



ARCWAY
BRIDGING THE GAP

ARCWAY AG

Server Upgrade von 3.3, 3.4 auf 3.7 oder 3.8



English

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1 INTRODUCTION

This document explains how to upgrade an **ARCWAY Cockpit** Enterprise Edition Installation from version 3.3 or 3.4 to 3.7 (3.8).

Apart from reinstalling the clients and the server to upgrade to 3.7 (3.8), you will also need to migrate the data of the server, due to changes in the internal database structure.

This document is composed of three parts. The first part contains remarks, the second part gives you an overview of the upgrade procedure and the third part explains the upgrade procedure in detail. The detailed description in the third part takes an default installation using the Tomcat Servlet container as reference.

If you have any questions, or if you wish to submit feedback on this document, feel free to contact us at support@arcway.com.

2 SERVER UPGRADE FROM 3.3 OR 3.4 TO 3.7

The following description of the upgrade from version 3.3 or 3.4 to Version 3.7 (3.8) is divided into three parts. The first part contains important notes that have to be taken into account when upgrading. These notes will be explained in more detail in the third part. The second part gives an overview over the general procedure when upgrading. The third part describes the upgrade process in detail using Tomcat-Servlet-Containers and the [ARCWAY Cockpit](#) standard installation as example.

2.1 Important Notes

Please read these remarks carefully. They will tell you something about the background of the upgrade procedure.

Compatible Versions

Please note that the server and the clients wishing to connect to the server must have identical versions. The server of version 3.7 (3.8) only serves clients of version 3.7, and vice-versa. Older clients will be rejected by the server version 3.7.

Hence it is necessary to upgrade the server, the license server and the clients consistently. Existing licenses of the version before 3.7 cannot be used anymore, but can be reissued for the new version, if you are eligible for an upgrade.

Archiving the Server

To migrate the data from the version 3.3 or 3.4 to the current version, it is necessary to archive the data from the old server and restore it after the installation of the new server is done.

Recreate or Reuse Database and File Archive

The Cockpit server uses external storages (e.g. database, file archive), which are specified in the server configuration. When upgrading, you may either reuse the existing storages or create and configure new storages.

When you reuse the existing storages, you must empty them prior to restoring the data. When you use different storages, please make sure that the server configuration is not accidentally pointing to the old storages.

One Machine – Many Clients

Sometimes several users work on the same machine. In the default configuration each Windows user has a personal, virtual client. The application is installed just once, but each user has an individual workspace for his settings and local changes.

2.2 Server Upgrade from 3.3 or 3.4 to 3.7 – Overview

This part lists the necessary steps for a successful upgrade. Each step is explained in detail in the subsequent part.

1. Preparations of the Server – for upgrading the Cockpit-Server certain files and passwords must be on hand.
2. Preparation of the Clients – the Clients write modifications on the projects in the workspace, which is by default on the local hard drive. All locally saved modifications of the old Client are ignored by the new Client. Therefore, it is required to upload these modifications to the Server. The Clients of the new version can be installed in parallel to the old Clients so that they can be used right after the Server Upgrade.
3. Dumping the Data – for a data migration it is required to archive all data with a dump. This dump is necessary to restore all data after the upgrade to the new server installation.
4. Uninstalling the Existing System – it is required to uninstall the old Cockpit systems (client and server) before you can install the new version.
5. Preparing the Database and the Archive – the server uses external systems (database, plan archive) to store all data. If the same systems shall be reused after the upgrade, it is required to clean this. It is recommended to create new databases and archive for the new Cockpit version.
6. Installation of the new System – the new system (client and server) is installed in this step. The server is delivered with a default configuration. The default settings have to be adapted to your needs.

7. Restoring the Data – the data saved before in the dump have to be restored to the new system after the installation. All existing data are converted automatically to the new data structures during this step.
8. Configuring the Clients – after the new Cockpit server is installed, the server parameters need to be configured into the new clients.

2.3 Server Upgrade from 3.3 or 3.4 to 3.7 – Detailed

This part explains the upgrade procedure in detail. Where possible, we will give recommendations or mention alternatives.

