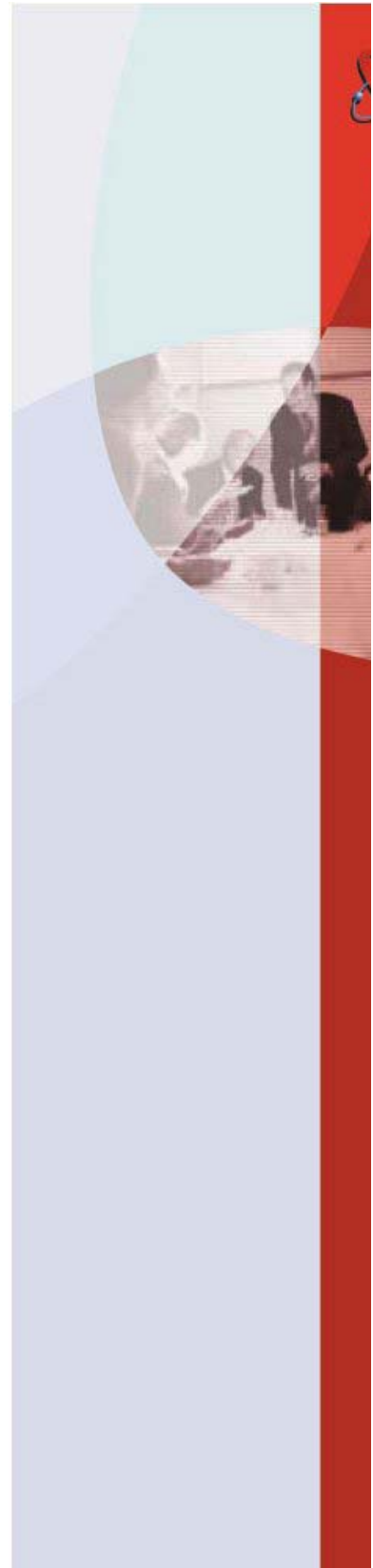




# **Synchronize Assembly Helper for SmarTeam – Web Applications**

## **Installation and User Guide**





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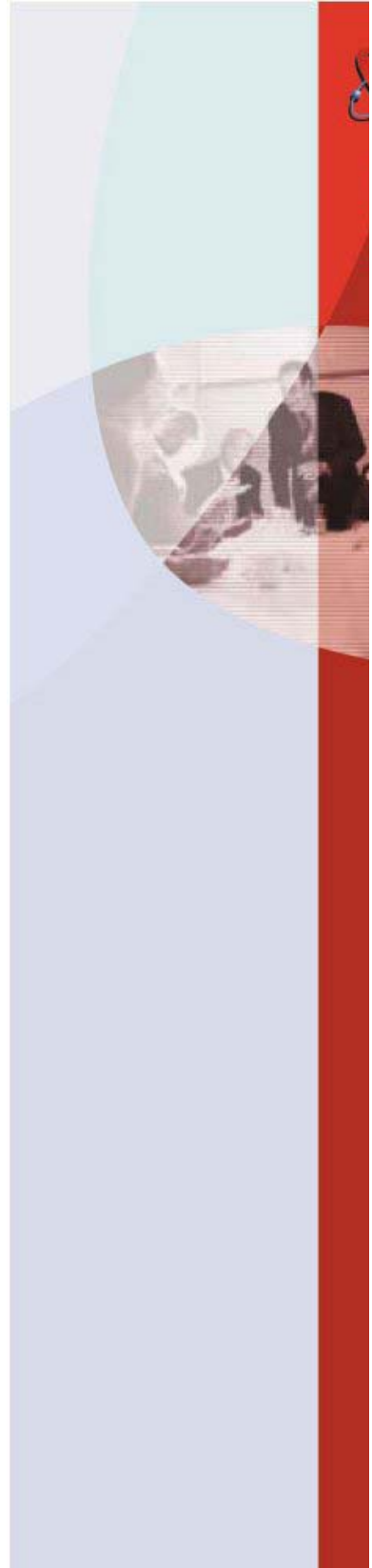
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## **Chapter 1:**

