

SmarTeam - CATIA Web Integration Product

User's Guide

Version 5 Release 19

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Overview

This book is intended for the user who needs to become quickly familiar SmarTeam - CATIA Web Integration product.

This overview provides the following information:

- [SmarTeam-CATIA Web Integration Product in a Nutshell](#)
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SmarTeam - CATIA Web Integration Product in a Nutshell



SmarTeam - CATIA Web Integration Product is a seamless, integrated, rapidly usable drawing and document management tool for CATIA users. It gives you the power to manage your parts, products and drawings easily, effectively and affordably, and provides powerful functions to assist you in building assemblies.

SmarTeam together with the CATIA Integration product data management solution (PDM) is designed to give you the tools to create, edit, view and control CATIA documents, in an intuitive and friendly way.

SmarTeam is a revolutionary PDM solution. This philosophy stands behind the product and enables users to install, set up and implement a full fledged Product Data Management solution very easily and rapidly, while maintaining a broad spectrum of functionality.

SmarTeam streamlines the flow of documents through an organization's business process, thereby promoting communication, cooperation and

teamwork. SmarTeam together with the CATIA Integration provides a process-oriented approach which enables individuals to work together as a team throughout a product's life cycle.

What are the benefits of the web based SmarTeam - CATIA Web Integration Product?

SmarTeam - CATIA Web Integration Product is a new architecture of the SmarTeam CATIA Integration based on web applications.

The most important benefit is that no more installation of SmarTeam is needed on the client. SmarTeam - Web Editor enables secure product lifecycle collaboration through the SmarTeam database from standard Internet browsers. SmarTeam -Web Editor exploits standard web technologies to provide remote individuals and teams working on multi-platforms, with comprehensive access to the central SmarTeam database and managed files, enabling users to manipulate product data easily in a dynamic and secure environment from anywhere.

Before Reading this Guide



Before reading this guide, you should be familiar with basic Version 5 concepts such as document windows, standard and view toolbars. Therefore, we recommend that you read the *Infrastructure User's Guide* that describes generic capabilities common to all Version 5 products. It also describes the general layout of V5 and the interoperability between workbenches.

Note that the name of the product referred to in this user's guide has been changed to *ENOVIA SmarTeam - CATIA Web Product* (ENOVIA added). Whenever *SmarTeam - CATIA Web Product* is mentioned in the documentation, read *ENOVIA SmarTeam - CATIA Web Product*.

Getting the Most out of this Guide

This book is intended for users who need to use the SmarTeam - CATIA Web Integration product. The user should already be familiar with basic SmarTeam - CATIA Integration TDM functionalities and with CATIA Version 5 concepts such as document windows, standard and view toolbars.

To get the most out of this guide, we suggest you start reading the [User Tasks](#). For installation please refer to the installation guide of SmarTeam Web Editor as there is no installation on the client computer.

Conventions Used in this Guide


To learn more about the conventions used in this guide, see the [Conventions](#) section.


User Tasks


The links below lists the information you will find in this section.

- [Setting Up the CATIA Environment](#)
- [Connecting to the SmarTeam Database](#)
- [Saving Documents](#)
- [Document Lifecycle States](#)
- [Creating a Document from an Existing One Using New From...](#)
- [Refreshing your Display in CATIA](#)
- [Showing Profile Cards](#)
- [Managing Assemblies](#)

Setting Up the CATIA Environment

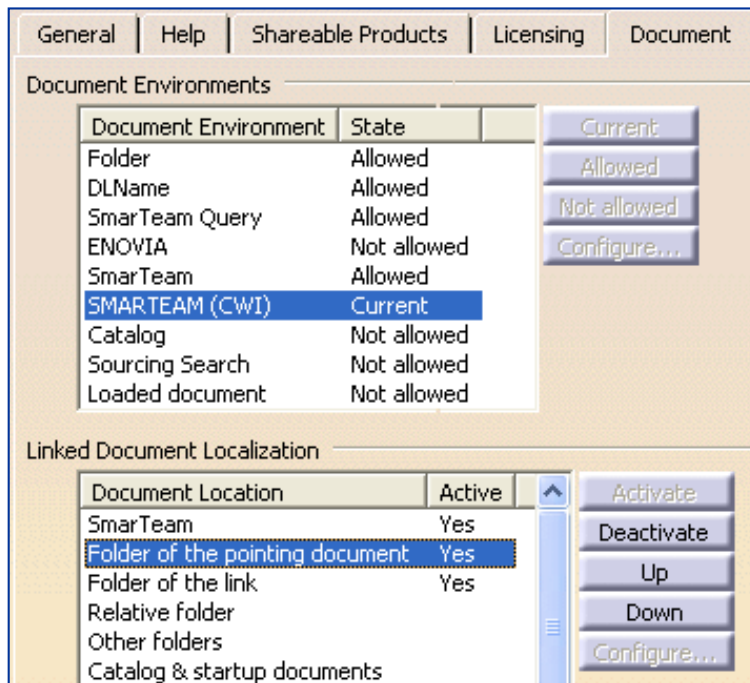
 This first task of this guide shows you how to set up the options you need for working in the CATIA environment.

 This task assumes that a CATIA V5 session is running and that SmarTeam client components are installed on your machine.

-  1. From your CATIA session, select **Tools > Options...** to access the options you need. The **Options** dialog box appears.
2. Select the **General** category in the left-hand box, if not already selected.

Document Tab

3. Click the **Document** tab.
- The **Document Environments** area defines the various ways of accessing your documents.
4. Select **SmarTeam (CWI)**.
5. Click the **Current** button.
- This lets you access documents stored in the SmarTeam vault.
6. In the **Linked Document Localization** area select **SmarTeam**.
- The **Linked Documents Localization** capability lets you define a personal strategy that will be used to locate your linked documents and therefore resolve document links.
7. Click the **Up** button.
8. Repeat the operation for **Folder of the pointing document**, which provides the current folder of your document.
- When done, you must get this:



SmarTeam Tab

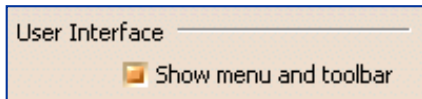
9. Select the **Compatibility** category in the **Options** dialog box.

10. Click the **SmarTeam (CWI)** tab.

The **SmarTeam** tab lets you customize compatibility settings in CATIA V5 in order to work in a SmarTeam CWI - CATIA Interoperability context.

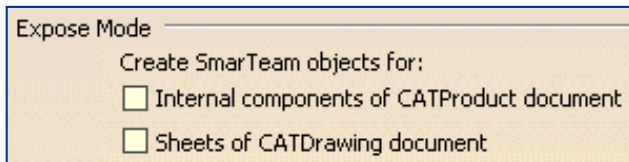
11. Select **Show menu and toolbar** in the **User Interface** area.

This option displays SmarTeam CWI menu and toolbar in your CATIA session.

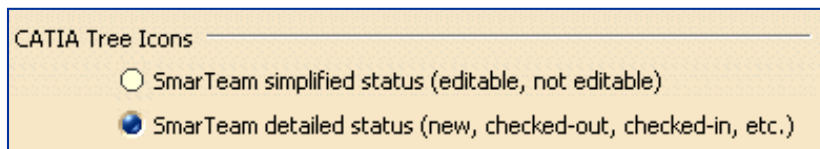


12. In the **Expose Mode** area, clear **Internal components of CATProduct document** and **Sheets of CATDrawing document** in order to be compatible with the SmDemo database.

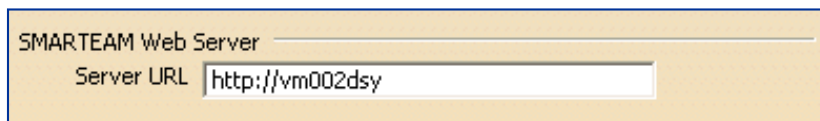
This ensures you do not create SmarTeam objects corresponding to the components of product documents and sheets whenever you check in CATProduct and CATDrawing documents.





13. Select **SmarTeam detailed status (new, checked-out, checked-in, etc.)**. This ensures that icons identifying all possible statuses for documents (new, checked-out, checked-in, released etc.), are displayed in CATIA specification tree.



14. Take a look at the **SmarTeam Web Server** area to ensure that you are using the requested server. Otherwise, enter the server's address.



15. Click **OK**  to close the **Options** dialog box.
16. Restart a CATIA session to take your modifications into account.
- You are ready to [connect to the SmarTeam Database](#).

 For more information about the different settings, see [Customizing](#).



Connecting to the SmarTeam Database




This task shows you how to connect to the SmarTeam database.



