

XFILEV5 V1.2.x
for CATIA® V5

USERS MANUAL



Orientation Symbols Used in the Manual

Warning triangle



The warning triangle refers to *critical circumstances*, which should be considered imperatively in order to avoid serious problems in your work.

Hint symbol



The light bulb relates to *hints*, which provide you with practical examples to simplify your work.

Note symbol



The hand symbol relates to *notes*, which you should pay attention to in order to assure that you can *work without problems*.

Info symbol



The info symbol relates to background *information*.

Step symbol



The work steps symbol refers to a *step-by-step instruction sheet*.

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1. What is XFILEV5 ?

XFILEV5 is a program package facilitating the work with CATIA V5 documents, consisting of two independent modules—XFILEV5 itself and CV5 CONSISTENT FILE SET.

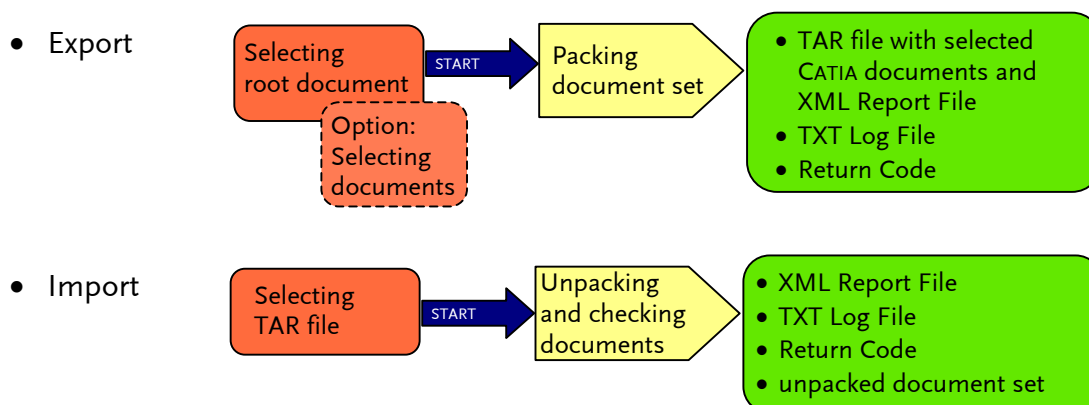
- XFILEV5 is a tool facilitating the exchange of CATIA V5 document sets on both sending and receiving sides. On the sending side it finds out, on the base of a specified root document, which are its linked documents and packs them in a container file. On the receiving side the container file is unpacked, and the completeness of the CATIA V5 document sets is checked. The main features and benefits of XFILEV5 will be described in the following section 2 XFILEV5 in Detail, starting on page 5.
- CV5 CONSISTENT FILE SET is a tool destined to verify directories: it checks all files contained in a specified directory to find out whether the document set in it is consistent, and eventually generates one or two report files in xml format, a text log file and returns an error code. For detailed description see section 6 CV5 CONSISTENT FILE SET in Detail, starting on page 24.

2. XFILEV5 in Detail

- **Export:** The sender specifies a root document of a CATIA file set to be prepared for sending. For this document all linked documents—existing and missing ones—will be identified. The sender may verify in a file tree dialog box the extent and the structure of the file set—which files are in the file set, what is the hierarchy, are there missing files, and he may determine which files are not to send so that is no need to send unnecessary documents.

When these settings are done, pressing the Start button launches the process of packing the selected document set, a container file is created containing beside of the documents themselves also an XML file containing information on the document set.




- **Import:** During import the container file is unpacked, the completeness of the CATIA V5 document sets is checked (if it matches the XML file information), and the link information is adapted to the target directory.
- **Document set information:** The XML information file contains data-exchange relevant information: names of all documents—sent as well as not sent or missing—, and their type, directory names etc.
- **Packing and unpacking:** In order to avoid loss of naming information, the documents for sending are packed in a container file .
To avoid incompatibilities of packing tools, in XFILEV5 GNU packer is integrated so that all XFILEV5 users will work with the same tool (GNU packer also is delivered with XFILEV5) .
- **Avoiding link problems:** The *Send To* save method of CATIA is used to adapt the link information according to the current directory. For packing the *Send To* method is used optionally, for unpacking the use is compulsory.



3. XFILEV5 Operation Modes

To start XFILEV5, three different operation modes are available. The table below gives an overview of these modes.

The details of the operation modes will be described in the following chapters.

Operation mode		
How to be started	Purpose and general description	Detailed description
<ul style="list-style-type: none"> Interactive Mode CATIA icon to start CATIA with XFILEV5 environment  → 	Exporting or importing CATIA document sets and other linked documents from within CATIA V5	▶ See section 3.1 Interactive Mode on page 7.
<ul style="list-style-type: none"> Utility Mode XFILEV5 desktop icon 	Exporting or importing CATIA document sets and other linked documents from GUI without starting CATIA.	▶ See section 3.2 Utility Mode on page 13
<ul style="list-style-type: none"> Batch Mode From command line	Exporting or importing CATIA document sets and other linked documents from command line. Batch Mode allows integration of data-exchange operations into automated processing applications, possibility to process several jobs one after another.	▶ See chapter 3.3 Batch Mode on page 17.

3.1 Interactive Mode

The interactive mode of XFILEV5 is started inside an interactive CATIA V5 session; the operation is controlled via GUI.