2.3.1 Preparations

Preparing the Server

The following preparations refer to the computer of the Administrator, who will perform the upgrade. Even the Administrator needs access to an installation of the Cockpit-Client-Software.

On every Cockpit-Server there is an Administrator account which has the login name „Administrator“, except when the Cockpit-Server was connected to an LDAP directory for user account management. In this case the login name was specified upon the setup of the LDAP connection. The credentials of the Cockpit-Administrator-Account (Login, password) are needed for performing the upgrade.

[Optaining the necessary credentials](#)

A Web Browser and http access to the Server are needed. You can test the connectivity by entering the Server URL, as it is setup in your [ARCWAY Cockpit-Client](#), into the Web Browser. Usually the URL looks like:

<http://servername:8080/CockpitServer/>

Access to the file system of the Server is needed. In the case of a standard installation the Server Software and Server Data can be found in the webapps directory of the Tomcat-Servlet-Container-Installation. For Example, at:

C:\Program Files\Apache Software Foundation\Tomcat 7.0\webapps

You must be able to start and stop the Servlet-Container (e.g. Tomcat) to perform the upgrade. In Windows this can be done for example in the Windows Service Management.

Lastly it is important to know how the backup of the current version of the Cockpit Server is done, so that it can be replicated for the new version. We highly suggest the use of the command line tool for backing up the server to guarantee consistent backups even when the server is running.

Optaining the necessary Software To install the new version of the Server you need the WAR-Archive of the new Server Software.

You also need an installation of the new Cockpit Client-Software, as it will be used by the users.

Installation notes and Software Download Links to Server and Client of the new version can be found under the following URL:

http://download.arcway.net/COCKPIT-Client/v370/index_de.html

Furthermore, you need an installation of the old Cockpit Client Software, as it is currently used by the users.

Installation notes and Software Download Links to Server and Client of the old version can be found under the following URL:

http://download.arcway.net/COCKPIT-Client/v340/index_de.html

The old Client has to be setup to be able to connect to the Server that will be upgraded. You also might need to import a license file into the client to connect to the server.

Preparations of the Clients

Unless otherwise stated, the preparations described below relate to the users' computers. If a software distribution system is used, they refer accordingly to the software packages that are distributed to the users.

installation of the new clients The new client software can already be installed parallel to the old client software so that it is immediately available after the server upgrade. The installation of the new client is exactly the same as a new installation. The required software archives can also be found in the current version at the following URL:

http://download.arcway.net/COCKPIT-Client/v370/index_de.html

To install the client, please refer to the client installation guide and follow the steps given there.

Since version 3.3 there is a separate variant for the Enterprise Reader. This variant can be installed parallel to the Enterprise full version. If a user has had the client in version 3.2 up to now, and in the future should have both a client in the full version and a client in the reader version, all three variants can be installed simultaneously for this user without affecting each other.

Also install the optional components, in the same selection as they were used in your projects before the upgrade. If you have such optional components in the old version, please contact us at support@arcway.com. We will provide you with these components for the new version immediately. Among the optional components, the module "Use Case Specification" should be highlighted. In versions prior to **ARCWAY Cockpit 3.0**, this module was used for the process description. Since version 3.0, the better integrated and less formal process diagrams are used for this purpose. There are only a few users left who use the module "Use Case Specification".

The Cockpit Server can already be set up on the newly installed clients. To do so, start the **ARCWAY Cockpit** client and select **New server connection**:

New Serverconnection

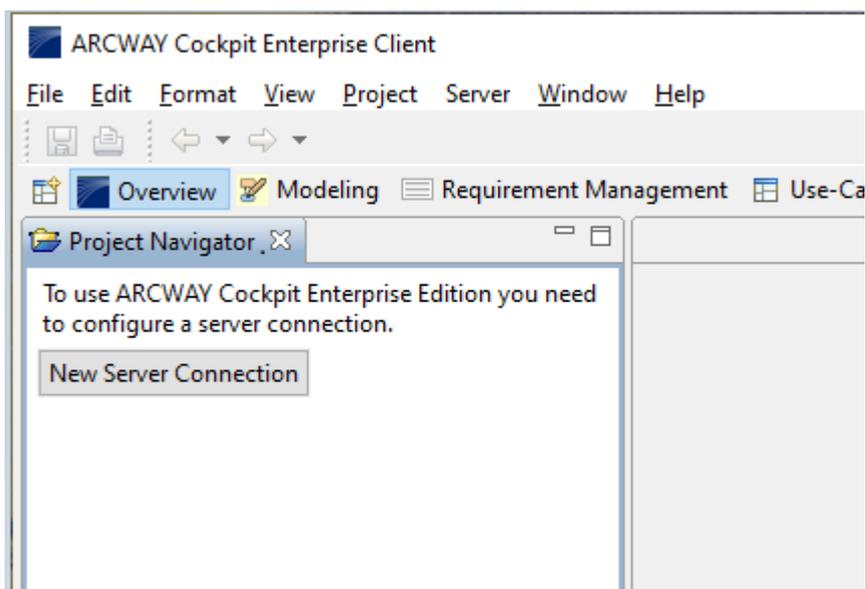
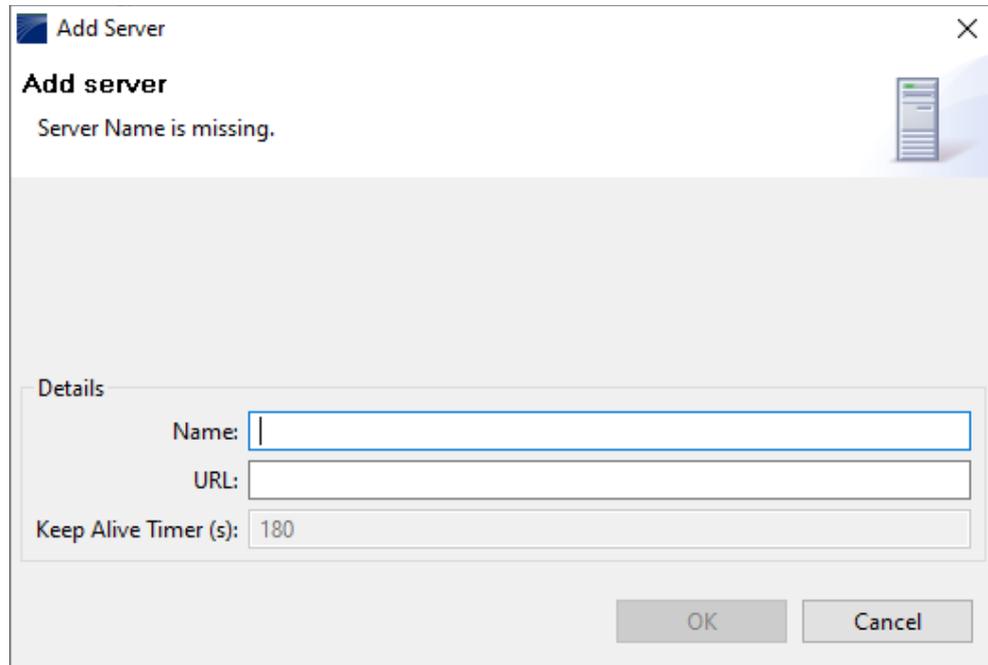


Figure 1: New Serverconnection

Add Server



Add Server

Add server

Server Name is missing.

Details

Name:

URL:

Keep Alive Timer (s):

OK Cancel

Figure 2: Add Server

You will also find information on this in the client installation instructions. Please note that the old server will be rejected by the new client until the server is migrated to the new version. Then the new server is rejected by the old client.

Possibly existing client license files can already be imported into the client. You will also find information on this in the client installation instructions. The license files from versions prior to 3.5 cannot be used any longer, but if you are entitled to an upgrade, they can be reissued for the current version. If necessary, contact [[EMAIL|license@arcway.com]].

upload of changes The clients save user changes to the local hard disk. Only when the user uploads his changes to the server in his old clients by calling up the "Upload" function or discards his changes by calling up the "Discard" function are the locally saved changes deleted. Changes that are not uploaded are lost during the upgrade. It is therefore necessary to upload all relevant local changes to the server before the upgrade.