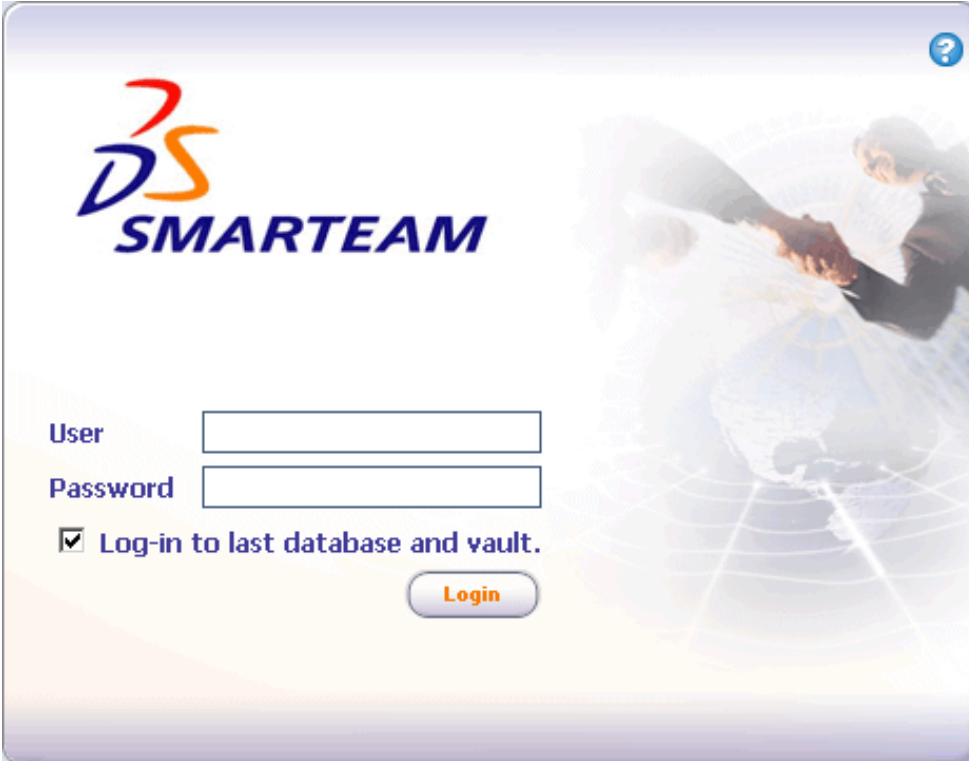
This task assumes that the web server's name was indicated in the **Options** dialog box as indicated in [Setting Up the CATIA Environment](#).



1. From the **SmarTeam** toolbar, select **Connect** .

Alternatively, select **SmarTeam** >  **Connect**.

The **SmarTeam Web Editor-Login** dialog box appears:

The image shows the SmarTeam Web Editor-Login dialog box. It features the SmarTeam logo (a stylized 'S' and 'M' in red and blue) at the top left. Below the logo are two text input fields labeled 'User' and 'Password'. Under the 'Password' field is a checkbox labeled 'Log-in to last database and vault.' which is checked. At the bottom center is a 'Login' button. The background of the dialog box shows a faint image of two people shaking hands over a globe.

2. Enter your user name and password.
'Joe' is the default user of the SmDemo database. Using this user, there is no need to enter a password to connect to the database.
3. Select **Connection**.
Now that you are connected, you are ready to work with SmarTeam.

Disconnecting

When exiting CATIA, by default you disconnect from the SmarTeam database. Because sometimes it may be useful not to disconnect from the Web Editor, you can modify this behavior by deactivating a dedicated setting. This setting is **Automatically disconnect from SmarTeam when exiting CATIA**. For more information, see [Connection](#) in the SmarTeam (CWI) page.


Connection


☐ Automatically launch connection on startup

☒ Automatically disconnect from SMARTEAM when exiting CATIA



Saving Documents

 This task shows you how to save a CATProduct document you created in a CATIA workbench, in the SmarTeam database. The instructions provided here also apply to any CATIA documents you want to save.

 This task assumes that you have just created a product 'MMLStructure.CATProduct', including five parts in a CATIA workbench.



1. Open the CATProduct document you want to save.

2. From the **SmarTeam** toolbar, click **Save** .

Alternatively, select **SmarTeam** > **Save**.

The **Save As** dialog box that appears. In case no leading project is defined, the dialog box lets you choose the project in which you wish to save the document. If, as shown below, a leading project exists, the dialog box displays the name of this leading project. For more about projects, see the SmarTeam documentation.

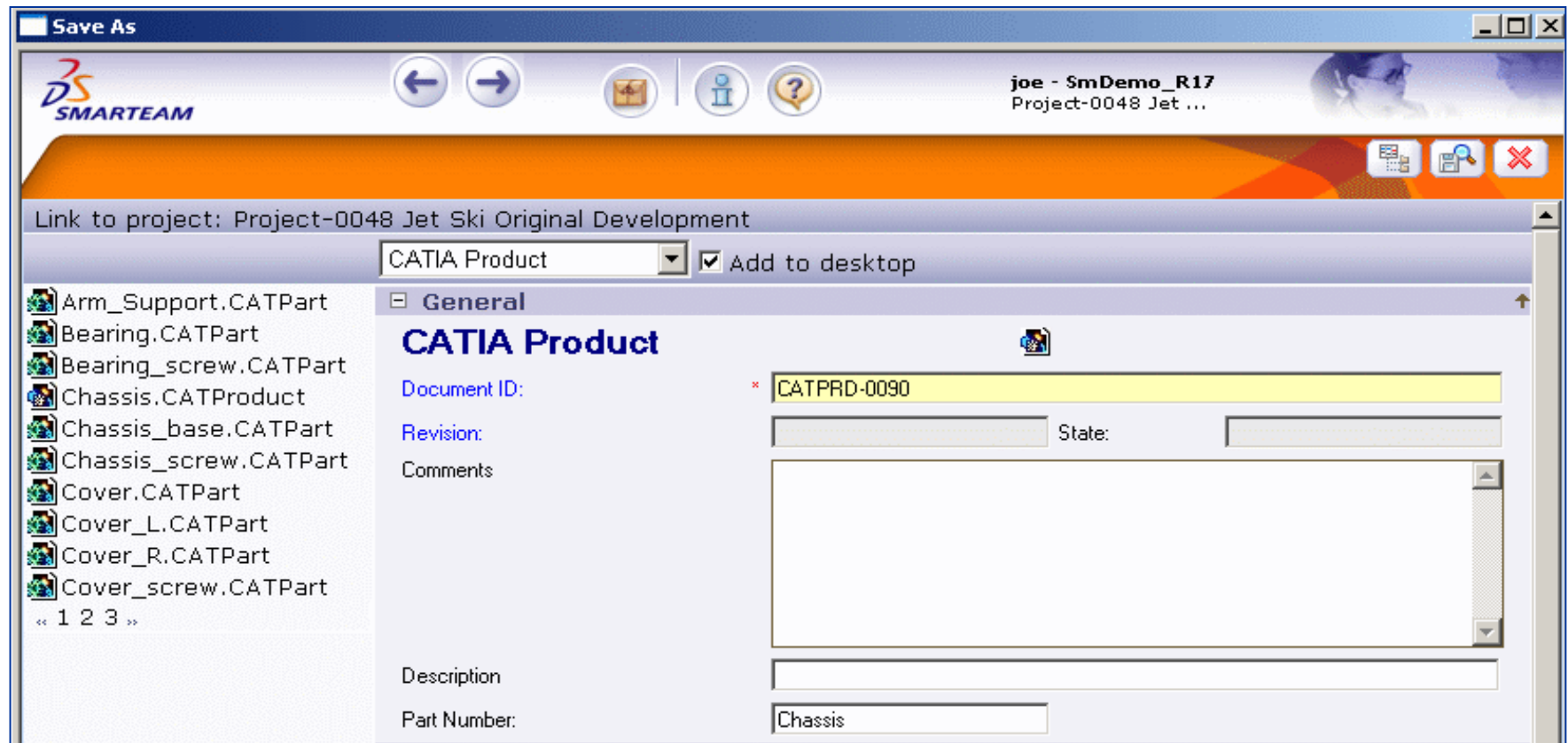
3. Select **Link to project** to save the document in the current project.

By default, this option is not selected.

4. Select **Add to desktop**, now available, to ensure that the document will be shown in the different SmarTeam windows. In case you do not select this option, the only way of finding this document will be by using the SmarTeam **Search** capability. For more information about searching for documents, see the SmarTeam documentation.

5. Click **Advanced** to access additional information.

This part of the dialog box shows all the different document linked to the CATProduct document you are saving.



