the Runtime is not active.
- Implement the conversion for multi-user systems on the server.
- The conversion of screens during migration may not be interrupted.
- Conversion of screens and libraries will be canceled after 18 hours.
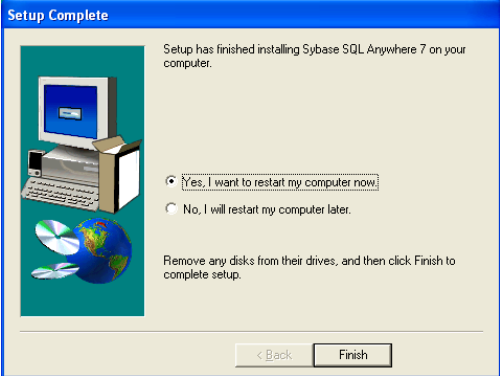
Requirement

Sybase 7 must be installed on the migration computer.

You can install Sybase SQL Anywhere 7 later using the autorun program of the WinCC V6.2 DVD. For this you need the installation CD for WinCC V5.0 Service Pack 2 or WinCC V5.1.

Installation

No.	Procedure
1.	Start the installation DVD of WinCC V6.2.
2.	Select "SQL Anywhere Studio 7" from the "Other Software" menu. Follow the instructions in the Sybase SQL Anywhere 7 setup.
3.	Upon request, insert the installation CD for WinCC V5.0 SP2 or WinCC V5.1 into the CD drive.

No.	Procedure
4.	If you have activated the autorun function in your operating system, the inserted CD will be started. The started autorun program of WinCC V5 is not required for the migration. Close the program with "Exit".
5.	Click the "Repeat" button in Sybase Setup. Sybase SQL Anywhere 7 is installed.
6.	Restart the computer.

Note
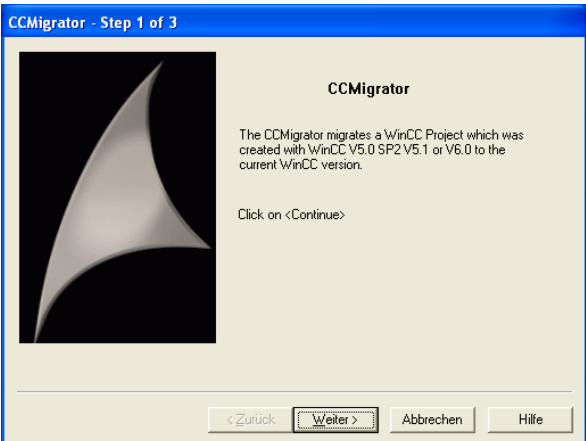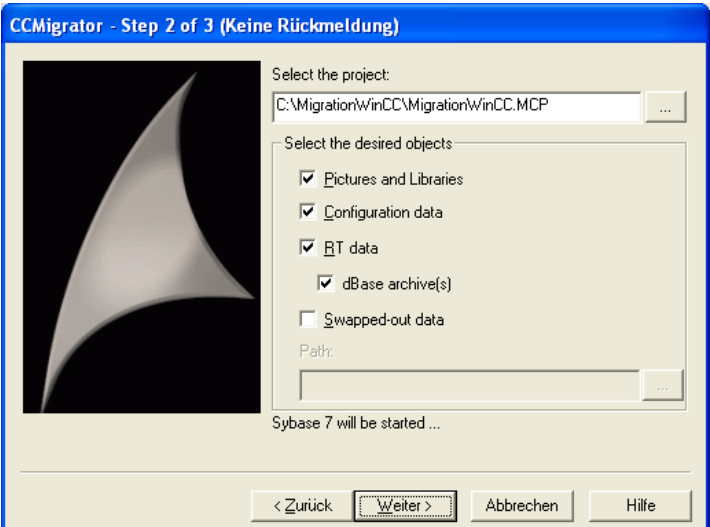
- "Symantec Ghost Corporate Edition" is not compliant with Sybase 7 of STEP7/WinCC. Installation options "Console Client", "Standalone Client" and "Standard Tools only" as well as the standard version "Norton Ghost" offered by Symantec are not affected by this incompatibility.
- Sybase 7 is no longer needed after migration and can be uninstalled.
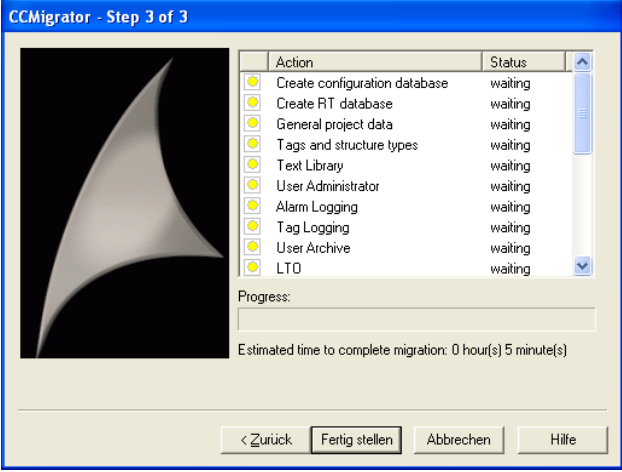
5.4 Migration Process