# **Installing the Synchronize Assembly Helper**



## Introduction

In a **SmarTeam** Win32 client environment, synchronization between assembly structures is generated and maintained by the specific CAD program. This is represented in **SmarTeam** by a tight integration between **SmarTeam - Editor** and the specific CAD program, such as CATIA, Solid Edge, etc. Integration also offers a way to maintain automatic updates and consistency between values within the CAD, such as Title Blocks, File Properties, Drawings, etc., and the matched attributes in the SmarTeam database. This is performed by **SmarTeam's** attribute mapping functionality Assembly structure.

When a user working over the Internet checks out a multi-part, multi-level Assembly, it is necessary to ensure that when the Assembly is checked in again, all changes made will be eventually reflected in the Assembly tree in the **SmarTeam** database and incorporated in files inside the **SmarTeam Vault**. When more than one user is working via **SmarTeam – Community Workspace**, it is also necessary to ensure that changes are not overwritten by another user. These files need to be synchronized in order to ensure that they encompass all changes made.

**Note:** Throughout this document the term **Web Application** refers to **SmarTeam Community Workspace**.

The **Synchronize Assembly Helper** enables management of multi-part, multi-level Assemblies that were originally created or edited without using the **SmarTeam** integration to the specific CAD program and then checked in to the **SmarTeam** database using **SmarTeam – Community Workspace**.

As **SmarTeam – Community Workspace** currently does not provide a tight CAD integration as with a **SmarTeam** Win32 client, synchronizing files manually, especially in a complicated Assembly structure, may be a tedious and time-consuming process, requiring a detailed list of all changes made in every file. The **Synchronize Assembly Helper** is used to facilitate this process, comparing all files in an Assembly to the corresponding files in the Vault and generating a list of files that were changed, deleted or added. This enables the user to select which changes he/she wants to keep or discard. Then, the **SmarTeam** CAD integration is activated from within the **Synchronize Assembly Helper** to complete the check in process.

The **Synchronize Assembly Helper** extends **SmarTeam – Community Workspace's** **functionality** by mediating between the initial check in operation performed by **SmarTeam Community Workspace** and the **SmarTeam** integration CAD application.

**Note:**

In previous SmarTeam versions, the default SmarTeam settings were saved in various locations, such as INI files in SmarTeam\LocalConfig folder, inside the database and in the Windows Registry.

The System Configuration Service is a web-based tool that provides the administrator with the ability to handle and control all configuration settings from one central location. The tool runs on the system configuration server.

From SmarTeam V5R13, the System Configuration Service replaces the configuration and INI files which were used in previous versions of SmarTeam, and which are described in this document.

For more information on the System Configuration Service and its parameters, see “System Configuration Service” in the SmarTeam – Editor Online Help.

## Installation

The **Synchronize Assembly Helper** utility is a separate installation located on the **SmarTeam - Web Applications CD**. To install the **Synchronize Assembly Helper** utility, proceed as follows:

1. Insert the CD-ROM containing **SmarTeam - Web Applications** software in the CD drive.
2. The **SmarTeam - Web Applications** installation is launched automatically and appears on the screen, to take you through the software installation process.

**Note:**

If for some reason the installation program does not appear on your screen, in the taskbar click on the **Start** button and select **Run** to open the **Run** utility. In the **Run Open** line type **D:\install.exe** to run the installation setup program (where **D** denotes the CD ROM drive in which the **SmarTeam - Web Applications CD** is inserted).

3. Click **Synchronize Assembly Helper** to install this utility that synchronizes complex Assemblies originating from **SmarTeam Community Workspace** users - proceed to the next step.



4. After selecting **Synchronize Assembly Helper** in the previous step, the **Welcome** screen is displayed. After reading the contents of the **Welcome** window, click **Next** to proceed to the next window, **License Agreement**.