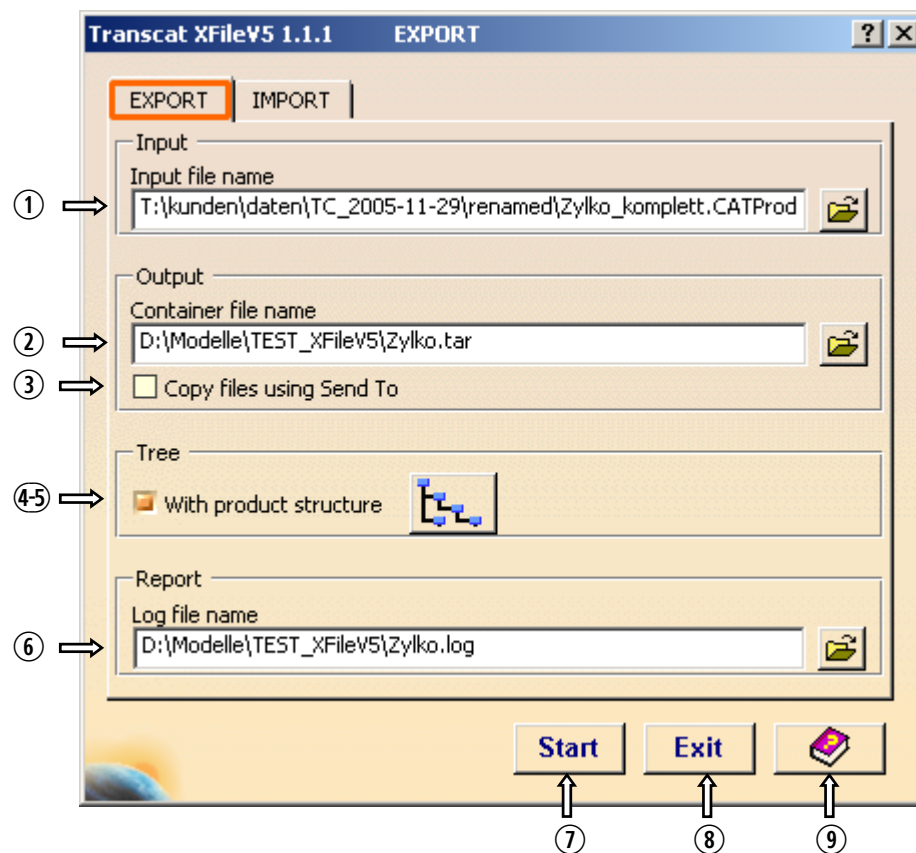
3.1.1 Export

The Import function provides the following functionalities (cf. fig. below) :

- to select the input document to be exported
- to specify the output container file name
- to select the copy method (normal copying or copying using *Send To* method)
- to specify the log-file name.

The *File-tree* dialog box (see page 10) allows:

- to verify whether documents of the document set are missing
- to select which documents are to be packed in the container file.



① *Input-file name* text box and *Open file* button

These two elements allow to select the root file document. Its name can be entered in the text box or can be selected with the file selection dialog box which is opened after pressing the *Open file* button.



In case of Interactive Mode by default the text box is filled with the name of the currently opened CATIA document.

② *Container file name* text box and *Open file* button

These two elements allow to specify the name of the container file to be created. Its name can be entered in the text box or can be selected with the file selection dialog box which is opened after pressing the *Open file* button.

By default this text box is filled with a name identical to the root-document name, the extension `tar` being added. The user can define a default directory of the container file using the environment variable `XFILEV5_EXP_TARGET_DIR`.


To predefine a name for the container file, the `XFILEV5_ADMIN` environment variable is to be used, which points to the `XFileV5.par` file in the `admin` directory. In the `XFileV5.par` file the format of the container name can be predefined.

③ *Copy files using Send To* check box

If this check box is checked, the selected files will be sent to the specified directory using the CATIA *Send To* method. If unchecked, normal copying will take place.

④ *With product structure* check box

This check box controls whether in the *File-tree* dialog box (see below) the documents will be shown in a (simplified) hierarchical product structure or only in a flat structure.

⑤  *Show Tree* button

By pressing this button the *File-tree* dialog box is opened—see below section *File-tree* dialog box. The icon on the button prompts in which structure the file tree will be shown (hierarchical or flat).

⑥ *Log-file name* text box and *Open file* button

These two elements allow to specify the log file document. Its name can be entered in the text box or can be selected with the file selection dialog box which is opened after pressing the *Open file* button.

By default this text box is filled with a name identical to the root-document name, the extension `log` being added. The default directory of the log file is predefined by the CATIA environment variable `CATReport`.

To predefine a name for the log file, the `XFILEV5_ADMIN` environment variable is to be used, which points to the `XFileV5.par` file in the `admin` directory. In the `XFileV5.par` file the format of the log name can be predefined.

⑦ *Start* button

By pressing this button, the export operation is started.

The documents activated for sending and the XML file are copied (depending on the selected option, either by normal copying or using the CATIA *Send To* functionality) into a temporary directory. This temporary directory by default is situated under the target directory for the container file. With the CATIA XFILEV5_EXP_TMP_DIR environment variable a predefined directory can be specified. The files saved in the temporary directory then are packed in the specified container file, which is saved in the target directory. When this operation is finished, the temporary directory is deleted.

⑧ *Exit* button

By pressing this button, the dialog box is closed, the settings made in the dialog box being saved in a CATSetting file.

⑨  *XFileV5 Help* button

When this button is clicked, the XFILEV5 manual is opened.