Note	The migration of a project can only be started once. Only swapped data can be migrated subsequently.

Table 5-2

No.	Procedure
1.	Check the following setting in Windows Explorer prior to the start of the Migrator Project: In the menu "Tools > Folder options > View" in the "Advanced settings" section, the check box "Hide file name extension for known file types" must not be checked.
2.	Open "Simatic > WinCC > Tools > Project migrator" in the start menu of the operating system. Project Migrator opens with the "CCMigrator - Step 1 of 3" start window.
3.	Select the project directory, in which the V5 project is located by clicking the button. The "Configuration data" check box is already activated in the "Select the desired data" area. Select all data to be migrated. If available, you can also select the path of your backup archives. These will then also be migrated to the new WinCC version.

No.	Procedure
4.	Click "Continue". The "CCMigrator - Step 3 of 3" window opens. The Project Migrator shows all components of the project that are migrated. The Project Migrator indicates the estimated migration duration: "Estimated Migration Duration: XX hour(s) XX minute(s)". This specification is only a rough guideline value. The migration of a project may take several hours.
5.	If migration was successfully completed, the Project Migrator sends the following message: "Data was successfully migrated." Click "OK" to close the dialog.

Note	You can use Project Migrator to migrate the Runtime data, configuration data, and exported Runtime data individually!

5.5   Migration Backup-Archive

Backup archives are migrated from the WinCC project Migrator to the new version. To do this, enter the path in the migrator where the archived data is stored.

Figure 5-1
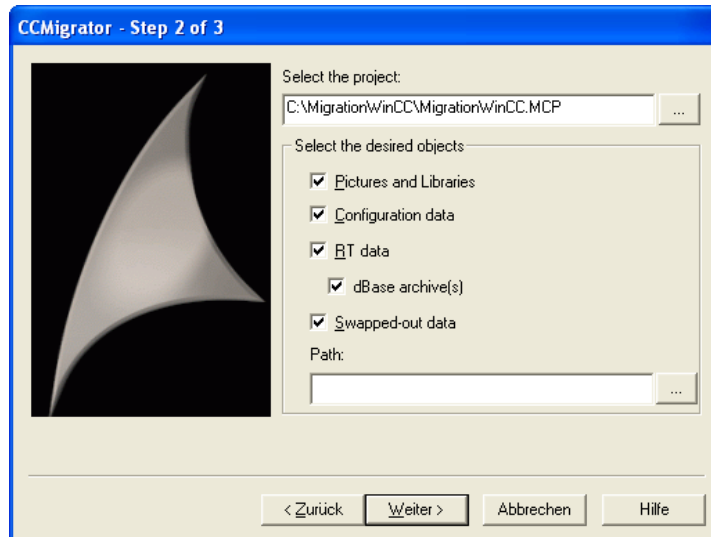
Migration of dBASE III Archives

dBASE III archives can only be migrated if the ODBC driver "Microsoft Visual FoxPro Driver" has been installed. This driver is missing if Windows XP SP1 has been installed without additional Windows installation packages. The driver may be found on the internet under URL:

http://msdn.microsoft.com/vfoxpro/downloads/updates/odbc/default.aspx

Note   During migration, the Runtime data and exported data are saved in a common database.