6. Click on any of these CATPart documents.


The corresponding SmarTeam profile card is displayed. It provides an organized interface that displays the attributes of the selected part.




The profile card is divided into different groups of data, that change according to the type of object selected. As shown in our scenario, a CATPart profile card has three groups:

- **General**
- **System**
- **Notes**

You just need to click the + sign to the left of the group name to expand it and access the requested information.

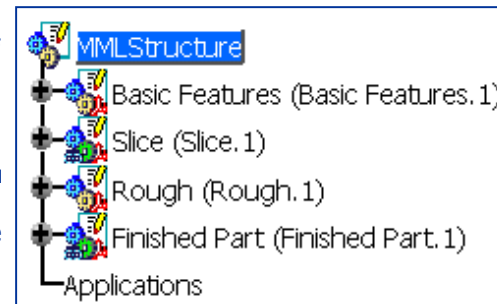
7. Clicking **Project Manager**  allows you to return to the initial dialog box. SmarTeam shows the profile card corresponding to the CATProduct document. In our scenario, five parts are to be saved. SmarTeam has already identified the product as shown in the document ID field of the document profile card:



8. Enter the information you need in the different editable fields of the profile card. Fill in the fields as described below in [Save As Dialog Box](#), or accept the default attributes. Other attributes are filled in automatically with CATIA information.
9. Now that you have entered your own information, click **Save**  to save the document in SmarTeam.
10. Take a look at the icons for the documents in CATIA specification tree. New icons indicate the current status of the CATProduct and CATPart documents. The document you created is now saved in SmarTeam, and you still can edit and save it.

Note that the SmarTeam status is displayed on the top right side of each document icon. Here, the icons indicate that the CATProduct document as well as CATPart documents can be edited.

There are two ways of displaying icons. A dedicated setting lets you choose the display that best meets your needs. Here, you can note that the icons are of the simplified type. For more about CATIA tree icons, see [Customizing](#).



Editing Documents

If after saving a document in SmarTeam as shown above, you later on edit and save this document in different ways (graphic properties, geometry etc.) in CATIA, these modifications are reflected in SmarTeam. The document's profile card displayed reflects the changes you made to the document.

Save As Dialog Box

The following describes the options in the **Save As** dialog box:

Name	Description
Add to desktop	Ensures that the document you are saving will be shown in the different SmarTeam windows. In case you do not select this option, the only way of finding this document will be by using the SmarTeam Search capability. By default, this option is not selected.
Link to project	Directly links the document to the chosen project
Advanced	Displays all the different parts linked to the CATProduct document you are saving.
Project Manager	Displays the project in which you are saving the selected document.
Save	Performs the Save operation and you exit the dialog box.
Cancel	Cancel the Save operation



Checking In Documents



This page provides instructions for checking in documents.

You will check in documents:

- After creating a new document: to protect the document from modifications that cannot be tracked, your first step in ensuring the document protection is to perform a Check In Lifecycle operation. See [Checking In a Document for the First Time](#)
- After a document has been checked out and perhaps modified. You then need to place it back into the vault. See [Checking In a Document \(other than the first time\)](#).


In both cases, the instructions to follow and detailed in this page are the same.




How to Check In Documents

Checking in a document means closing the document in your CATIA session and placing it in the electronic vault. Once placed in the vault, everybody can then access it to read it. However, the document is protected from unauthorized modifications.

The electronic vault ensures that only those persons with access permission may access a file, and that a file cannot be modified by more than one person at a time.

1. From the **SmarTeam** toolbar, click **Check In** .

Alternatively, select **SmarTeam** > **Life Cycle** >  **Check In**.
The **Check In** dialog box is displayed.

LifecyclePage

Check In

CATPRD-0089 Car_Suspension

Actions: Go to Tab

Operation: Check In

[Apply operation to branch](#)

Object settings


Comment


☐ Keep checked out

☐ Keep local file

Local folder

Phase

Effective from 

Effective until 

☒ Current revision ()

Profile card

CATPRD-0089 Car_Suspension

CICOMP-0019
CATFIT_Car_Suspension_Step1

CICOMP-0018
CATFIT_Car_Suspension_Step1

CICOMP-0017
CATFIT_Car_Suspension_Step1

CICOMP-0016
CATFIT_Car_Suspension_Step1

CICOMP-0015
CATFIT_Car_Suspension_Step1

CICOMP-0014
CATFIT_Car_Suspension_Step1

CICOMP-0013
CATFIT_Car_Suspension_Step1

CICOMP-0012
CATFIT_Car_Suspension_Step1

CICOMP-0011
CATFIT_Car_Suspension_Step1

CICOMP-0010
CATFIT_Car_Suspension_Step1

CICOMP-0009
CATFIT_Car_Suspension_Step1

CICOMP-0008
CATFIT_Car_Suspension_Step1

CICOMP-0007
CATFIT_Car_Suspension_Step1

CICOMP-0006
CATFIT_Car_Suspension_Step1

CICOMP-0005
CATFIT_Car_Suspension_Step1

CICOMP-0004
CATFIT_Car_Suspension_Step1

CICOMP-0003
CATFIT_Car_Suspension_Step1

CICOMP-0002

2. Fill in the fields as described in [Check In Dialog Box](#), or accept the default attributes.

3. Click **OK**  to confirm the **Check In** operation and exit the dialog box.

When done, the status of the document is changed to "Checked In" .

Note

While placing the document in the vault, the application also enables you to keep a copy of the document in your session (use [Keep Local File](#)), for instance to reuse it in another workbench.


Check In Dialog Box

The following describes the options in the **Check In** dialog box:

Name	Description
Set to No Operation	Performs no operation on the selected object
Set to Check In	Checks the selected document into the vault
Apply Operation to Branch	Applies this operation to the entire document branch
Comment	Allows you to enter any comments relating to the Check In process
Keep Checked Out	Keeps the file checked out for modifications after performing the Check In operation
Keep Local File	Keeps the file located in the working directory in read-only mode
Released Parents of Previous Revision	Links the object to all the released parents of the previous revision
Checked in Parents of Previous Revision	Links the object to the checked in parents of the previous revision
Phase	Open the combo box to select an option to define the phase for this revision. This field is descriptive only and does not affect the revision status
Effective From/Until	Click the Date button to enter applicable dates for effectivity in these fields
Current Revision	Checks the document in as a new revision.

Replace Previous Revision	Checks the document in under the previous revision, overwriting the previous revision
Apply Changes	Performs the Check In operation and keeps the dialog box open.
OK	Performs the Check In operation and you exit the dialog box.

Checking In a Document for the First Time

When a document is first created and saved into the SmarTeam database, it is automatically assigned the status "New". This means that the document has not yet been checked into a SmarTeam vault for safekeeping. To protect the document from modifications, place the document into the SmarTeam vault by checking it in. After the document has been checked in, its status is changed to "Checked In" .


Checking In a Document (other than the first time)

After a document has been checked out and perhaps modified, it must be placed back into the vault. At this point, you can check the document back into the vault in one of two ways:

- **Check In** - simply places the document back in the Check In vault. (You can later apply the **Check Out** operation on the document to make further changes).
- **Release** - moves the document to the Released vault.

What happens next?

At any time it is possible to reopen the document in your CATIA session. If you need to modify it, the part must be checked out. Otherwise, the part can be copied in your session in read-only mode.



 To be able to make changes to a document checked in to the vault, check it out of the vault as explained in [Checking Out Documents](#).



Checking Out Documents



When you need to make modifications to a checked-in document, you must check it out of the vault.

When the checked out document is launched into CATIA for modification changes, no other user can currently modify it, but other users can view it or copy the file to their working directory. After the document is checked back in or released, the status is replaced by Checked In  or Released . For more about the Released status, see [Releasing Documents](#).

Depending on whether the document you want to modify is in your CATIA session or not, the application behaves differently:

- If the document is in your session, you can check it out before modifying it, or if you start modifying it, the application detects it and then prompts you to check it out. This behavior is made possible if **Display Check-Out/New Release dialog box on first modification** is active. For more information about this option, see [SmarTeam \(CWI\)](#).
- If the document is not in your session and that you are opening it, you can use the **Check Out** option before confirming the open operation.

This task shows you how to check out a document from CATIA.




This section provides the following information:

- [How to Check Out Documents](#)
- [Check Out Dialog Box](#)




How to Check Out Documents

You can perform the Check Out operation if the part is currently displayed in your session (in read-only mode), or not.