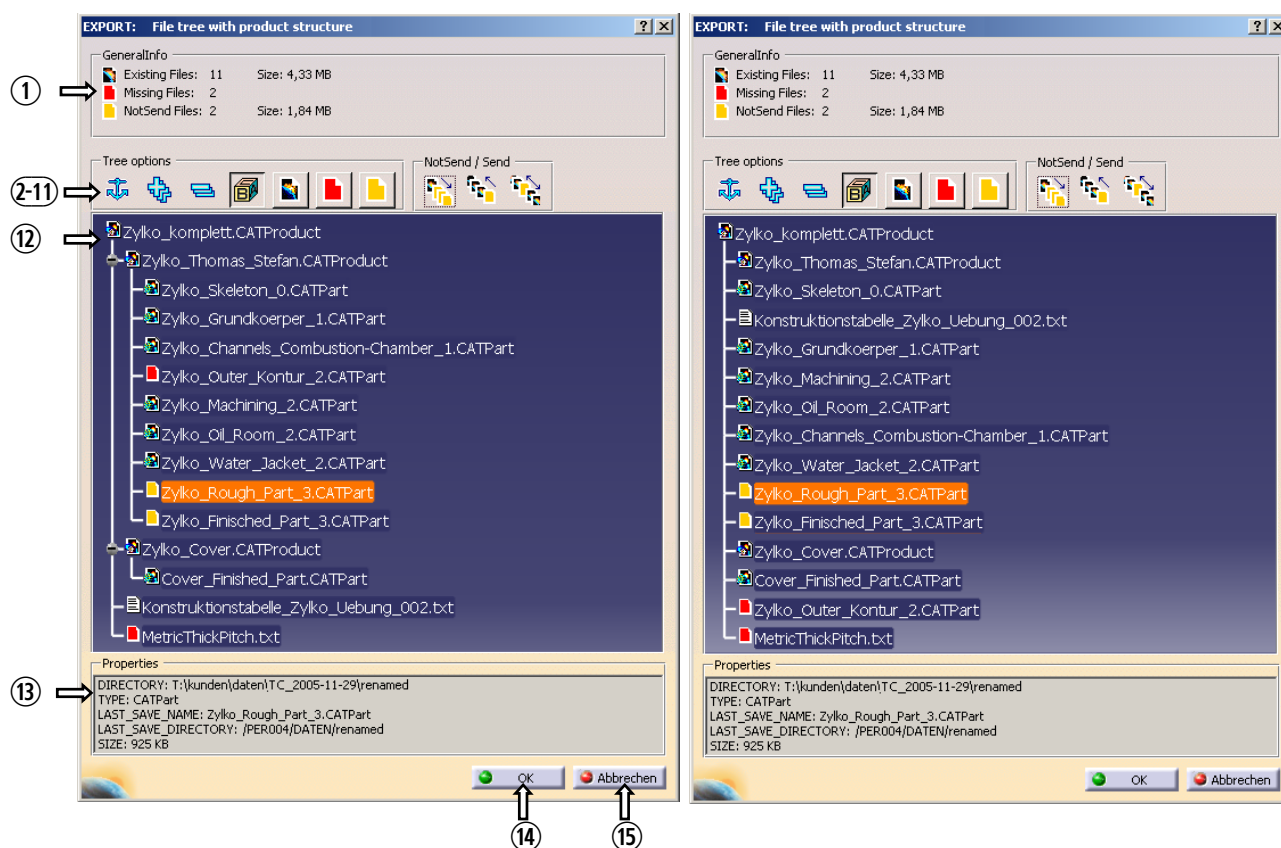


For UNIX the XFILEV5_DOC environment variable must be provided with the command to launch ACROBAT READER; with specifying the path of the manual PDF file.

• **File-tree dialog box**

The *File-tree* dialog box displays the root product and all its child documents, giving an overview of the documents and their properties—especially if documents are missing or not, and allows to control which files are to be packed in the container file. Depending on whether the *With product structure* check box (see page 8 item ④) was activated or not, the file tree may be displayed with hierarchical product structure (checked) or in flat structure (unchecked).

File-tree with hierarchical product structure ... without hierarchical structure



① **General info box**

Here the number of existing, missing and not-to-send files is displayed with their total size (for missing files a size can not be given).

②-④ **Buttons for tree manipulation**




Anchor button


Pressing this button moves the root of the document tree to the left upper corner of the tree box.




Expand all button

④  *Collaps all* button

⑤-⑧ Visibility filter toggle switches

⑤  *Show/hide parameters* toggle switch

When this button is pressed, the parameters of the documents are hidden; when it is not pressed, the parameters are shown (provided that the knots are expanded).

⑥  *Show/hide existing files* toggle switch

When this button is pressed, the existing files are hidden. Parent elements with missing children or children with *NOT_SENT* state are shown in every case—as long as these children are not hidden. The root document never will be hidden.

⑦  *Show/hide missing files* toggle switch


When this button is pressed, missing documents are hidden.

⑧  *Show/hide not-to-send files* toggle switch


When this button is pressed, documents with *NOT_SENT* state (files that are not to be packed in the container file) are hidden

⑨-⑪ Send/not send buttons


These buttons allow to switch documents between their initial state and *NOT_SENT* state.

⑨  *Not send selection and children* button

By pressing this button the highlighted document and its children will be set to the *NOT_SENT* state. (If the highlighted document has no children, only this highlighted document will be set to the *NOT_SENT* state.)

⑩  *Send only selection* button

The highlighted document and its parents will be set to their initial state.

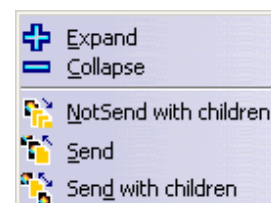
⑪  *Send selection and children* button

The highlighted document and all its parents and children will be set to their initial state.



TIPP:

The expand/collapse and the send/not-send functionalities also are accessible over context-sensitive menu.



⑫ *Document tree* box

Which elements of the document tree are displayed depends on the buttons ②-⑪.

⑬ *Properties* box

This box displays the properties of the highlighted document.

⑭ *OK* button

When this button is pressed, the tree dialog box is closed with saving the *NOT_SENT* state settings.