6 Project Adaptations in WinCC V6.2

6.1 Important Differences in Comparison to V5.1

- The database system is Microsoft SQL Server 2005
  - WinCC manages Runtime data and configuration data with the Microsoft SQL Server 2005.
  - dBASE III is no longer supported for archiving.
- Message system
  - WinCC no longer differentiates between short-term and long-term archives.
  - When an archive is created, the user defines the period after which WinCC should create a new archive file.
  - Different views are provided for the display Runtime which are still referred to as short-term archive and long-term archive, however. Both views in the WinCC Alarm Control display 1,000 messages from the archive.
- Cyclic archive/Sequence archive
  - WinCC no longer creates sequence archives, but only works with cyclic archives, which are subdivided into several segments.
  - The archives consist of several individual segments. F a segment has reached its maximum size or maximum time span, a new segment will always be created. The oldest individual segment is deleted only if the maximum number of all segments has been exceeded.
- In Tag Logging, there are two types of archives:
  - In the case of an archiving cycle of up to one minute, the "Tag Logging Fast" archive is used.
  - For an archiving cycle greater than one minute, the "Tag logging slow" archive is used.
- Swapping data
  - WinCC enables you to swap your data directly via the new WinCC database.
  - The Storage option is no longer necessary. As a result, the swapped-out data is available as a database.
- Access to clients and servers
  - WinCC offers the new system access rights "Remote activation" (1000) or "Configure remote" (1001). This enables activation or configuration of a project on a computer from any client.
  - The new "View Only" authorization (1002) only allows the client to monitor during Runtime.
- Options
  - For the option package "Basic Process Control", you no longer need an additional license.
  - The "Video" option package is omitted.

6.2 Important Differences in Comparison to V6.0

In WinCC V6.2 WinCC/Central Archive Server (WinCC CAS) is used to implement the central archiving concept. WinCC Historian was used in WinCC V6.0.

- If you have used WinCC Historian in WinCC V6.0, then you can continue to use the server after migration. The concept of WinCC V6.0 continues to be supported by V6.2 after migration of projects.

- If you have not used the WinCC Historian in WinCC V6.0, but want to use a central archive server starting with WinCC V6.2, use the WinCC CAS.

It is not possible to use compressed hard disks or disk drives.

6.3 Modifications with C Functions

The following C functions have been omitted in WinCC V6.2

Table 6-1

C functions	MSRTBackup	MSRTEnumBackupList	MSRTGetBackupSize
	MSRTRestore		
C-API Alarm Logging functions	MSCSUpdateExeGeneric	MSRTEnumArchivDays	MSRTDialogReset
	MSRTDialogInfotext	MSRTDialogDiagnose	MSRTDialogComment
	MSRTSetLanguage	MSRTStartProt	MSRTEndProt
	MSRTEnumProtData	MSRTGetProtTitle	MSRTEnumMsgWin
	MSRTGetMsgWinData	MSRTGetFilterData	MSRTCreateMsgWindow
Backup/Restore functions of Tag Logging	TLGBackup	TLGRestore	TLGEnumBackupEntries
	TLGGetBackupSize		
C-API functions of Tag Logging	TLGCSConnect	TLGCSConnectEx	TLGCSDisConnect
	TLGCloseProject	TLGSaveProject	TLGCreateTemplate
	TLGCreateTemplateEx	TLGDeleteTemplate	TLGDrawCurvesInDC
	TLGEnumTableEntries	TLGInsertTemplateItem (only OCX)	TLGDeleteTemplateItem (only OCX)
	TLGSetTemplateData (only OCX)		

Functions of the DB.DLL (when using C-API access)

With regard to the DB.DLL functions, certain data types and their representation change:

Data type in the DB.DLL	Data type in Sybase 7	Data type in SQL server	Comments
DB_TYP_CHAR	Char	Char	Identical
DB_TYP_INTEGER	Integer	Int	Identical
DB_TYP_SHORT	Smallint	Smallint	Identical
DB_TYP_DOUBLE	Double	Float	Identical, but name changed.
DB_TYP_TIME	Timestamp	Datetime	Data type is different. In the millisecond range, the times are rounded exactly to .000, .003, .007, etc., seconds.
DB_TYP_BINARY	Binary	Binary	Identical