As a Cockpit administrator you can check whether - and if so, which - users still have local changes. To do so, start an **ARCWAY Cockpit** client of the old version

and connect to the desired server using the administrator login. Then select the entry **Server » Remove locks...** in the main menu:

Remove Locks

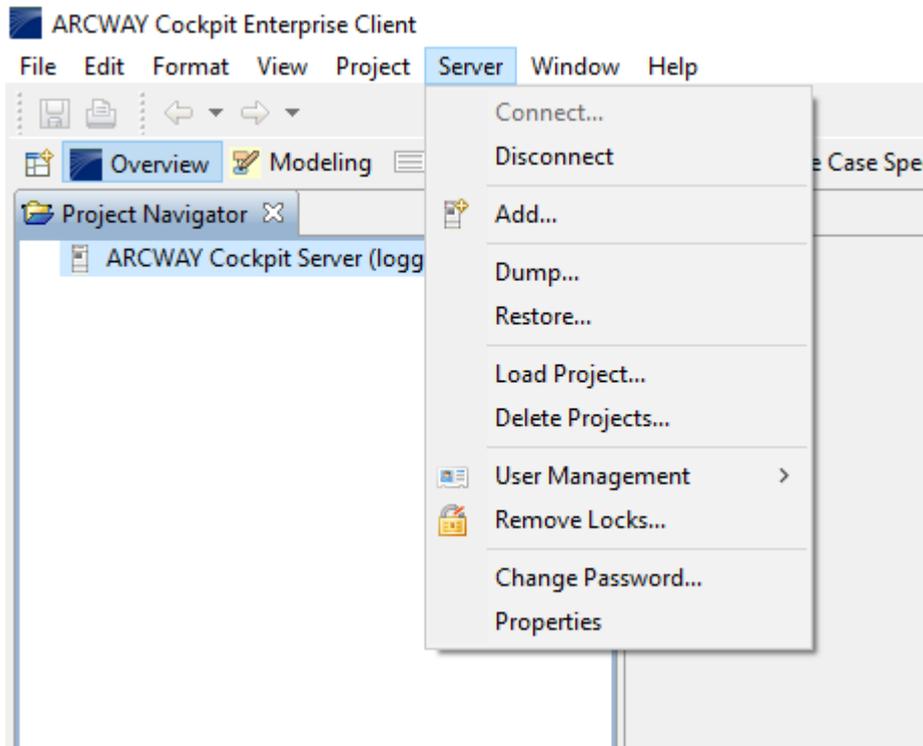


Figure 3: Remove Locks

List Locks

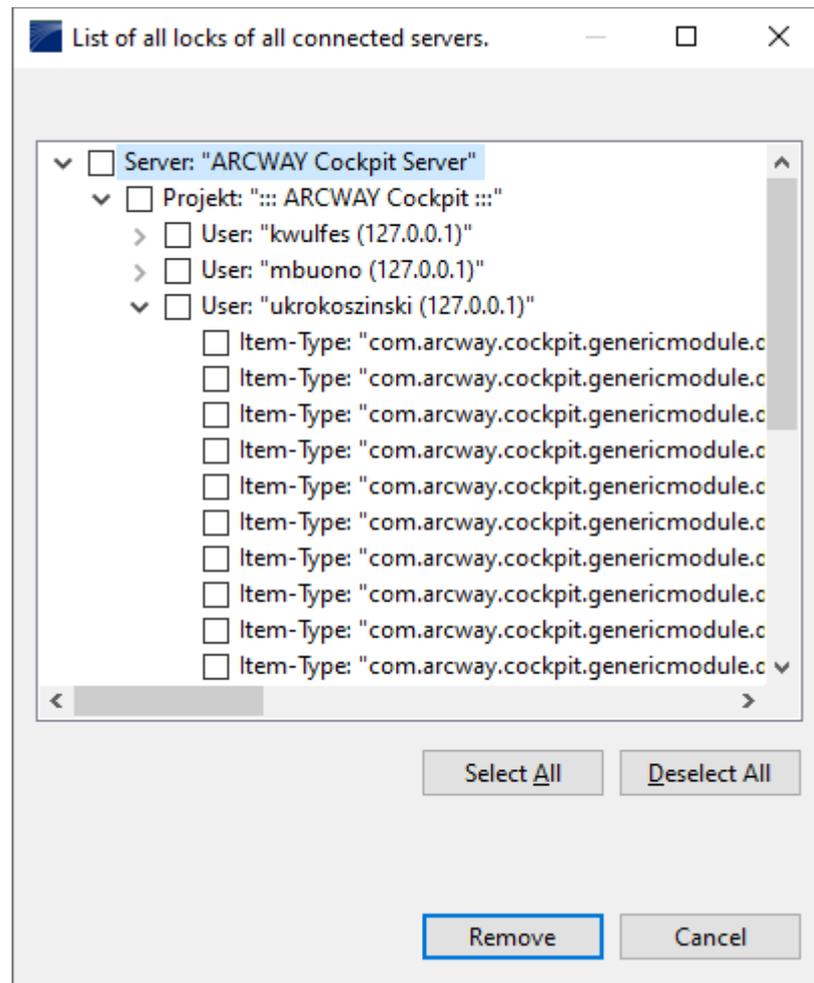


Figure 4: List Locks

In this dialogue, the users who still have local changes on the cockpit projects can be read off. The list is grouped by projects (see figure). Do not remove any locks, but close the dialogue with Cancel. Removing locks would discard the user's changes.

It is recommended to set a migration date when all users upload their changes. Each individual user can make this preparation as follows:

Please start the [ARCWAY Cockpit Client](#) and check all projects for locally saved changes.

Even if a project is closed, it may have local changes. Please open all projects that you see in the project navigator.

Local changes are indicated by an **[asterisk]** in front of the project name. If a project has local changes, you can upload or discard the changes by right-clicking on the project and selecting the appropriate entry in the context menu:

Commit Modifications

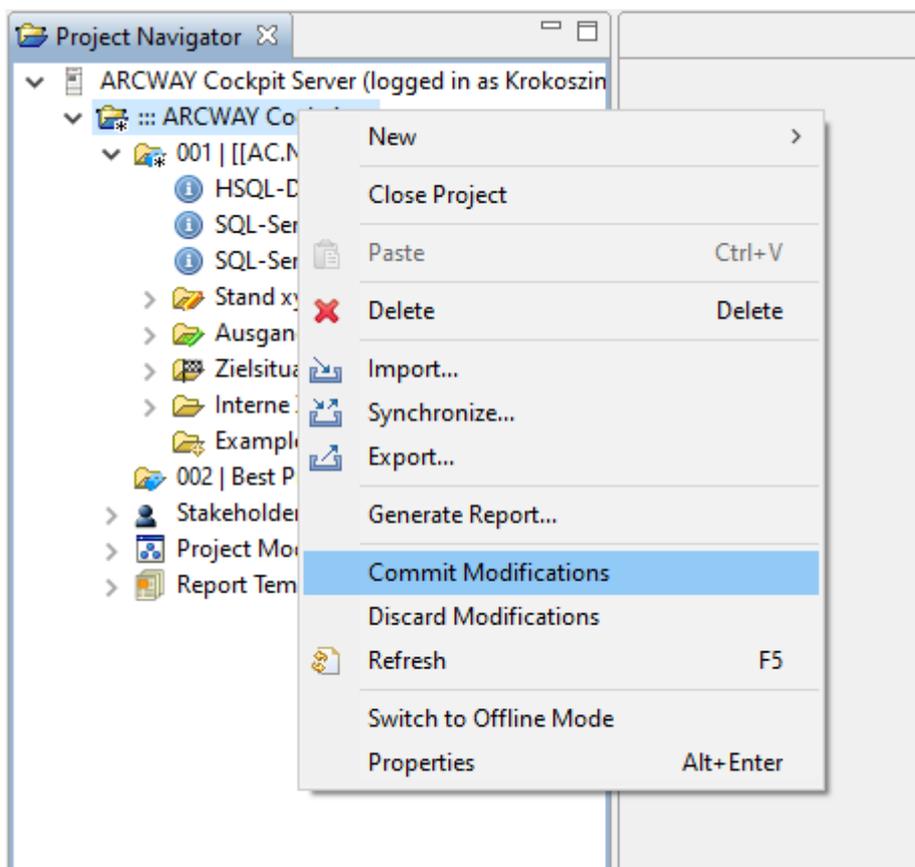


Figure 5: Commit Modifications

Please go through all projects! Even closed projects may contain changes.

Please note that different users may be working on one computer. ARCWAY Cockpit is set in the default configuration so that each Windows user has a separate work area.

After that, it is recommended that you exit the client until the migration to the new version of ARCWAY Cockpit is completed.

Changes that are not uploaded on the migration date or are made after the migration date will be lost!

On the migration date, you can use the **Remove locks...** dialog to check whether all users have actually uploaded. The dialog does not update itself automatically, but must be closed and reopened. It is not necessary that all changes have been uploaded. However, all changes that have not been uploaded will be lost during the migration.

As soon as these preparations have been made, the migration can begin (see step 2).

2.3.2 Dumping the Data

After in the first step the local changes have been uploaded by the clients, all relevant data are now saved on the server and can be backed up.

Please make sure that you do not archive the data while other users are working on the server. All changes made on the server after archiving the data will be lost.

To archive the data of a server, you must start a client and connect to the server as a user with *System Administration* or *Operator*- access privileges.

Once connected to the server, you can archive the entire server or individual projects on the server using the **Server » Archive...** and **Project » Archive...** menu items.

A dialogue appears in which you can select the server or project to be archived. Make the desired selection and specify a file in which the data is to be saved. The files created in this way form the basis for restoring the data in step 6.

When a server is archived, all the projects of the server and the users and groups of the server are taken over. When archiving a project, only the project is archived. Especially the users and groups of the server are not archived. When archiving and restoring individual projects it is therefore necessary to create the users and groups again after the upgrade.

Archiving a project or server can take up to an hour, depending on the amount of data. During this time the client is blocked. A status dialogue opens, indicating that the server is waiting for a response. As long as this dialogue is active, the server generates the archive.

Do not cancel the process prematurely!

2.3.3 Uninstalling the Existing System

Before the new Cockpit Server can be installed, the old server components must be uninstalled or removed. This step is necessary, as otherwise files of the old Cockpit server may affect the new system. In any case, the following servlets belong to the server components:

- CockpitServer
- CockpitLicenseServer

and, if installed

- Further instances of the Cockpit Server

The following describes how to remove the server components from Tomcat. If you are using a different servlet container, please refer to your implementation documentation for information on removing servlets (web applications).

Stop servlet container Tomcat

Before you can remove the server components, you must stop the servlet container Tomcat. To stop the Tomcat, you can do the following:

Click .