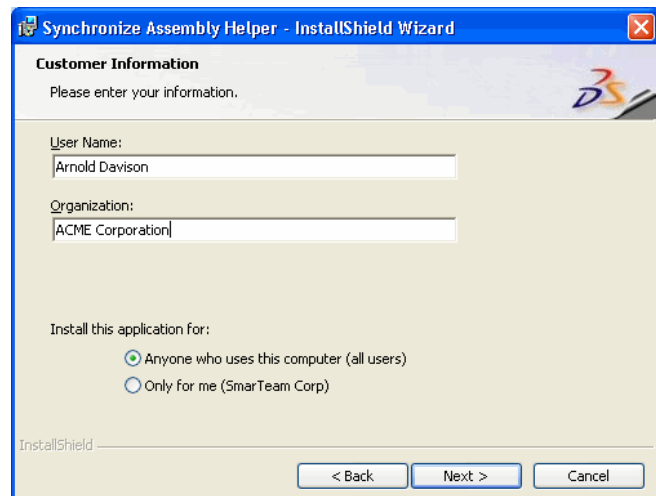
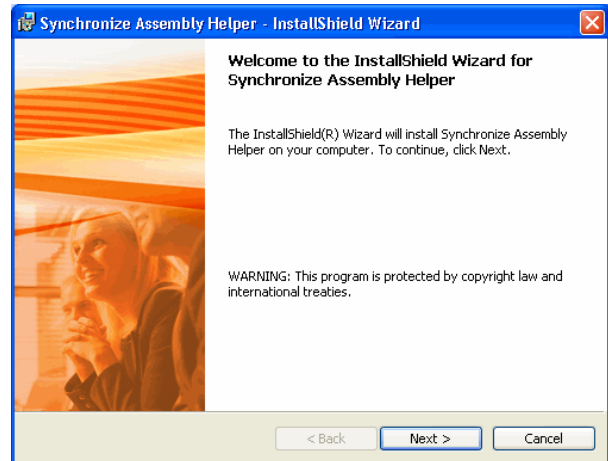
**Note:**

Selecting **Next** at any time from a window during the installation process allows you to confirm your selection and proceed to the next window.

Selecting **Back** at any other time from a window during the installation process allows you to return to the previous window.

Selecting **Cancel** now or at any other time from a window during the installation process allows you to abort the installation setup program without installing **Synchronize Assembly Helper** software.

5. In the Customer Information window, personalize the program by entering your user name and company details in the applicable fields.  
Click **Next** to proceed to the next window, **Ready to Install the Program**.





6. The **Ready to Install the Program** window, informs you that the setup program has enough information to install **Synchronize Assembly Helper** software.

Click **Install** to commence the installation process.