Functions with changed dynamic behavior

The dynamic behavior has changed in the case of the following DB.DLL functions:

- DBCreateDataBase
- DBCreateDataSource
- DBStartEngine
- DBStopEngine

New functions

The following functions are new in WinCC V6.0 or higher:

- DBDataBaseAttach
- DBDataBaseDetach
- MldRegisterMsgEx
- MldUnRegisterMsg

6.4   Communication Channels

If channels are used in the migrated project which are no longer supplied with the material supplied, the corresponding process tags are not displayed in the tag management following the migration.

- When the tag management is subsequently opened for the first time, a dialog appears prompting the user to install the driver.
- The process tags can be reconfigured prior to the migration. Move the process variables into another communication driver, e.g. OPC. However, you must adjust the addressing for all moved process variables.
- With the "WinCC Configuration Tool", you can reconfigure the process variables more effectively.
  - The "Connections/Groups" sheet in the File Manager can be used to create connections under a different communication driver.
  - Use the "Tags" sheet to readdress the process tags and adapt the properties.
- The following channels are no longer supplied for WinCC V6.2:
  - Allen Bradley DH DH+ DH485
  - Allen Bradley Serial DF1
  - Applicom Multi Protocol Interface
  - GE Fanuc SNP SNPX
  - Mitsubishi FX
  - Modbus Protocol Suite
  - Modbus Serial
  - SIMATIC S5 PMC Ethernet
  - SIMATIC S5 PMC Profibus
  - SIPART

6.5   Upgrade within SIMATIC WinCC V6 (V6.0 → V6.2)

VBA code

Backup the "@GLOBAL.PDT" file before installing WinCC V6.2. The file contains your global VBA extensions, for e.g. some menus. The file is replaced when you install WinCC V6.2.

Procedure

1. Navigate to the <WinCC installation directory\bin> and copy the file "@GLOBAL.PDT " to another directory.
2. Install WinCC V6.2.
3. Copy the file "@GLOBAL.PDT" from your storage directory to <WinCC installation directory\Templates>.
4. Migrate the WinCC project.

7 Additional Steps After Migration

Usually, 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 necessary after the upgrade:

- Adapting and Reconfiguring Process Tags
- Adapting Archiving
- Adapting the Time Base for Communication
- Customize print jobs
- Adapting Project Documentation
- Adapting process controlled archive variables.
- If necessary, adjust the setting for "SIMATIC Logon" in the User Administrator
- If necessary, enter the option User Archives in the startup list of the WinCC computer properties

7.1 Adapting the Computer Name

If the migrated project was originally installed on another computer, the original computer name is still specified.

- On opening the project for the first time on the new computer, the following dialog appears: "The configured server is not available. Would you like to open the project with the local computer as the server?"
- Select the "Start server locally".
- After opening the project, change the computer name in the "Computer properties" dialog.

7.2 Multi-Place Projects

After migrating a multi-user project, you must recreate the packages on the server and load them onto the clients. For more information, refer to "Configuration > Multi-user systems > "Server configuration" or "Client configuration" in the WinCC Information System.

7.3 Communication Channel Windows DDE

The Windows DDE channel is contained in the scope of deliveries because it is compatible with earlier WinCC versions. New connections, however, should be created via the "OPC" channel.

8 Migration Testing

Note	The migration check up to a target version of WinCC V5.1 can only be performed in the configuration and Runtime environment.
	Log files are only created during the migration of projects to WinCC V6.x.

Introduction

In the following cases, the migration from WinCC V5.1 to WinCC V6.x may result in error messages or aborting:

- Sybase 7 is not installed.
- The migration computer has too little memory space available.
- The project is not loaded on the migration computer.
- The project was created with a WinCC version below V5.0 SP2.

Errors During Migration

An error during the migration of a component does not interrupt the migration. The Project Migrator writes an error message in a diagnostics file and processes the next components.

Migration after elimination of errors

- When the migration is canceled, migration can be restarted after clearing the fault. Do not use the project containing the faulty migrated project, but a copy of the backup.
- The computer name and the name of the local computer must match.