Stop Webserver

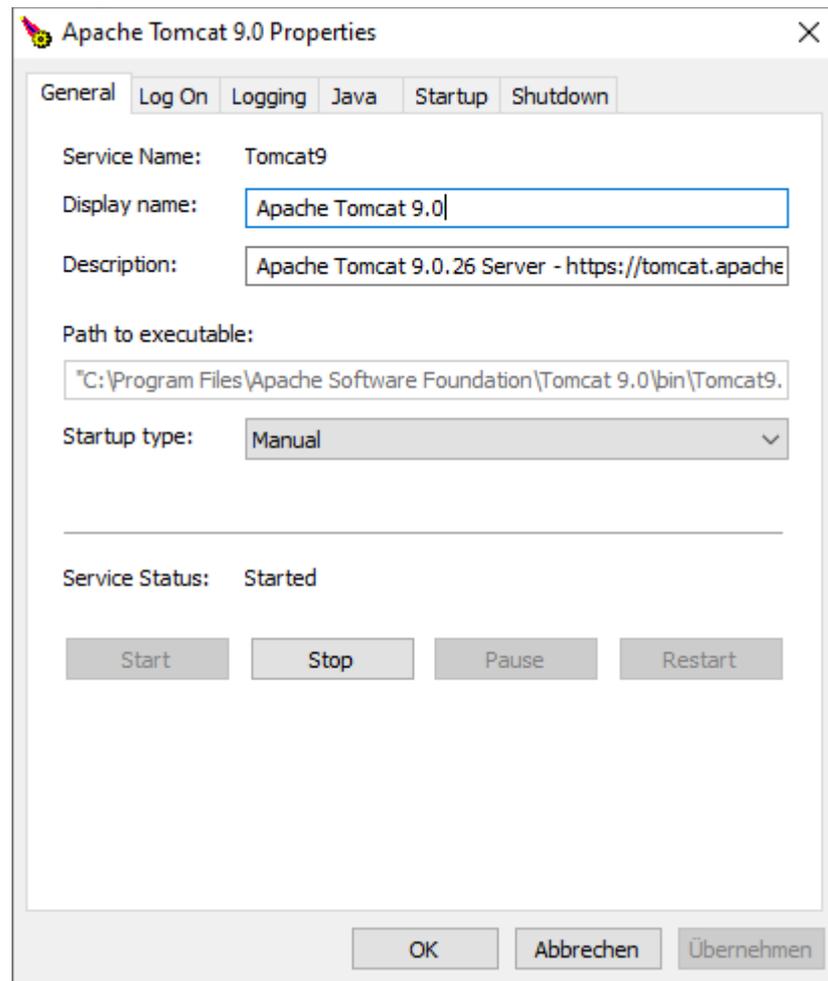


Figure 6: Stop Webserver

The tool for managing the computer's services and applications opens. In this dialog box, select **Services**, right-click the **Apache Tomcat 9.0** item, and select **HOLD** from the shortcut menu.

Save Tomcat server customisations

If the Cockpit Server has been set up according to the standard installation procedure in the Installation Guide, this step is not required. In the case of custom installation, the following files may have been modified:

```
[Tomcat root directory]/conf/server.xml
[Tomcat root directory]/conf/Catalina/localhost/[CockpitServer].xml
[Tomcat root directory]/webapps/[CockpitServer]/WEB-INF/web.xml
```

For the name "[CockpitServer]", specify the corresponding name of the Cockpit Server servlet. By default, the cockpit server servlet is named **CockpitServer**.

The configuration files can be reused in the server of the new version without modification. Back up these files from each configured cockpit server, and restore them after installing the new server version. The Tomcat servlet container must be stopped while the files are restored!

Save and delete servlets

You must then back up and delete the Servlets' directories and WAR files.

We recommend that you first make a backup copy of the files and folders to be deleted. Both steps can be done most easily by moving the relevant directories and WAR files into the backup directory. The backup directory must not be located below the Tomcat main directory. Tomcat must still be stopped (see above)!

The servlet directories and WAR files are located in the **[Tomcat main directory]\webapps** directory and have the same names as the servlets. If the Cockpit Server has been configured according to the standard installation procedure of the Installation Guide, the Cockpit Server servlet is named **CockpitServer** and the License Server servlet is named **CockpitLicenseServer**.

Verzeichnis Cockpit Server

Please save and delete the directories (see screenshot)

- **CockpitServer**
- **CockpitLicenseServer**

and, if installed

- **Additional instances of Cockpit Server**

and the files

- **CockpitServer.war**
- **CockpitLicenseServer.war**

and, if installed

- Additional copies of the Cockpit Server WAR-file.

Start servlet container Tomcat

Now restart the Tomcat server by clicking **Start** in the context menu of the Services and Applications tool (see above: Stop Tomcat).