⑮ *Exit* button

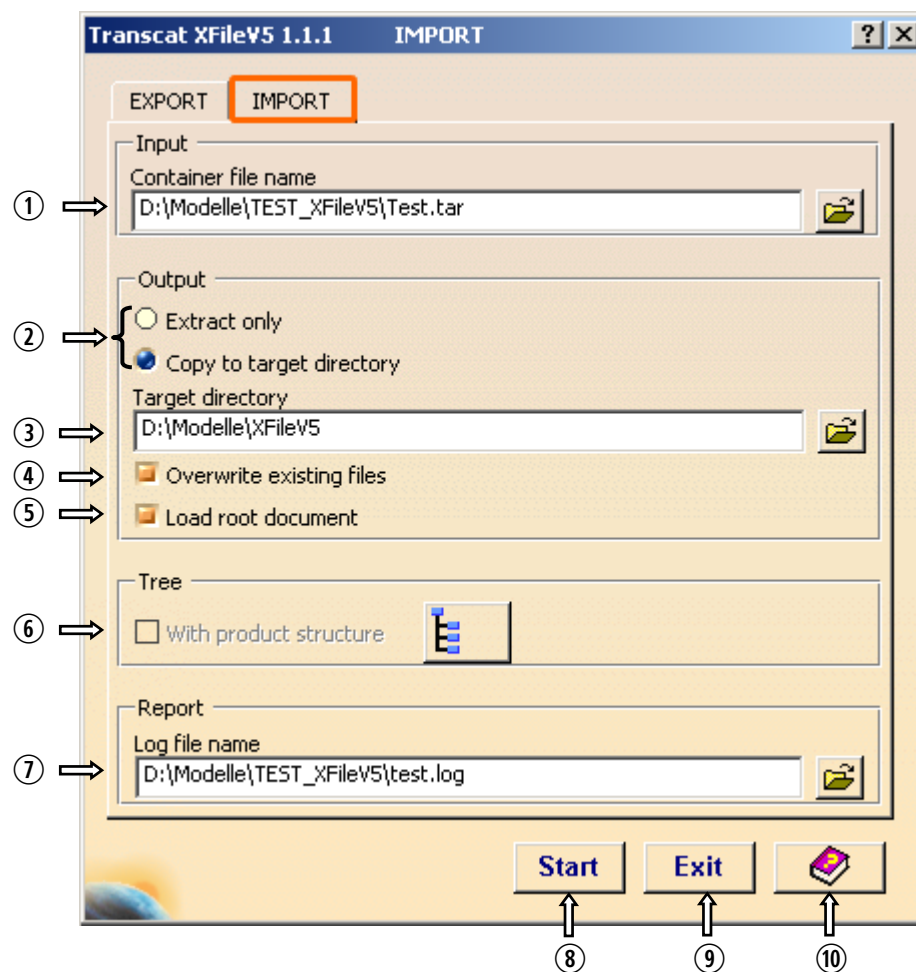
When this button is pressed, the tree dialog box is closed, the last *NOT_SENT* state settings being discarded.

3.1.2 Import

The Import function provides the following functionalities (cf. fig. below):

- to select the input document to be imported
- to specify the target directory
- to specify the log-file name
- to specify whether the container file is to extracted only or to be copied to the target directory.
- to specify for interactive mode, whether the imported root document is to be opened for a CATIA session.

For import in every case the *Send To* method is used, ensuring adaptation of the link information to the new directory.



① *Container-file name* text box and *Open file* button

These two elements allow to select the container file to be unpacked. Its name can be entered in the text box or can be selected with the file selection dialog box which is opened after pressing the *Open file* button. When reopening the dialog box for a new session, the text box is filled with the name of the container file from the preceding session.

② *Extract only* and *Copy to target directory* radio button

If the *Extract only* option is activated, the container file will be unpacked in a directory under the initial directory, the link information being adapted with the CATIA *Send To* method.

If the *Copy to target directory* option is activated, the container file will be unpacked, the files being sent to the target directory specified in textbox ④ with the CATIA *Send To* method (adaption of the link information).

③ *Target directory* text box and *Open directory* button

These two elements are active only in case that the *Copy to target directory* option is activated. They allow to select the target directory where the unpacked files are to be saved. The directory name can be entered in the text box or can be selected with the dialog box which is opened after pressing the *Open directory* button. With XFILEV5_IMP_TARGET_DIR environment variable a directory can be predefined. When reopening the dialog box for a new session, the text box is filled with the name of the container file from the preceding session.

④ *Overwrite existing files* check box

If this option is activated, existing files are allowed to be overwritten by new files with identical names. If this option is deactivated, overwriting will not be allowed.

**NOTE**

While overwriting existing files, no compatibility check is executed.

⑤ *Load root document* check box

This option is available only for Interactive Mode. If it is activated, the import operation will be completed with opening the imported root document in CATIA.

⑥ *Not available.*⑦ *Log-file name* text box and *Open file* button

These two elements allow to specify the log file document. Its name can be entered in the text box or can be selected with the file selection dialog box which is opened after pressing the *Open file* button.

The default name filled in this text box is the name container file, the extension `log` being added. The default directory of the log file is predefined by the CATIA environment variable `CATReport`. When a new session is opened, the directory and name of the preceding session will appear.

⑧ Start button

By pressing this button, the import operation is started.

The import operation comprises the following steps: The container file selected for import will be unpacked in a directory under the container-file directory. The completeness of the file set will be checked by comparing the file set with the XML file information (in case of missing files a warning message will be displayed). In case of the *Copy to target directory* option activated, the files will be transferred into the target directory. In every case the link information is adapted to the new directory, using CATIA *Send To* method. For Interactive Mode, in case of activated *Load root document* option, the import operation will be completed with opening the root document in CATIA.

The unpack directory by default is situated under the container file directory. With the CATIA XFILEV5_IMP_TMP_DIR environment variable a predefined directory can be specified. When the import operation with *copying to target directory* option selected is completed, the temporary directory is deleted.