1. Select the document you want to check out.
2. Select **SmarTeam > Life Cycle >  Check Out**.
The **Check Out** dialog box is displayed.
3. Fill in the fields as described below in [Check Out Dialog Box](#), or accept the default attributes.
4. Click **OK** .
When done, the status of the document is changed to "Checked Out" . You can then modify the document. A new revision number is assigned to it.

Using the SmarTeam Open For... Capability

It is also possible to check out a document as follows:

1. In the Web Editor, once the corresponding profile card of the document you want to check out is displayed, just click **OK** .
This displays the **Open For...** window.
2. You then just need to click **Check Out** in that window.
This displays the [Check Out](#) dialog box.
3. Perform steps 3 and 4 as described in the instructions provided above.

Note

The application also enables you to copy a file (use [Set to Copy File](#)) to your working directory without checking it out of the vault. This is useful when another user is working with the document (and has checked it out of the vault), but you wish to view the document at your desktop.

Set to Copy File also to be used whenever you are handling a CATProduct document including several documents. In case you do not need to check out all of these documents, you can therefore restrict the number of documents to be checked out.

Check Out Dialog Box

The following describes the fields in the **Check Out** dialog box:

Name	Description
Actions	
• Set to No Operation	Performs no operation on the selected object
• Set to New Release	Makes a new copy of the released document placed in the Released vault. The resulting document is a new revision of the source document.
• Set to Copy File	Copies the file of a document to your working directory without checking out the document from the vault. You can view the document in your working directory, but you cannot modify it.
• Set to Check Out	Checks the selected document out of the vault
Go to Tab	Selects the group to which to jump directly (optional)
Apply Operations to Branch	Applies this operation to the entire document branch
Switch Children to Latest Available	Switches the children of the selected object to the latest available objects
Global Settings Group	
• File Name	Shows the name of the physical name (name on the disk) of the file to check out
• Local folder	Contains the directory path of the vault in which the document's file will be located
• Comment	Allows you to enter any comments relating to the Check In process
• Do not get the file from the vault	Performs the check out operation without copying the file from the vault to the working directory


Leading Object Settings Group	
<ul style="list-style-type: none"> • Phase 	<p>Defines the phase for this revision:</p> <ul style="list-style-type: none"> • Yes: replaces existing local files when checking out • No: leaves existing local files when checking out • Yes, for read only
<ul style="list-style-type: none"> • Current Revision 	Displays the current revision.
<ul style="list-style-type: none"> • Next revision 	Presents the next revision number to be applied to the document after completing this check out operation.



To check the document back into the vault for safekeeping, check the document in as explained in [Checking In Documents](#).



Releasing Documents

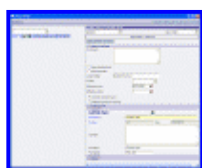
 After a document has been modified and when it is ready to be moved to the next development phase, you place it in the Released vault. The Release operation is generally performed when a supervisor releases a stage of development of the document.


Once a document is placed in the Released vault, it can only be released as a new revision to ensure the safekeeping of this version of the document. The document can be checked out as a **New Release** with a new revision number.


You can perform a **Release** operation on a document assigned one of the following states:

- **New**
- **Checked Out**

-  1. Select **SmarTeam > Life Cycle >  Release**.
The **Lifecycle Page** dialog box is displayed.



2. Fill in the fields as described in [Release Dialog Box](#), or accept the default attributes.
3. Click **OK**  to confirm the **Release** operation and exit the dialog box.

When done, the document is then assigned the "Released" status .


Release Dialog Box

The following describes the options in the **Release** dialog box:

Name	Description
Set to No Operation	Performs no operation on the selected object
Set to Check In	Checks the selected document into the vault
Apply Operation to Branch	Applies this operation to the entire document branch
Comment	Allows you to enter any comments relating to the Check In process
Keep Checked Out	Keeps the file checked out for modifications after performing the Check In operation
Keep Local File	Keeps the file located in the working directory in read-only mode
Released Parents of Previous Revision	Links the object to all the released parents of the previous revision
Checked in Parents of Previous Revision	Links the object to the checked in parents of the previous revision
Phase	Open the combo box to select an option to define the phase for this revision. This field is descriptive only and does not affect the revision status
Effective From/Until	Click the Date button to enter applicable dates for effectivity in these fields
Current Revision	Checks the document in as a new revision.
Replace Previous Revision	Checks the document in under the previous revision, overwriting the previous revision
Apply Changes	Performs the Check In operation and keeps the dialog box open.
OK	Performs the Check In operation and you exit the dialog box.

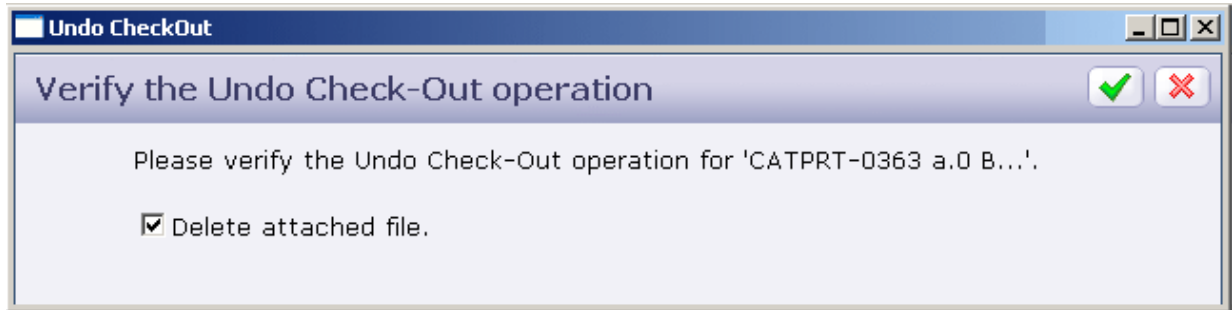



Undoing Check Out Operations


 You can cancel the check-out of a document as explained in this task.

-  1. Select **SmarTeam > Life Cycle >  Undo Check Out**.


The **Undo Check Out** dialog box is displayed, in which you are prompted to verify the operation you are about to perform.



2. Click **OK**  to confirm the operation and exit the dialog box.

Any changes made following the check-out are lost. The document status reverts to "Checked In" .

Note that the **Undo Check Out** capability is not fully supported by modified documents. We recommend you save the documents before.

 To know more about Check Out operations, see [Checking Out Documents](#).



Creating a Document from an Existing One Using New From...

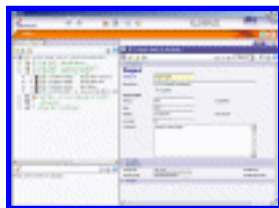


In the CATIA session you can create a new document based on an existing SmarTeam database document. To do so, you need to use **New From....** This task shows you how to do so.




1. Select **SmarTeam** >  **New From...**

The **Open** dialog box is displayed, showing you your leading project.




If the document to be used as a template is located in another project, select the **All Projects** button on top of the window, and navigate to the project of interest. Another way of accessing the document is to perform a search operation. For more about searches, see the SmarTeam documentation.

2. Select the requested document.
3. Click **OK**  to confirm the creation operation.
A new document is created from the document you selected in SmarTeam. In our example, the original document was a CATProduct document.



Refreshing your Display in CATIA



The **Refresh**  command updates the product structure and file desk icons with regard to SmarTeam information.

This is particularly useful for concurrent engineering. For instance, if you are using checked-in parts within their assembly, you can use **Refresh** to check whether its loaded parts correspond to the latest revision. Another user may have performed a check-out, modifications and a check-in while the first user is still using the old file revision.




1. Select **SmarTeam** >  **Refresh**.

The display of icons representing documents in the specification tree is updated. For more about the different icons, see [CATIA Tree Icons](#).



Showing Profile Cards




The **Show Profile Card**  command provides the database view of the document currently displayed in a CATIA session. If you wish to view the relationships between documents open in your CATIA session and other documents as saved in SmarTeam, you can also use this capability.

It is available for all documents and can be accessed:

- From CATIA workbench
- From CATIA Desk tree



From CATIA Workbench

1. Select the document of interest.
2. From the **SmarTeam** toolbar, click **Show Profile Card** .

Alternatively, select **SmarTeam** >  **Show Profile Card**.

A SmarTeam document window opens, giving access to the profile card displaying information corresponding to the selection as saved in the SmarTeam database. If your selection contains a new entity not saved in SmarTeam, the application informs you.



Note that the capability does not apply to multi-selected documents.

From CATIA Desk Tree

The **CATIA Desk** window lets you view the relationships between different documents and obtain information about their properties.

1. In the **CATIA Desk** window, right-click the document of interest.

Once in the window, you can use **Show Profile Card**  for all

documents.