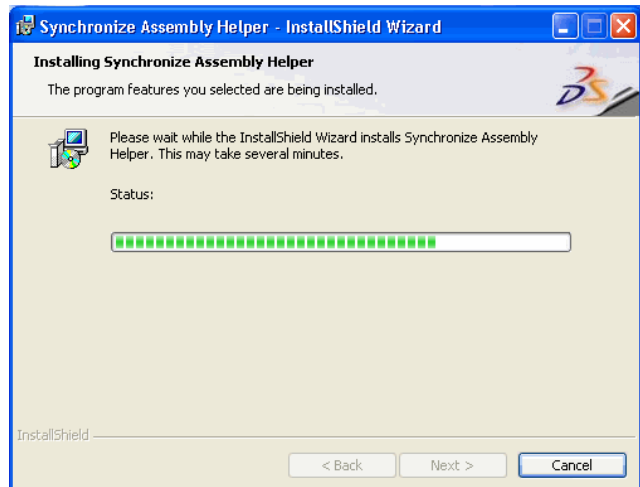
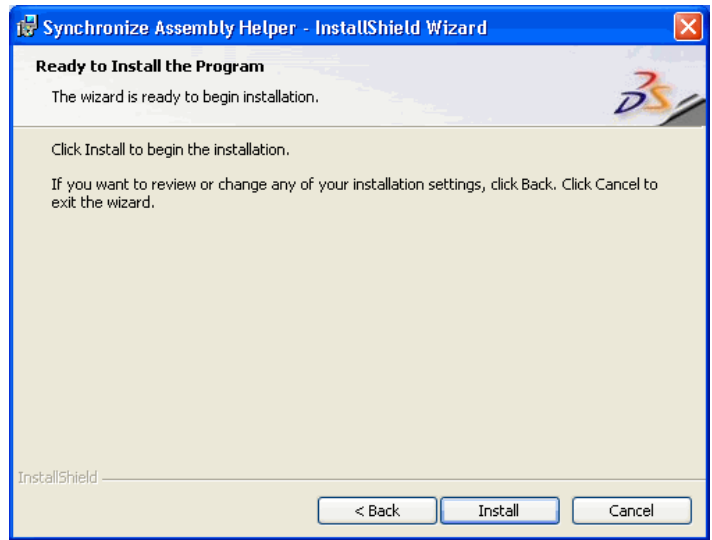
**Or**

Click **Cancel** to abort the installation process.

7. When you click **Install** in the previous step, the installation process commences and the **Installing Synchronize Assembly Helper** window appears.

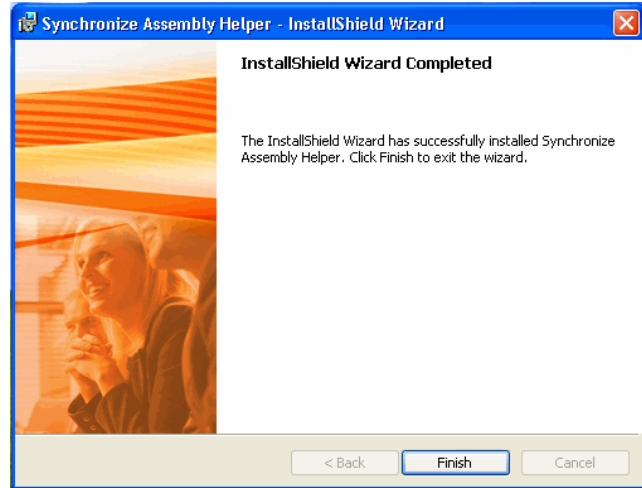
Installation progress and description is shown in the **Status** bar, as illustrated.

If you need to abort **Synchronize Assembly Helper** software installation at this stage, click **Cancel**.



8. After successful installation, the **InstallShield Wizard Complete** window appears. Click **Finish** to complete the installation and exit the **InstallShield Wizard**.

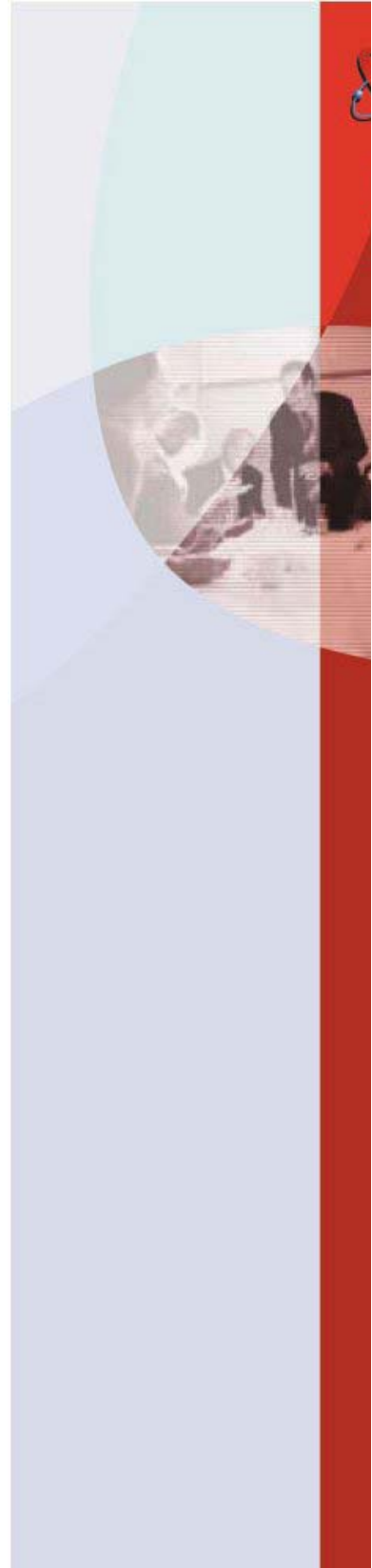
**Synchronize Assembly Helper** software installation is now complete.