⑨ Exit button

By pressing this button, the dialog box is closed, the settings made in the dialog box being saved in a CATSetting file.

⑩  XFileV5 Help button

When this button is clicked, the XFILEV5 manual is opened.



For UNIX the XFILEV5_DOC environment variable must be provided with the command to launch ACROBAT READER; with specifying the path of the manual PDF file.

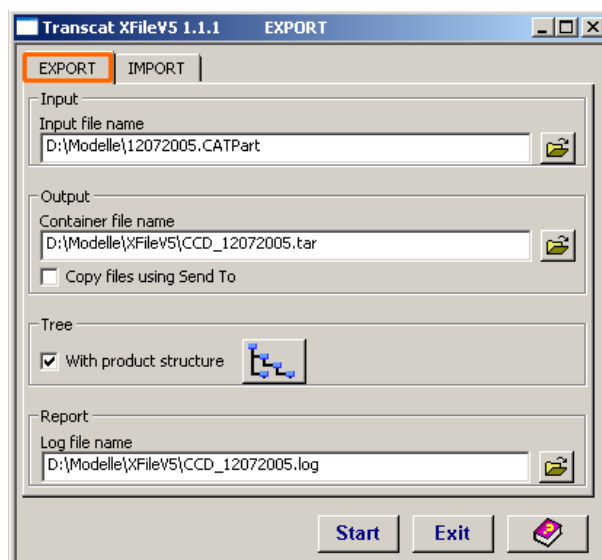
3.2 Utility Mode

3.2.1.1 Export & ...

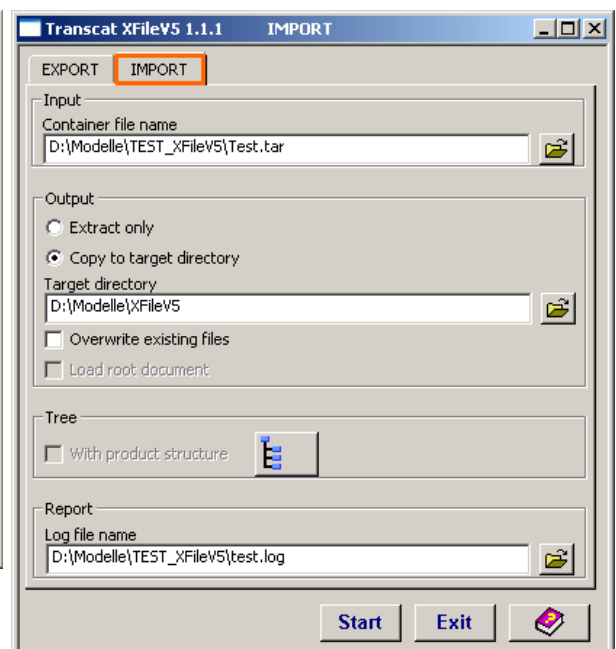
3.2.1.2 Import

The Utility Mode provides the advantage that export/import operation can be executed outside of CATIA (i. e. without starting CATIA). Beside of that and despite the slightly different optical aspect of the GUIs, the export and import functionalities of the Utility Mode and the structure of the respective GUIs are identical with those of the Interactive Mode—for detailed description see sections 3.1.1 *Export* on page 7 and 3.1.2 *Import* on page 13.

► Export



► Import



3.3 Batch Mode

• General Options

TCAXFileV5BatchMd -?|-h|-help Displaying help information.

TCAXFileV5BatchMd -v|-version Displaying the version number of the program.

3.3.1 Export

• Input on the Command Line—Syntax

```
TCAXFileV5BatchMd [ -env environmentName -direnv environmentDirectory ] -exp
                  -r rootfilePathName -x xmlReportPathName -c containerPathName
                  -l logfile [-s] [-p previewFormat]
```

TCAXFileV5BatchMd Program name

Environment :

In case that the CATIA V5 environment not has been set yet:

-env environmentName • environment name:

- write the name of the of CATIA V5 environment (XFILEV5 environment is a part of it).

-direnv environmentPath • environment path:

- write the full path of the environment.

-exp Start export

-r rootfilePathName Name of the root file:

- Write -r followed by blank and full path name of the root file.

-x xmlReportPathName Name of the path for the XML report file

- Write -x followed by blank and full path name of the XML report file to be created—if you want to create only an XML report file

-c containerPathName Name of the path for the container file to create:

- Write -c followed by blank and full path name of the container file to be created (backslash/ slash included!)—if you want to create a container file with XML file included in it.

If only the path and no container name is indicated, XFILEV5 will create automatically a name, using the name of the last path directory.



Alternatives— Export options:
-x and -c

- (1) When using -r and -x, only an XML report file will be created.
- (2) When using -r and -c, a container file will be created with the exported files and the XML report file in it.
- (3) When using -x and -c, a container file will be created on the base of the information in the XML report file. (In this case, the option -r is not used.)

<code>[-s]</code>	Copying files using CATIA Send To method	<i>Optional.</i> If this option is set, for copying the CATIA Send To method will be used. This setting will be ignored in case of the export of an XML file (export option 1).
<code>-l logFile</code>	Name of the path for the log file	Write: <code>-l</code> followed by blank and full path where the log file is to be created.
<code>[-p previewFormat]</code>	Creating previews of the exported CATIA files	<i>Optional.</i> If this option is set, for every exported CATIA file a preview will be created. Write instead of <code>previewFormat</code> the required format code (<code>jpg</code> , <code>bmp</code> , <code>tif</code> , or <code>png</code>). This setting will be ignored in case of the export of an XML file (export option 1).



Note:
For batch export full path must be indicated—DLNames can not be used.