2. Select **SmarTeam (CWI) > Show Profile Card** contextual command.

The profile card of the selected document is now displayed.


More About Profile Cards

The profile card is divided into different groups of data, that change according to the type of object selected.


Profile cards are custom-designed by your system administrator. For more information, see the SmarTeam documentation.



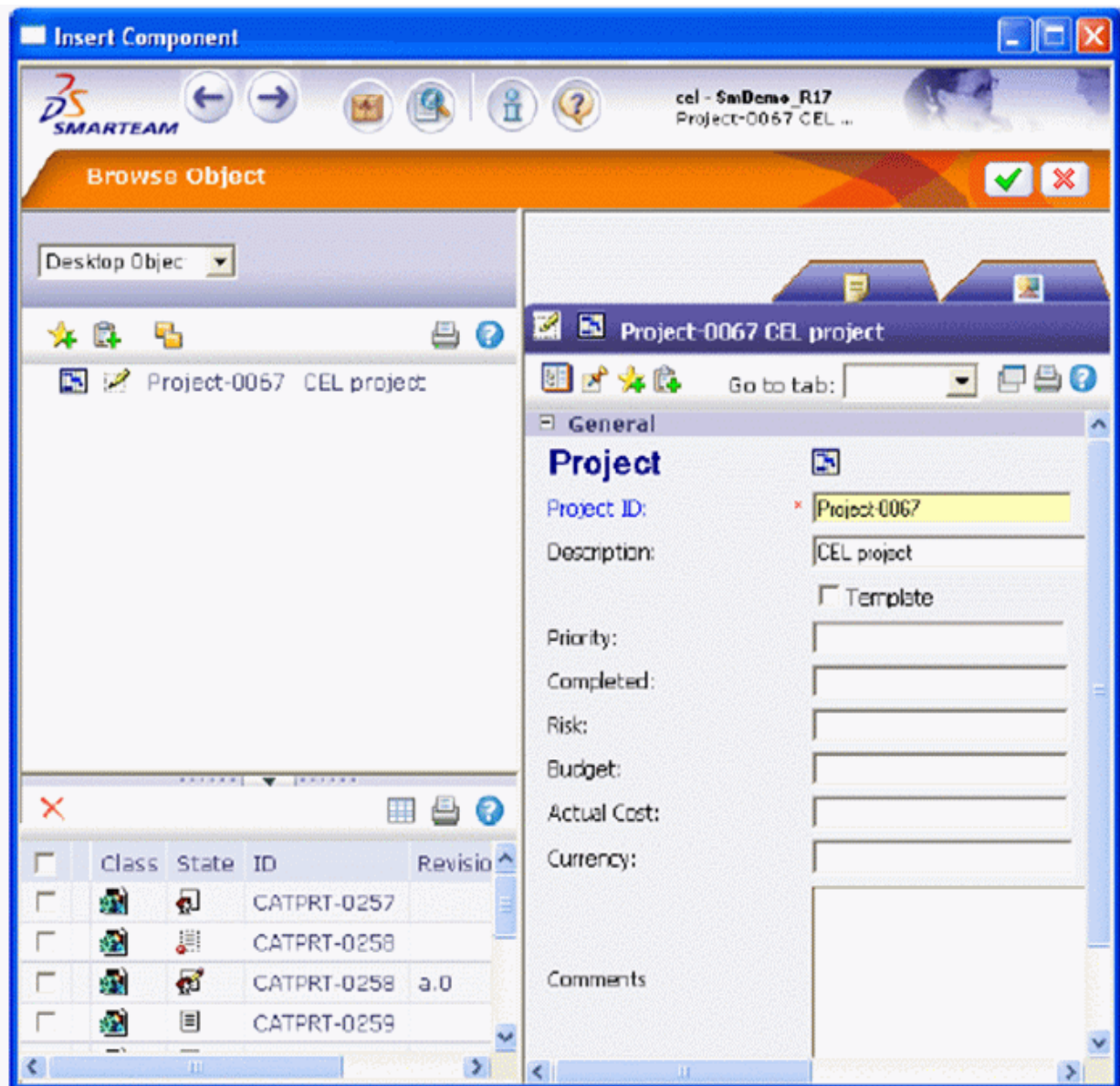
Managing Assemblies


 This task shows you how to use the **Assembly Management** commands. These enable you to insert existing parts, assemblies as components of the current assembly and to replace an existing part or product or a component of the current product.

Inserting a Component

1. In CATIA specification tree, select the document you wish to replace from the assembly.
2. Select **SmarTeam > Assembly Management >  Insert Component**.

The **Insert Component** dialog box that appears, displays your leading project to let you access the required parts or products.





3. Select the document you want to insert.
This displays the corresponding profile card to the right of the dialog box. You can then check if it is the part you wish to insert in your CATProduct document.
4. Click **OK**  to confirm the insertion.
The CATProduct document now contains the inserted document. More precisely, that document is a read-only copy of the original document still in the vault.

Replacing a Component

Perform the same steps as for component insertion described above but this time select **SmarTeam > Assembly Management > Replace Component**.

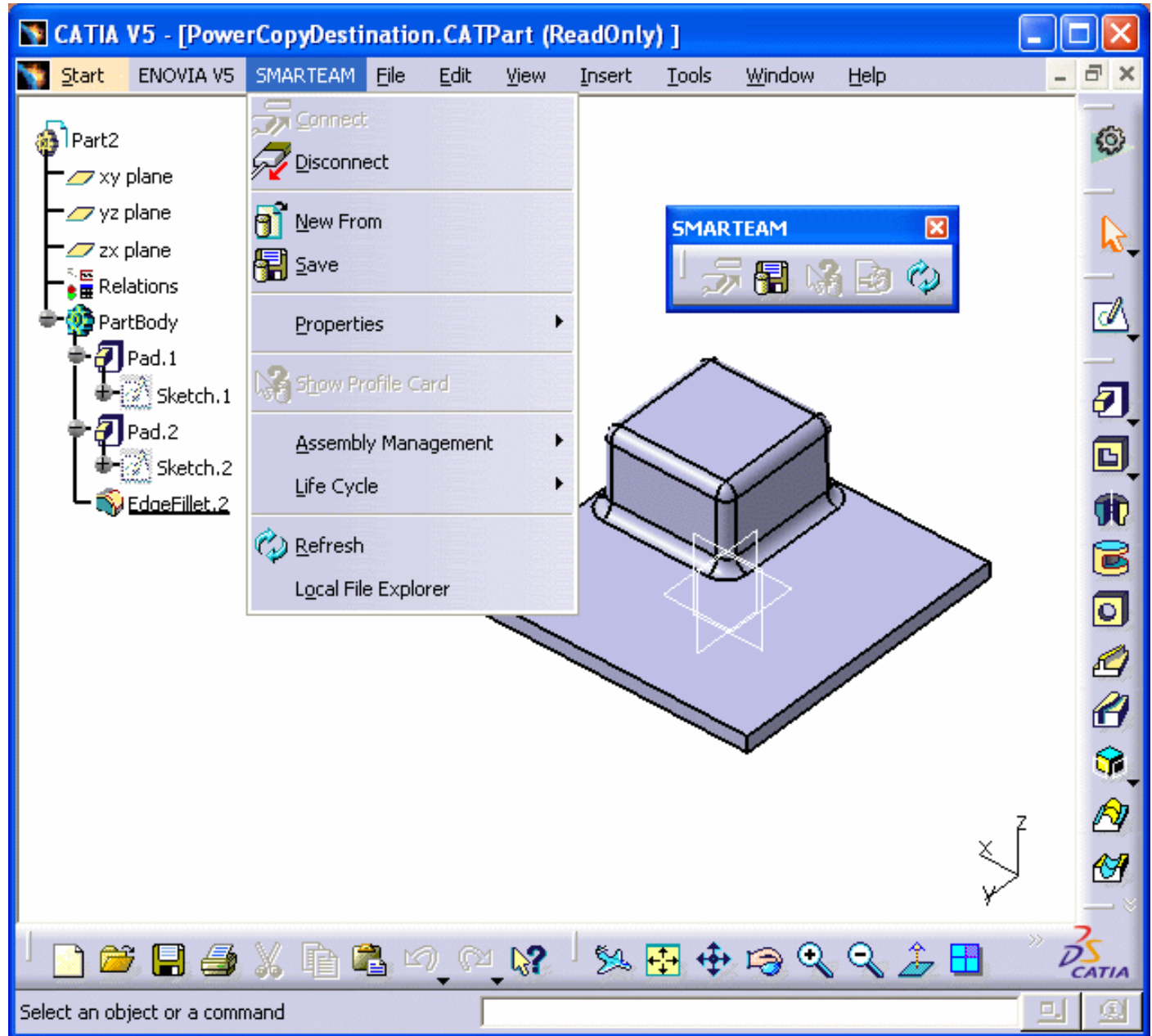
Replace with Selected Revision

1. In CATIA specification tree, from your assembly select the document you wish to replace.
2. Select **SmarTeam > Assembly Management >  Replace with Selected Revision**.
The dialog box that appears, displays all revisions related to the document to be replaced.
3. Select the revision you want to use.
The **Copy File** dialog box is displayed.
4. Click **Ok**  to confirm the change.