8.1 Diagnostic Files Project Migrator

The Project Migrator creates two diagnostics files:

- CCMigrator.txt
- DTSPackages.log

The diagnostics files are stored in the project directory of the migrated projects.
The files can be viewed in any text editor.

CCMigrator.txt

The "CCMigrator.txt" file contains general information:

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

If the migration was successful, the file contains the message: "Migration succeeded.".

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

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

DTSPackages.log

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

The diagnostics file contains the following important entries:

Message text	Meaning
Package name	migrated component
Package description	Function of the migrated component
Execution started / Execution completed	Time: start of migration / Time: end of migration
Package steps execution information	Migration steps of a component, specifying whether migration was successfully executed: "succeeded" = successful / "failed" = error during migration
Error source / Error description	Error source and description of the error which occurred

8.2 Diagnostic File when Converting Screens

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

9 License Overview

9.1 Migration from WinCC V3 to V4

No license upgrade is necessary.

9.2 Migration from WinCC V4 to V5

No license upgrade is necessary.

9.3 Migration from WinCC V5 to V6

Licensing before WinCC V6.2 differs from the previous versions. New RT or CS licenses are required. Licensing may be upgraded during the installation of WinCC V6.2 or subsequently.

License upgrade

Upgrade the licenses in the Automation License Manager from V5 to V6.

Table 9-1

Step	Procedure
1.	Insert the USB stick of WinCC in the USB port.
2.	Start the Automation License Manager using the Start menu. In the navigation window, select the drive where the license to be upgraded is located. Select this license from the table.
3.	Select menu instruction "License Key" > "Upgrade...". The upgrade process is started.
4.	The upgrade process concludes with the transfer of the upgraded license to the local drive.

Compatibility

- After an upgrade from WinCC V5 to WinCC V6.2, only one V6.2 license is available. This license is not recognized by WinCC V5.

- If WinCC V5 is used as an alternative to WinCC V6, the user is authorized to create a screen of WinCC V5, including its license. However, both WinCC versions may only be used as an alternative to the other. Any concurrent use of WinCC V6 and WinCC V5 represents a violation of the license agreement.

- If you have configured more than 512 archive variables in your project, you will also need a license for archive tags starting with WinCC V6.

Available upgrade packages

Table 9-2

Upgrade package	Order number
RC Upgrade from V5.x to V6.2	6AV6381-1AB06-2AX4
RT Upgrade from V5.x to V6.2	6AV6381-1AA06-2AX4
RC Upgrade from V6.x to V6.2	6AV6381-1AB06-2AX3
RT Upgrade from V6.x to V6.2	6AV6381-1AA06-2AX3

Note	Upgrade licenses for the redundancy, user archive, and server options are included in the RC and RT upgrade packages.

10 Useful Information

WinCC database versions

Table 10-1

WinCC version	Database
<= V4.x	Sybase Anywhere 4
V5.0	Sybase Anywhere 5
V5.1	Sybase Anywhere 7
V6.0	SQL Server 2000
V6.0 SP4	SQL Server 2000 SP4
V6.2	SQL Server 2005 SP1

11 Appendix

11.1 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

11.2　Links and literature

Table 11-1

No.	Subject
\1\	Siemens Industry Online Support https://support.industry.siemens.com
\2\	Link to the article 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\	WinCC Competence Center https://new.siemens.com/global/en/products/automation/industry-software/automation-software/scada/pm-add-ons.html
\5\	Expert advice and personal contact person https://mall.industry.siemens.com/aspa_app
\6\	How can the truncation of decimal places be prevented when converting a string to a floating point number? https://support.industry.siemens.com/cs/ww/en/view/22277926

11.3   Change documentation

Table 11-2

Version	Date	Change
V1.0	09/2010	First version
V1.1	01/2014	Expansion of V7.2
V1.2	07/2017	Expansion of V7.4 SP1
V1.3	01/2019	Expansion of V7.5
V2.0	10/2020	Split into two documents for WinCC V6.2 SP3
V2.1	08/2023	Order numbers WinCC Upgrade V6.x to V6.2 added Updated Appendix and Links