Delete manual configuration

If the Tomcat administration tool is installed, the next step is to delete the old configuration of the servlets using the administration tool. The Tomcat Administration Tool, if installed, is available at:

http://[IP]:[Tomcat Port]/admin/

e.g. <http://localhost:8080/admin/>

If the administration tool is not installed, you can proceed to the following step 4, "Preparing the database and archive".

You must log in using the administrator ID created during the installation of Tomcat.

*You can look up the password by consulting the
open [Tomcat Home]/conf/tomcat-users.xml*

After login you will see the administration page. Please carry out the following steps:

Tomcat Server » Service (Tomcat Standalone) » Host (localhost)

In the **Host Actions** drop-down list, click *Delete Existing Contexts* on the upper right of the screen. You should then see the following screen:

Kontext Delete

Now mark the entries

- CockpitServer

- CockpitLicenseServer

and, if installed

- Further instances of the Cockpit Server

The changes are applied when you click Save and then Commit Changes. This removes the old configurations from the configuration file managed by Tomcat.

2.3.4 Preparation of the database and archive

If you operate ARCWAY Cockpit in the standard installation, the database and the archive were also deleted when deleting the directories in step 3. In this case you can skip step 4. Standard installation" means an installation according to the instructions for the standard installation in the document "Server Installation" without subsequent adaptation or modification of the standard configuration.

If the standard installation procedure suggested in the server installation instructions was selected for setting up the 3.3 or 3.4 server, the ARCWAY Cockpit Server uses an embedded database and an embedded file storage for data storage. This database and file storage is re-set up and filled with the migrated data by the described upgrade procedure (backup data, uninstall software, install new software, restore data).

Different from the standard installation, it is possible to use an external database or file storage, which must be entered in the servlet configuration of the servlet container used. When upgrading the server, you have the option in this case to reuse the corresponding data stores or to create new ones. If you reuse existing data stores (database, archive), you must ensure that they are empty when migrating data before importing the existing data. Please note the following information under "Reusing the data stores".

Creating new data stores

If you create new data stores, you only need to ensure that these are entered into the server configuration.

We recommend that you create new data files. For example, you can create a new database and run it parallel to the old database for a certain period of time. After successful upgrade and productive use of the new version you can then delete the old database.

Reuse of the data repositories

If you want to continue to use the previously used data stores, you must completely empty them before installing the new server.

No data from the old system must be in the external resources used by the new system when the new system is started!

For the database, this means that all the tables together with their contents (data and schema) must be deleted from the *deleted* database.

For an archive in the file system, this means that all files and directories below the root of the archive *deleted* must be deleted.

2.3.5 Installation of the new server

The installation of the new server is the same as a new installation. Please refer to the document "Server Installation" and follow the steps indicated there. You can skip the first three steps ("Step 1 - Installing Java", "Step 2 - Setting the environment variable JAVA_HOME" and "Step 3 - Installing Tomcat") if you have already installed the recommended version of the respective software.

2.3.6 Restoring the data

Finally, the data from the old Cockpit version is imported into the new installation. To do this, please start a client, set up the server and connect to the server as administrator. Select one of **Server » Restore...** and **Project » Restore...** to restore the entire server or a single project from the archives created in step 2.

Server wiederherstellen

The import of data from a project or a server can take several minutes, depending on the size of the project. During this time the client is blocked. It is only indicated that a response from the server is expected.

Do not abort the process prematurely!

When restoring the server, all data including the user accounts of the old server status will be restored. The only exception is the administrator password.

2.3.7 Uninstalling the old 3.3 or 3.4 clients

To uninstall the client, click **Start » Programs » ARCWAY Cockpit » Uninstall**. This starts the supplied uninstaller, which automatically removes the client.

*The uninstaller does not remove the workspace of the ARCWAY Cockpit client. By default, this directory is located in **C:\Documents and Settings\[User Name]\Application Data\ARCWAY\Cockpit340CS**. This folder can be deleted. However, this is not mandatory.*

Please note that by default each Windows user has his own user directory and therefore his own workspace.

Do not rename the workspace directory, as each Cockpit version can only interpret the workspace it has created.