Interface Description

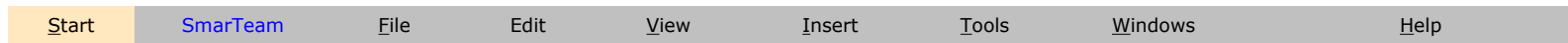
The SmarTeam - CATIA Web Integration Product interface looks like this:



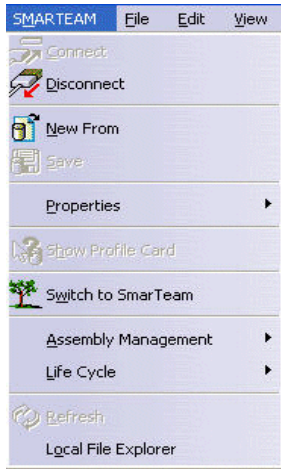
For more information about the items of the **SmarTeam** menu bar or toolbar, either click on the item concerned in the image above or go into one of the two sections below.

[SmarTeam Menu](#)
[SmarTeam Toolbar](#)
[Progress Indicator](#)

SmarTeam Menu



SmarTeam



For

Connect

See

[Connecting to the SmarTeam Database](#)

Disconnect

[Connecting to the SmarTeam Database](#)

New From

[Creating a Document from an Existing One Using New From...](#)

Save

[Saving Documents](#)

Properties

- **Load from Database** [Defining Property Mapping](#)

Switch to SmarTeam

Launches the SmarTeam - Editor (Web-based) application

Show Profile Card

[Showing Profile Cards](#)

Assembly Management

- [Insert Component](#)
- [Replace Component](#)
- [Replace with Selected Revision](#)

Life Cycle

- **Checking In** [Checking In Documents](#)
- **Release** [Creating a New Release](#)
- **Check Out** [Checking Out Documents](#)
- **New Release** [Releasing Documents](#)
- **Undo Check Out** [Undoing Check Out Operations](#)

Refresh

[Refreshing your Display in CATIA](#)

Local File Explorer

Lists all files copied to the *view* and *work* directories. For further information on the SmarTeam File Explorer refer to the SmarTeam – Web Editor online help.

SmarTeam Toolbar

This section describes the icons available in the SmarTeam (CWI) workbench. There is only one toolbar, which lets you access some of the capabilities available from the [SmarTeam Menu](#).



Connect

See [Connecting to the SmarTeam Database](#)



Save

See [Saving Documents](#)



Show Profile Card

See [Showing Profile Cards](#)



Switch to SmarTeam

Launches the SmarTeam - Editor (Web-based) application



Check In

See [Checking In Documents](#)



Refresh

See [Refreshing your Display](#)

Customizing

A certain number of settings is available to let you customize your session.

The customization you perform is stored in permanent setting files, meaning that these settings are not lost when you end your session.

To access them, proceed as follows:

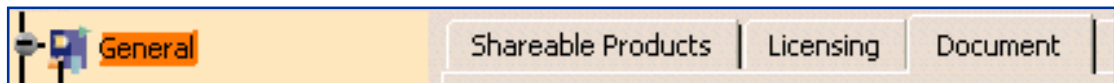


1. Select **Tools > Options**.

The **Options** dialog box displays.

2. Select the **General** category in the left-hand box, if not already selected.

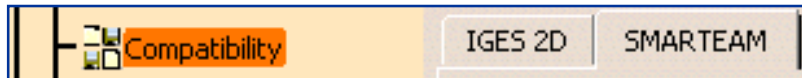
Various tabs are displayed.



The **Document** tab provides options dealing with:

- [Document Environments](#)
- [Linked Document Localization](#)

3. To access settings about compatibility, select the **Compatibility** category in the left-hand box.



The **SmarTeam** tab provides options dealing with:

- [User Interface](#)
- [Connection](#)
- [Expose Mode](#)
- [CATIA Tree Icons](#)
- [Modifications to Read-Only Documents](#)
- [SmarTeam Web Server](#)

4. Change these options according to your needs.

5. Click **OK**  when done to validate your settings.

Administration Tasks

This section assists administrators in configuring their environments to fit their specific needs. The following topics are discussed:

- [Defining Property Mapping](#)
- [Defining Property Mapping for the Revision Block](#)
- [File Naming](#)

Defining Property Mapping



Mapping properties between CATIA and SmarTeam is one of the key features of CATIA-SmarTeam integration. Properties can be mapped on both directions: from CATIA to SmarTeam and from SmarTeam to CATIA. Some CATIA actions perform mapping on only one direction, other on both directions. This mapping definition is usually performed by the administrator.

This page deals with the following issues:

- [When are Properties Automatically Mapped?](#)
- [Integration Tools Setup Utility](#)
- [Using the Integration Tools Setup Utility to Define Properties Mapping](#)
- [Using 'Load From Database'](#)

When are Properties Automatically Mapped?

Once the mapping definition has been done by the administrator, CATIA users can then take benefit of this during their daily works. To be more precise, properties are mapped automatically:

- during first **SmarTeam > Save**, properties are mapped on both directions (properties are first mapped from CATIA to SmarTeam, then profile-card are displayed, then properties are mapped from SmarTeam to CATIA) during:
- next **SmarTeam > Save**, properties are mapped only from CATIA to SmarTeam
- **Check In** or **Release**, properties are mapped from CATIA to SmarTeam
- **File > Open**, properties are mapped from SmarTeam to CATIA
- **Check Out** or **New Release**, properties are mapped from SmarTeam to CATIA
- **SmarTeam > Properties > Load From Database**, properties are mapped from SmarTeam to CATIA

Load From Database

In some scenarios, you may want to update manually CATIA properties from SmarTeam values. For instance, if you have modified some attributes in a SmarTeam profile-card, you may want to update the CATIA properties accordingly.

This is possible by using the **SmarTeam > Properties > Load From Database**. Selecting this capability automatically retrieves all SmarTeam properties of current document and updates corresponding CATIA attributes according to the mapping definition.

Integration Tools Setup Utility

The most commonly used tool to define properties mapping is the **Integration Tools Setup** utility. This utility defines the settings of the integration between SmarTeam and an external CAD system. One of these settings is the properties mapping.

Using **Integration Tools Setup** utility, the administrator can define mappings between CATIA information and SmarTeam properties. In addition to this mapping, the direction is also set (mapping only from CATIA to SmarTeam or from SmarTeam to CATIA or both).

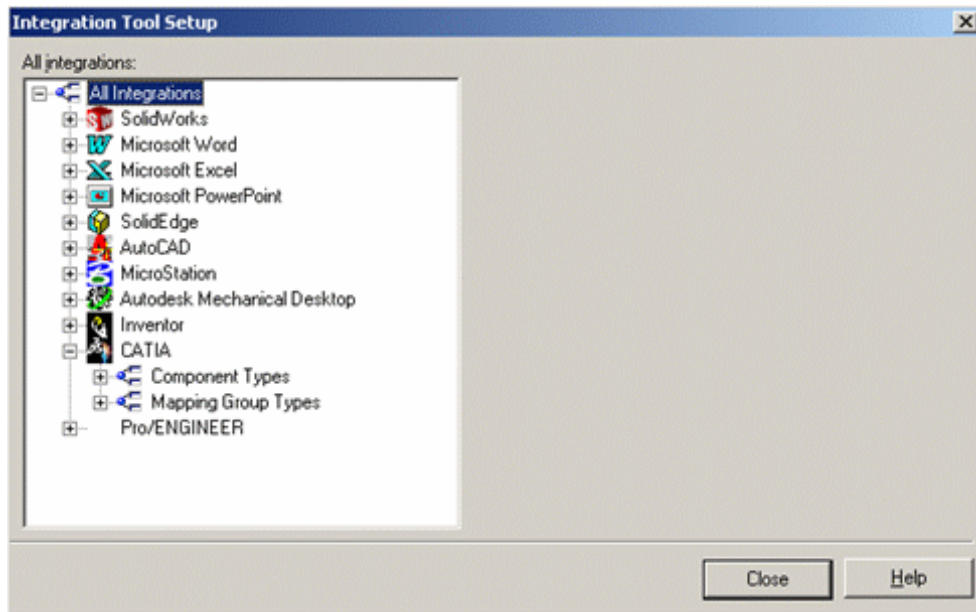
Using the Integration Tools Setup Utility to Define Properties Mapping

The **Integration Tool Setup** utility is available on the SmarTeam server (it may also be available on SmarTeam client machines). For reference information about the **Integration Tool Setup** utility, see the SmarTeam documentation.