## **Chapter 2:**

### **Working with the Synchronize Assembly Helper**



## Reviewing the Assembly Synchronization Process

The process to synchronize an Assembly is performed in several stages, depending on whether the Assembly already exists or whether it is a new Assembly.

❑ **Existing Assembly**

The Assembly already exists in the **SmarTeam** database and its files are stored in **SmartVault**. The Assembly is checked out with its reference files by the **SmarTeam Community Workspace** user for editing in the specific CAD program.

❑ **New Assembly**

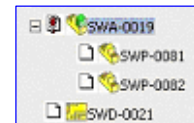
A new Assembly created in the specific CAD program. Using **SmarTeam Community Workspace**, a new object will need to be defined for the top assembly component.

After working with the new or modified Assembly, the user performs a final save operation in the working directory then compresses the Assembly and all dependent files into a single, zipped file.

The user selects and highlights the top assembly object in the **Tree Browser** then from the **Actions** button select **Check In** to display the **Check In** page.

In the **Check In** page, the user clicks **Upload Zip Package** to display the **Upload Package** window and browses the local disk to locate the zipped file for the check in operation. Comments can be added during this operation.

After uploading the zipped file in the **Check In** page, the user clicks **OK** to complete the operation. The Assembly's object state is displayed in the SmarTeam – Editor **Tree Browser** as **Pending** (i.e., a temporary state), awaiting further processing to complete the check in operation.



Other users (or the same user) working within the context of **SmarTeam Win 32** rich client and CAD integration, and also coupled with the **Synchronize Assembly Helper** utility, can now complete the check in operation.

The user then initiates the **Synchronize Assembly Helper** utility and starts the synchronization process. This operation first extracts the zip file into a temporary working folder and compares its content with the file already in the Vault (if it exists). A report is then generated that compares the original files of the Assembly from within the Vault (if they exist) with the new files from the modified Assembly, included in the uploaded zip file.

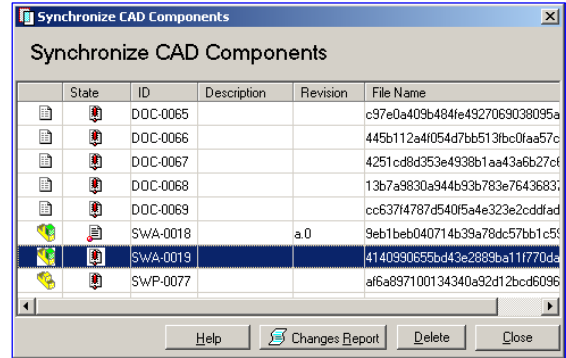
The user then decides which changes to approve, and by clicking a button the applicable CAD integration is automatically launched. From that point, the user completes the check in process.

## Using the Synchronize Assembly Helper Utility

1. From the taskbar **Start** button select **Programs, SmarTeam, Synchronize Assembly Helper** to launch the **Synchronize Assembly Helper** utility.
2. In the **Login** window, enter your user name and password then click **OK** to display the **Synchronize CAD Components** window.