• Syntax Examples

▷ Export option 1 (XML file export):

```
TCAXFileV5BatchMd -exp -r /V5Models/RootFile.CATProduct -x /tmp/report.xml -l /tmp/log.txt
```

▷ Export option 2 (export of container file with the exported files and the XML report).

```
TCAXFileV5BatchMd -exp -x /tmp/report.xml -c /ContainerPath/ContainerName.tar -l /tmp/log.txt
```

▷ Export option 3 (export of container file on the base of XML report file).

```
TCAXFileV5BatchMd -exp -r /V5Models/RootFile.CATProduct  
-c /ContainerPath/ContainerName.tar -l /tmp/log.txt
```

3.3.2 Import

• Input on the Command Line—Syntax

```
TCAXFileV5BatchMd [ -env environmentName -direnv environmentPath ] -imp  
-c containerFileName [-t targetPath]  
-l logFile [-s] [-p previewFormat] [-ow]
```

`TCAXFileV5BatchMd` Program name

Environment : In case that the CATIA V5 environment not has been set yet:

`-env environmentName` • environment name: • write the name of the of CATIA V5 environment (XFILEV5 environment is a part of it).

`-direnv environmentPath` • environment path: • write the full path of the environment.

`-imp` Start import.

`-c containerPathName` Name of the path for the container file to import: • Write `-c` followed by blank and full path name (included file name) of the container file to import.

<code>[-t targetPath]</code>	Name of the target path:	<i>Optional.</i> Write <code>-t</code> followed by blank and the path name of the target path. Import options: (1) If <i>no</i> target path is specified, the container file will be opened in its original directory. (2) If a target path is specified, the container file will be opened in this directory.
<code>[-s]</code>	Copying files using CATIA Send To method	<i>Optional.</i> If this option is set, for copying the CATIA <i>Send To</i> method will be used.
<code>-l logFile</code>	Name of the path for the log file.	Write: <code>-l</code> followed by blank and full path (included file name) for the log file to create.
<code>[-p previewFormat]</code>	Creating previews of the exported CATIA files.	<i>Optional.</i> If this option is set, for every exported CATIA file a preview will be created. Write instead of <code>previewFormat</code> the required format code (<code>jpg</code> , <code>bmp</code> , <code>tif</code> , or <code>png</code>).
<code>[-notow]</code>	Do not overwrite existing files.	If this option is used, in case of import option 2 (import in a specified directory) the existing files in this directory will not be overwritten.

**Note:**

For batch import full path must be indicated—DLNames can not be used.

• Syntax Examples

▷ Import option 1 (Opening container file in its original directory):

```
TCAXFileV5BatchMd -imp -c /V5Models/containerName.tar -l /tmp/log.txt
```

▷ Import option 2 (Opening container file in specified directory):

```
TCAXFileV5BatchMd -imp -c /V5Models/containerName.tar -t /V5Models/targetPath -l /tmp/log.txt
```

4. License Management

For XFILEV5 operation the CATIA PX1 license is required.

The Batch Mode uses this license only for the operation time and releases the licenses when operation is completed.

In order to restrict the time of use of the PX1 license in Interactive and Utility Modes, a CATIA session can be started using no PX1 license. XFILEV5 in this case automatically starts, for the operations requiring PX1 license, in background an XFILEV5 batch session. For that purpose the XFILEV5_ENV and XFILEV5_DIRENV environment variables must point to an environment with PX1 license. (Cf. XFILEV5 installation manual.)

5. Output information

5.1.1 XML File

The XML file contains information about the root document and the referenced documents. It is structured on two levels. The first level is for the root document, the second for the referenced documents. In the course of the implementation it will be verified whether the instance structure can be represented. In this case the nodes can be structured over several levels.

Following attributes are defined for the nodes:

Attribut	Description	
NAME	Current document name	
DIRECTORY	Current document directory name	
TYPE	<ul style="list-style-type: none"> For CATIA V5 documents: CATIA V5 document type – independent of the file extension. For non CATIA V5 documents: the file extension (without checking the real file type, except for non CATIA V5 documents with a CATIA V5 file extension, which will get the value „NotAV5File“). 	
LAST_SAVE_NAME	File name at last save with CATIA V5	
LAST_SAVE_DIRECTORY	Directory name at last save with CATIA V5	
LAST_SAVE_VERSION	CATIA V5 version at last save with CATIA V5	
	For V5R9 or lower:	The value is NOT_AVAILABLE.
	For V5R10 or higher:	Version, Release und Service Pack.
	For V5R14 or higher:	Additionally Hot Fix.
	Note: NOT_AVAILABLE: Following attributes can not be determined for CATIA V5R9 and lower or non CATIA documents: LAST_SAVE_NAME, LAST_SAVE_DIRECTORY, LAST_SAVE_VERSION. These attributes have the value NOT_AVAILABLE.	
STATUS	EXISTING:	Referenced document is available.
	MISSING:	Referenced document is not available.
	NOT_SENT:	Referenced document deactivated for sending.

5.1.2 Log File

The log file is a text file containing the following information:

- Issued command
- A list of all processed documents
- Root document
- A list of missing files
- A list of documents deactivated for sending
- Information on general errors (e. g. no write access on target directory)

5.1.3 Return Codes

Code	Explication
0	Process OK
1	Wrong arguments
2	Internal error
3	No PX1 license available
4	Missing documents
5	No root file path selected.
6	Root file not found on the disk.
7	No TC-XFileV5 license available.
8	No input XML file selected.
9	Can not read input XML file.
10	XML file is not consistent.
11	Can not create a temporary directory on the disk.
12	Can not copy files on selected location.
13	Can not create preview file.
14	Can not create TAR archive.
15	Can not open input TAR archive.
16	No XML file was found in the TAR container.
17	Some files from TAR container are missing.
18	Root file not found in the TAR container.
19	Container file can not be renamed.
20	Can not write output XML file.