1. To launch it, select **Start > All Programs > SmarTeam > Administrative Tools > Integration Tools Setup**.

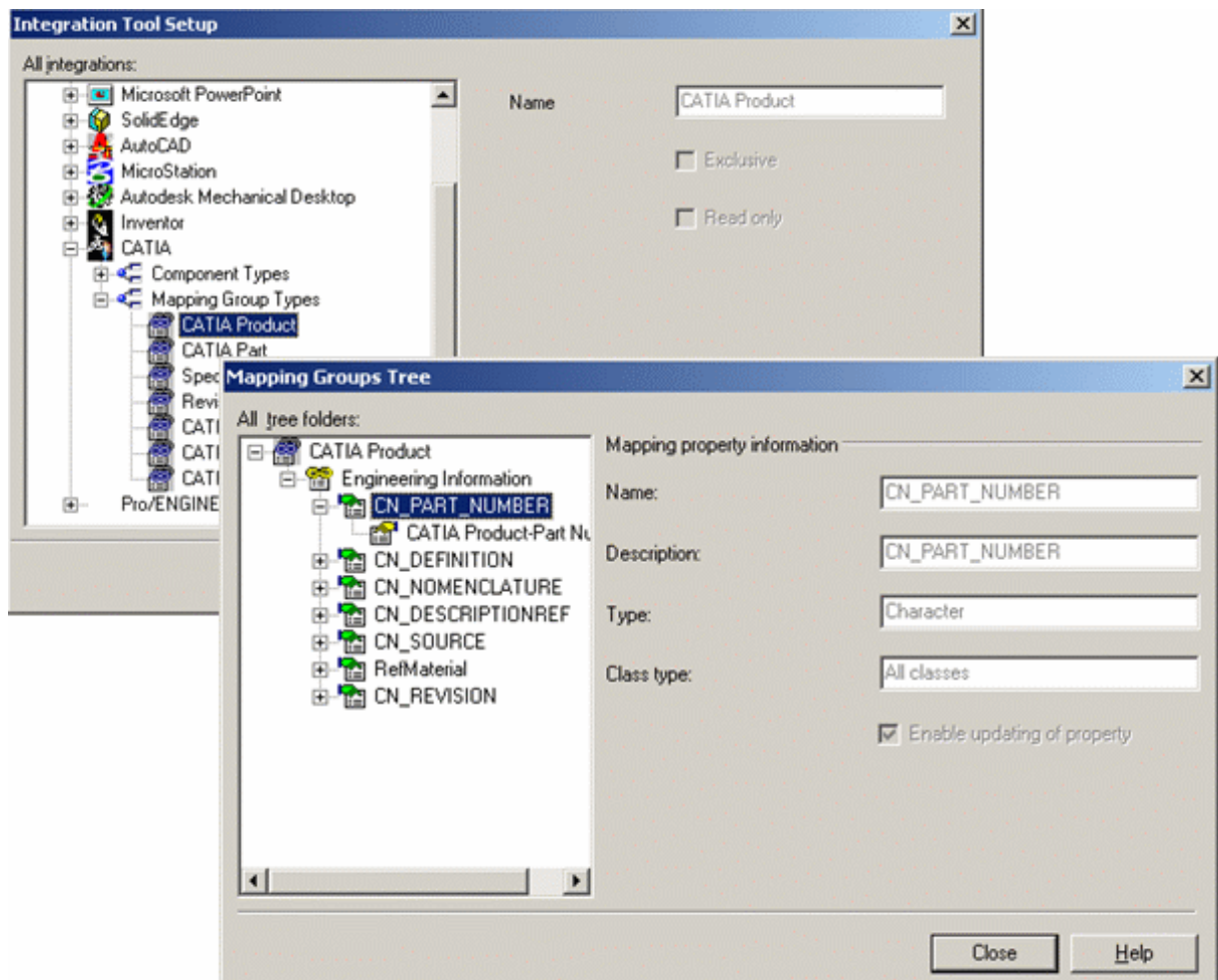
After the database selection and the user login, the main window is displayed.

2. Locate and open the CATIA; section. You will see two categories:
 - o **Component Types**
 - o **Mapping Group Types**: dedicated to the definition of properties mapping.



Mapping Group Types and **Mapping Groups** classify all single mappings. The **Mapping Group Types** category contains a list of Mapping Group Types;. Then, each Mapping Group Types groups "Mapping Groups". Each Mapping Groups groups "Mapping Properties". Finally a Mapping Property defines:

- o the name of the CATIA information
- o the corresponding SmarTeam attribute
- o the mapping direction



Each CAD integration (including CATIA integration) need to define their rules for the classification of "Mapping Properties" under dedicated "Mapping Group Types" and "Mapping Groups".

Mapping Directions

Directions	Definition
From SmarTeam to CATIA (unidirectional)	Attributes controlled by SmarTeam like revision, state or ID should be mapped in this direction only.
From CATIA to SmarTeam (unidirectional)	This is dedicated for CATIA attributes (like product properties) that you want to store in the database (for query purpose for instance)
Both (bidirectional)	This kind of mapping is possible but is not recommended because it may be difficult to the user to know where (in CATIA or in SmarTeam) is the official value of the property.

Units Management

CATIA attributes may have units: for instance, a $f(x)$ parameter representing a length may be associated to the "Length" magnitude. Then, the user is able to decide which unit will be used to display the attribute in CATIA dialogs.

Note that changing the displayed unit does not change the value inside the CATIA document: CATIA attributes are always stored with a defined unit (for instance, weights are stored in kilogram)

Unfortunately, SmarTeam attributes cannot be associated to magnitudes or units.

It has been decided that the mapping between CATIA and SmarTeam will be always performed based on the CATIA stored unit.

Rules for Mapping Definitions

We consider that in CATIA there are many groups of attributes, all of them with the same semantics: product properties, drawing sheet properties, user parameters.

We will use **Mapping Group Types** to define the mapping of each of these groups of attributes. **Mapping Group Types** correspond to these groups of CATIA attributes. For instance, we will have a **Mapping Group Type** for the definition of the mapping of all product properties and another one for the definition of all user parameters, a third one for the future document properties;

Some of these **Mapping Group Type** will be available for all CATIA documents. This is the case for instance for the Mapping Group Type containing the mapping of the user parameters. Other Mapping Group Types will be available only for some specific CATIA documents. For instance, the Mapping Group Type defining the mapping of product properties will be only available for CATProduct and CATPart document.

Even if a **Mapping Group Type** is dedicated to all CATIA documents, the customer may want to define specific mappings for specific documents and other mapping for other documents. This can be done by defining specific **Mapping Groups** for specific documents:

- if mappings are defined in a Mapping Group named "All", they will be available for all documents
- if mappings are defined in a Mapping Group which name correspond to a CATIA document type (for instance "CATProduct; or CATPart), they will be available only for this specific type of document.

Following is a subset of known CATIA document types:

- CATProduct
- CATProduct_ASMPRODUCT (a specific type dedicated to product internal components)
- CATPart
- CATDrawing
- CATDrawing_Sheet (a specific type dedicated to drawing sheets)
- CATProcess

Notes:

- Every document will take benefit of the "All" mapping group and also of the dedicated mapping group corresponding to its document type
- If the user decides to arrange his mappings in various mapping groups, then a mapping property defined in "All" mapping group should not be declared anywhere else (because both mappings will be run and we cannot know in which order they will be called)

CWI Mapping Group Types

Following is the list of all Mapping Group Types recognized by CWI.

Intrinsic Properties

This Mapping Group Type is used to define the mapping of all intrinsic properties of documents or features.