**Note:** It is highly recommended to log in with a user who has **SmarTeam Administrator** privileges.

3. The **Synchronize Assembly Helper** displays the **Synchronize CAD Components** window that consists of a list of all objects in **Check In** state, as illustrated. This includes assemblies or single objects that are initially marked as **Check In** by a **SmarTeam - Community Workspace** user, as well as a list of all components pending synchronization in the selected database.



Each record in the report represents a separate top level object in **Check In** state. The details for each object include State, ID, Description and Revision. The file name is generated automatically when the original ZIP file is moved from the temporary directory on the **SmarTeam - Community Workspace** server into the vault directory.

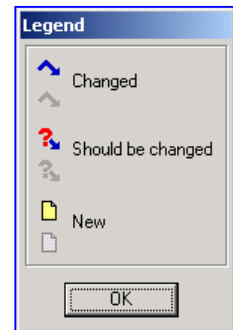
Select the object representing the Assembly that you want to synchronize and check it back into the **SmarTeam** database then click **Changes Report**. This operation automatically extracts the contents of the ZIP file into a temporary local work directory

**Note:** If only one object in a **Check In** state is listed, the first screen is not displayed; the second screen displays, assuming the object is selected for synchronization.

4. The **Changes Report** window, displays the Assembly and a list of all dependent objects that were modified or added. The complete Assembly structure is **not** displayed. Select the objects that you want to check out then click **Ok** to start the synchronization operation. Objects already checked out appear greyed and unchecked.

The **Changes Report** window displays all changes identified by the **Synchronize Assembly Helper**. The **Synchronize Assembly Helper** compares the files included in the extracted zip file (attached initially to the top level object during the **Check In** operation) and the file already exists in the Vault.

Click **Show Legend** to view the legend to understand the status of various files.



- ❑ **Changed** indicates that an existing in-vault file was changed and the logged-in user has **SmarTeam** authorization to perform the **Check In** operation on the object that points to that file. A grey arrow indicates that the file was changed but the logged-in user does not have the proper authorization.
  - ❑ **Should be Changed** indicates that an existing parent object was not checked out initially but a file attached to a child was changed, and therefore the parent file was changed (compared to the in-vault parent file) and it should also go through the Lifecycle process. A grey arrow indicates that **SmarTeam** authorization is **not** available to change that object.
  - ❑ **New** indicates that a new file was identified in the zip file with no previous revision in the vault.
5. After reviewing the **Changes Report**, the user clicks **Ok**. This operation activates the **SmarTeam** CAD integration, and the user needs to log in once more with the same user name and password used to log in to the **Synchronize Assembly Helper**. The activated CAD is determined according to the object file type. In addition, all objects belong to the specified assembly, which were found to have newer files and approved by the user going through the **Check Out** operation.
6. From this point, the user proceeds with the standard methodology of checking in the object through the CAD integration. You can now complete the check in operation by selecting **Lifecycle Check In** from the **SmarTeam** menu.

## Important Issues to Consider When Working with the Synchronize Assembly Helper

- ❑ The user who logs in to the **Synchronize Assembly Helper** must later log in to the CAD integration with the same username/password.
- ❑ The user who activates the **Synchronize Assembly Helper** needs to have the same configuration as used in the **SmarTeam Community Workspace** server.
- ❑ If a completely new assembly is created through a CAD and then checked in to a **pending** state through **SmarTeam - Community Workspace**, it is only needed to create a new object through **SmarTeam - Community Workspace** to the top level component and attach the zip file. During the synchronization operation, new objects will be created for the new parts.
- ❑ It is not recommended to perform a **Check Out** Lifecycle operation on objects in a **Check In** state.
- ❑ When performing a **Check In** operation on an Assembly via **SmarTeam - Community Workspace**, a Lifecycle operation is performed on the Assembly and not on the Assembly's Parts. Therefore, after using the **Synchronizer**, the Assembly will have a higher revision than the Assembly's Parts that were modified.