6. CV5 CONSISTENT FILE SET in Detail

CV5 CONSISTENT FILE SET is a command line based checking tool that controls the consistency of CATIAV5 document sets in a specified directory. The tool is primarily intended to be used to check incoming and outgoing CATIAV5 document sets on their consistence.

A consistent set of CATIAV5 documents contains

- one or more root documents (i. e. documents that are themselves not a link target, but may be a link source):
 - CATProduct, CATPart, CATDrawing etc.,
 - non-CATIAV5 documents,
- non-root documents (CATIAV5 / non-CATIAV5 documents that are link targets of these root documents).

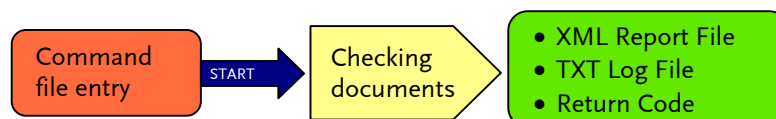
The file set is consistent if it contains all documents that are linked with each other.



Note:

CV5 CONSISTENT FILE SET also checks links to other directories outside of the checked directory. In the check result however it is not expressly stated that the link target is situated outside of the checked directory.

Check Operation



CV5 CONSISTENT FILE SET checks all files contained in a specified directory to find out whether the document set in it is consistent, and eventually generates one or two report files in xml format, a text log file and returns an error code.

CV5 CONSISTENT FILE SET identifies missing documents and writes additional information (e.g. CATIA version of last save and document type for CATIA V5 documents) to the report file. Optionally the CV5 CONSISTENT FILE SET also identifies naming conflicts for renamed Catia V5 documents.

Detailed Description of Check Operation

CV5 CONSISTENT FILE SET executes the following steps:

- Retrieving recursively the CATIA V5 documents, starting from the directory specified in the command issued, and then checking all its sub-directories.
- Retrieving information of the documents:
 - document type
 - document name
 - document directoryand for CATIA V5 additionally:
 - CATIA version of the last save
 - last save name
 - last save directory.
- Identifying all the root files.
- Identifying for each root file the associated set of documents and checking it regarding consistency.
- Finding out whether documents are missing in the file set:
 - Not existing (renamed or removed)
 - Renamed.
- Writing a structured (XML) report of the document set and —optionally—writing a structured (XML) “Resolved” report of the document set for renamed documents.
- Writing an error log file.

Details:

- **Document type check**

CV5 CONSISTENT FILE SET checks CATIA V5 documents of the following types whether they have correct names and name extensions:

- CATProduct
- CATPart
- CATDrawing
- CATProcess
- CATAnalysis
- CATMaterial
- catalog

If not corresponding, this will be indicated in the XML report file.

For all other files of non-CATIA types this check has no effect (for instance, a jpeg graphic file with a txt extension would not be found out as having a faulty name extension).

• Link check

As a result the links between the documents and missing linked documents are reported. The following links are considered:

- Links from CATIA V5 documents to other CATIA V5 documents,
- Links from CATIA V5 documents to other non-CATIA V5 documents.

Links from non-CATIA V5 documents to non-CATIA V5 documents are not checked.

• Report file vs. Resolved Report file

Both are XML files. The difference between these files is as follows.

Report type	Position of renamed files	Status
Report file:	A renamed file that has lost its link in the XML Report file is represented as root file.	EXISTING
Resolved Report file:	A renamed file that has lost its link in the XML Resolved Report is represented as linked document file (on its original position, i.e. under the correct root file)	RENAMED

6.1 How to Work

• Input on the Command Line—Syntax

```
TCAXFileV5CfsMd -env environmentName -direnv environmentPath -d inputDirectory
-o reportFile [-r resolvedReportFile] -l logFile
```

TCAXFileV5CfsMd	Program name:	• Write: TCAXFileV5CfsMd (Cfs stands for CONSISTENT FILE SET)
	Environment :	In case that the CATIA V5 environment not has been set yet:
-env environmentName	• environment name:	Write the name of the of CATIA V5 environment (TCAXFileV5CfsMd environment is a part of it).
-direnv environmentPath	• environment path:	write the full path of the environment.
-d inputDirectory	Input directory:	• Write: -d followed by blank and full path name of the directory to check.

<code>-o reportFile</code>	Report file:	<ul style="list-style-type: none"> • Write: <code>-o</code> followed by blank and full path name of the XML report file to be created.
<code>[-r resolvedReportFile]</code>	Resolved report file:	<ul style="list-style-type: none"> • <i>Optional</i> Write: <code>-r</code> followed by blank and full path name of the XML resolved report file is to be created.
<code>-l logFile</code>	Logfile:	<ul style="list-style-type: none"> • Write: <code>-l</code> followed by blank and full path where the log file is to be created.
<code>[-scs]</code>		<ul style="list-style-type: none"> • <i>Optional</i> Files are searched according to the CATIA settings under <i>Tools > Options > Linked Document Localisation</i>.
<code>[-scr]</code>		<ul style="list-style-type: none"> • <i>Optional</i> Child documents which have the same document name and the same localisation as the parent root document are not taken into account.

(Depending on the contextual links a root product itself may also be child. The `[-scr]` parameter allows this case. To prevent this case, the parameter must be omitted.)



Note:

- Full path means file based—DLNames can not be used.
- Input directory: Sub-directories included in the input directory also will be checked.

6.2 The Check Results

The check results are delivered in form of

- a log file,
- a report and—optionally—a “Resolved” report file and
- a return code.

In the following sections these results will be described in detail.





NOTE:

If a log file or a report file already exists, it will be overwritten by the next check.