Document and features have some intrinsic properties (properties which are automatically available. Product and Parts have the following intrinsic properties:

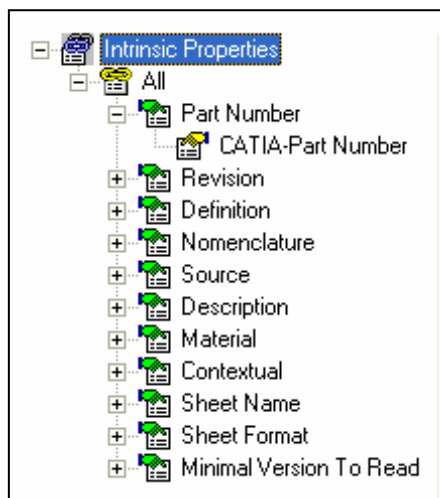
Properties	Availability
• Part Number	Available on both product and part
• Revision	Available on both product and part
• Definition	Available on both product and part
• Nomenclature	Available on both product and part
• Source	Available on both product and part
• Description	Available on both product and part
• Material	Material is stored on root-product reference. But in case of internal components, it is stored at the instance level
• Contextual	Available on CATPart document. In case it is designed in the context of a CATProduct document, the contextual information is the filename of the CATProduct (without the path)
• Sheet Name	Available on drawing sheets.
• Sheet Format	Available on drawing sheets.
• Minimal Version To read	Available on all CATIA V5 documents. Indicates the minimal CATIA version necessary for reading the document. The string looks like: CATIAV5R14

Even if some mapping types are only applicable to specific document types, they can be defined in a single Mapping Group named "All" or they can be defined in Mapping Groups dedicated to specific document types. But don't try to define a Mapping Type named "Sheet Name" in a Mapping Group named "CATProduct". It will be ignored because "Sheet Name" is not a recognized name in the context of a "CATProduct" document !

Example

In this example, all intrinsic properties are defined in a single Mapping Groups named "All". It means that these mappings will be applicable to all documents.

Of course, if one MT is not applicable to current in-work document, it will just be skipped for this document.



Product Properties

This Mapping Group Type is used to define the mapping of the Product other properties

These properties are created in CATIA with the **Define other properties;;** button that is displayed in the Product tab of the **Product** properties dialog. Once created, they are displayed on the ;Product; tab of the ;. There are also displayed in the Formulas; dialog with a Properties; prefix in front of their name.

This Mapping Group Types can be applied on CATProduct document, Internal Product of CATProduct and CATPart document.

As usual, mapping properties can be created inside a single Mapping Group named "All" or inside a Mapping Group which name correspond to a specific document type.

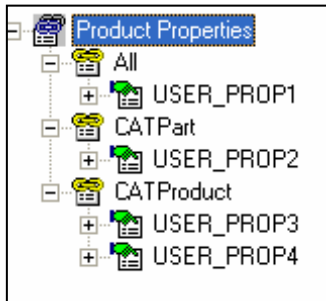
Mapping Property name correspond to the exact name of the CATIA property.

Example

In this example, we have one product property called 'USER_PROP1' which is applied on all documents.

Then, we have one product property called 'USER_PROP2' which is dedicated for CATPart documents.

The two last product properties are dedicated for CATProduct documents.



User Parameters

This Mapping Group Types is used to define the mapping of user parameters.

user parameters = correspond to f(x) parameters created by the user with "New Parameter of type" button of "Formulas" dialog. These properties may be created on various CATIA features (on products for instance).

NOTE: In a CATDrawing document, user parameters are defined only at the level of the document itself.

Mapping Property name correspond to the exact name of the CATIA user parameter.

Note that only parameters created by the user will be allowed for the mapping. If you want to map an internal parameter (for example the pad's thickness) you will have to create a user parameter that drive this internal parameter and use the name of this user parameter as Mapping Property name.

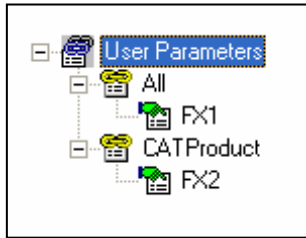
NOTE:

In CATProduct document, User parameters may be defined on the root-product or on internal components.

Example

In this example, we have one user parameter called FX1 which is dedicated to all documents.

Then we have another user parameter called FX2 which is dedicated to CATProduct documents.



NOTE:

If CWI ExposeMode is set to true, parameter will be read at the feature level, then if not found, at the document level. But parameter will always be written at the feature level.

For instance, if we have defined that FX1 is a user parameter which is mapped between CATIA and SmarTeam and if we are currently working on a document which has this user parameter set at the document level (ie: it is set on the root product) and if we are currently running the mapping on an internal component of this document and if this internal component does not have a FX1 user parameter, then, component profile-card will be filled with FX1 value read from the root-product.

If CWI ExposeMode is set to false, parameters will always be read and written at the document level.

A Reserved Mapping Group Type

In addition to the Mapping Group Types described above, "Revision Block" Mapping Group Type has been defined to drive the behavior of the integration code.

"Revision Block" Mapping Group Type is used to define which SmarTeam attributes will be displayed in drawing revision blocks.

Problematic Mapping Definition

As said previously, mapping can be either defined in Mapping Group named "All" or in a Mapping Groups which name correspond to a specific document type.

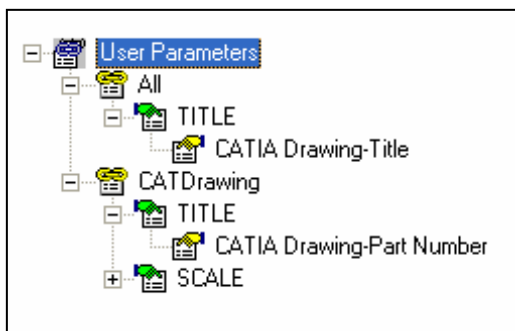
Definition of the same mapping on both locations is not recommended because it will produce unpredictable results.

Example

In this example, we see that 'TITLE' user parameter is defined twice but with different mappings.

At the 'All' level, it is mapped to CATIA Drawing 'Title' field.

At the 'CATDrawing' level, it is mapped to CATIA Drawing 'Part Number' field.




When running a mapping "from CATIA to SmarTeam", there are no particular problem: the CATIA TITLE value will be stored on both locations.

But the problem will occur when running the mapping "from SmarTeam to CATIA". During this process, there may be two SmarTeam values (one from 'Title' field, the other from 'Part Number' field) to be stored in one single CATIA user parameter.

Unfortunately, there is no way to define which Mapping Group will be run first. The 'All' one or the 'CATDrawing' one. This is the reason why the result will be unpredictable.

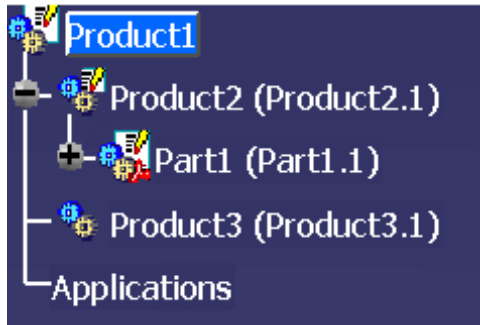
Using 'Load From Database'

Launching the **Load From Database** command performs the properties mapping on all objects belonging to the document of the selected object. For instance, if you have selected one component of a product stored in SmarTeam, all components of the document will be treated. You can select any component belonging to the document, even if selected component is not already stored in SmarTeam.

Only properties mapping from SmarTeam to CATIA will be run (use **SmarTeam** >  **Save** to perform mapping from CATIA to SmarTeam)

After properties mapping has been performed, there is no message indicating that the job has been done.

In the following example, if you want to apply **Properties > Load From Database** on the root CATProduct document, you need to activate either "Product1" or "Product2".



Methodology

Methodology and conceptual information about the following topics are provided in this section.

- Tools For Working in a Concurrent Engineering Environment
 - Enriched Decision Support with All V5 Links
 - The User Working Area
 - Handling Catalogs
 - Handling CATAnalysis Documents

Glossary



C

catalog	A CATIA tool storing and classifying objects, each with its own specific characteristics (such as shape, color, size, diameter, length, standard, etc.) so that they can be retrieved fast and easily.
check in operation	A lifecycle operation that checks in: <ul style="list-style-type: none">• a new object and places its file in the SmarTeam Checked In vault, or• a checked out object (being modified) and places the file back in the SmarTeam Checked In vault.
check out operation	A lifecycle operation that retrieves files from the SmarTeam Checked In vault. It is the first operation to do prior to making modifications to a file that is checked in to the SmarTeam vault.

D

default	An operation or value that the system or application assumes, unless a user makes an explicit choice.
document	A common unit of data (typically a file) used in user tasks and exchanged between users.

N

new release	A lifecycle operation that retrieves files from the SmarTeam Release vault.
--------------------	---

R

release	A lifecycle operation that changes the revision designation of a part.
resolve operation	A CATIA operation that generates the .CATPart documents referred to by part families or part family components.

S

specification tree	Area of the document window reserved for viewing the design specifications of a part, presented in the form of a tree structure.
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V


vault

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