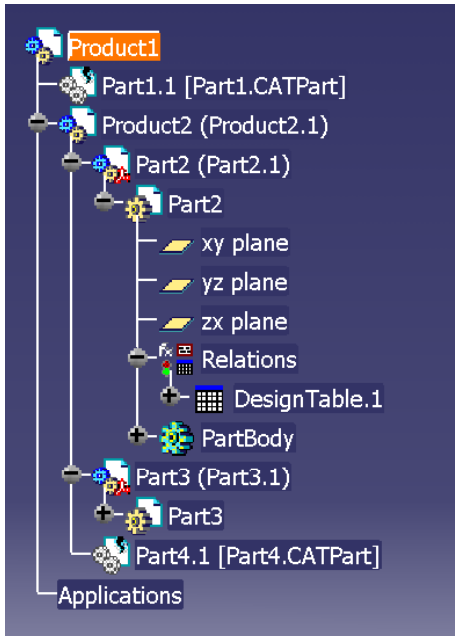
6.2.1 Report Files

The report files are structured files in XML format containing the information of the consistent sets of documents. Basically the report file consists of a list of root file elements. Each root file element consists of a list of associated file elements (on two levels—the first level for the root element, the second level for all linked documents). Both root file and file elements have following attributes:

Attribute	Explication	
NAME	Current file name	
DIRECTORY	Current directory of the file	
TYPE	<ul style="list-style-type: none"> For CATIA V5 documents the real file type is indicated—independent of the current file name and extension (which might have been changed by renaming). For non-CATIA V5 documents the file extension (without verification, except the case that a non-CATIA V5 document has been renamed with a CATIA V5 reserved name extension, to which the NotAV5File extension will be attributed). NotAV5File—this type is attributed to files that have a CATIA V5 file-name extension, but are not CATIA V5 documents. 	
LAST_SAVE_NAME	File name at last CATIA V5 save	
LAST_SAVE_DIRECTORY	Directory of the file at last CATIA V5 save	
LAST_SAVE_VERSION	CATIA V5 version at last CATIA V5 save	
	For V5R9 or lower:	The value will be NOT_AVAILABLE.
	For V5R10 or higher:	Version, release, service pack will be indicated.
	For V5R14 or higher:	Additionally hot fix will be indicated.
	NOT_AVAILABLE: In case that the value for LAST_SAVE_NAME, LAST_SAVE_DIRECTORY, LAST_SAVE_VERSION can not be determined (CATIA V5 R9 or lower, non-CATIA files), to these attributes the value NOT_AVAILABLE is assigned.	
STATUS	EXISTING:	Referenced file is available in the checked directory.
	MISSING:	Referenced file is missing in the checked directory.
	RENAMED:	Referenced file is available in the checked directory, but has been renamed.
		Note: <ul style="list-style-type: none"> The RENAMED status is available only in the “Resolved” report file with resolved naming conflicts. In the Resolved report is only reported that there is a name conflict, but CV5 CONSISTENT FILE SET does not resolve it—no re-naming to the original file name is executed.

- **Sample Use Case**

This sample use case is provided to illustrate the behavior of the solution.



- Example for “Resolved” report file:

The screenshot shows the XML Notepad interface for the file CV5_ROOT_STRUCTURE.xml. The left pane displays a tree structure of folders and files, each with several attributes. The right pane shows the corresponding values for these attributes.

Structure	Values
CV5_ROOT_STRUCTURE	EXISTING
ROOT_FILE	Product1.CATProduct
STATUS	C:\temp
NAME	CATProduct
DIRECTORY	Product1.CATProduct
TYPE	C:\temp
LAST_SAVE_NAME	V5R14SP3HF16
LAST_SAVE_DIRECTORY	EXISTING
LAST_SAVE_VERSION	Product2.CATProduct
FILE	C:\temp
STATUS	CATProduct
NAME	Product2.CATPart
DIRECTORY	C:\temp
TYPE	V5R14SP3HF16
LAST_SAVE_NAME	EXISTING
LAST_SAVE_DIRECTORY	Part2.CATPart
LAST_SAVE_VERSION	C:\temp
FILE	CATPart
STATUS	Part2.CATPart
NAME	C:\temp
DIRECTORY	V5R14SP3HF16
TYPE	EXISTING
LAST_SAVE_NAME	DesignTable1.txt
LAST_SAVE_DIRECTORY	C:\temp
LAST_SAVE_VERSION	txt
FILE	NOT_AVAILABLE
STATUS	NOT_AVAILABLE
NAME	NOT_AVAILABLE
DIRECTORY	EXISTING
TYPE	Part3.CATPart
LAST_SAVE_NAME	C:\temp
LAST_SAVE_DIRECTORY	CATPart
LAST_SAVE_VERSION	Part3.CATPart
FILE	C:\temp
STATUS	V5R12SP3
NAME	MISSING
DIRECTORY	NOT_AVAILABLE
TYPE	NOT_AVAILABLE
LAST_SAVE_NAME	CATPart
LAST_SAVE_DIRECTORY	Part1.CATPart
LAST_SAVE_VERSION	C:\temp
FILE	NOT_AVAILABLE
STATUS	RENAMED
NAME	ENGDATA001
DIRECTORY	C:\temp
TYPE	CATPart
LAST_SAVE_NAME	Part4.CATPart
LAST_SAVE_DIRECTORY	C:\temp
LAST_SAVE_VERSION	V5R10SP3

6.2.2 Log File

The log file is a text file containing the following information:

- command issued to start the check
- Information on general errors (e.g. input directory not found)
- A list of all processed files
- A list of all root files
- A list of all missing files
- If necessary, a list of all renamed files.

6.2.3 Return Codes

Code	Explication
0	Process OK
1	Impossible to find input directories
2	Impossible to open input directories
3	Impossible to find/open/write report file
4	No PX1 license available
5	Internal error
6	Missing documents
7	No TC-XFileV5 license available.

* * *



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