Agile Product Lifecycle Management

MCAD Connectors for Agile Engineering Collaboration Administration Guide

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IMPORTANT NOTICE

Contact Address (for Support Services see Preface chapter):

xPLM Solution GmbH

Devrientstr. 5
D - 01067 Dresden, Germany

www.xplm.com

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Note

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Pro/ENGINEER Connector Administration

This section provides a complete summary of configuration options available for the Pro/ENGINEER connector. Once the basic installation has been done following the instructions in the Installation Guide, you can refer here for details of all possible settings.

Note that in addition to the configuration files listed here, the EC Web Connector must be additionally configured to provide complete operation of the Pro/ENGINEER Connector. See the EC Web Connector Configuration Options section for details.

Table: List of all Configuration Files for the Pro/E Connector

Configuration files	Purpose	Location
xAcp.cfg	System configuration	<Install Directory>\xacp\com
AcpCustomer9.ini	Mapping and configuration	<Install Directory>\xacp\ini

Note Configuration files typically change content between connector releases. When upgrading to a new release, please incorporate your site's configuration settings into the new version of the configuration files. Failure to do so will cause unpredictable behavior of the connector.

Configuration file xAcp.cfg

The configuration file **xAcp.cfg** contains basic system parameters. It is described fully in the Installation Guide, Section "Editing the Configuration File" on page 9.

Setup the Attribute Mapping

Use the Mapping Editor to define the Attribute Mapping. Legacy mappings, as described in the following sections, are still supported.

Mapping file AcpCustomer9.ini

This is the main file for controlling the behavior of the Pro/E Connector. This file is structured in several sections. The first line of a section starts with a left square bracket followed by a space and its name again followed by a space and the right square bracket. Each section starts with the section name. A comment line starts with the # sign #.

Note Please make sure not to leave blank lines when editing the AcpCustomer9.ini file.

The table below provides descriptions of all of the sections in **AcpCustomer9.ini file.**

Table: Description of all sections in xAcpCustomer9.ini

Section name	Description
Initialize	Common switches to control the behavior of the Pro/E Connector
ProEToAgile.Create	This mapping section is used for initial creation of design objects using the Save command.
ProEToAgile.Update	This section is used when the existing design objects are updated via the Save command.
AgileToProE.ProE	Defines those Agile attributes that are saved automatically into all Pro/E files, during the Save command.
AgileToProE.PRT	Defines those Agile attributes that are saved automatically into Pro/E PRT files, during the Save command.
AgileToProE.DRW	Define those Agile attributes that are saved automatically into Pro/E DRW files, during the Save command.
AgileToProE.ASM	Defines those Agile attributes that are saved automatically into Pro/E ASM files, during the Save command.
AgileGetProperties.PRT	Defines those Agile attributes that are saved into Pro/E PRT files, when using the Update Properties command.
AgileGetProperties.DRW	Defines those Agile attributes that are saved into Pro/E DRW files, when using the Update Properties command.
AgileGetProperties.ASM	Defines those Agile attributes that are saved into Pro/E ASM files, when using the Update Properties command.

The following table provides details from each section.

Table: [Initialize] Section Parameters

Parameter name in section [Initialize]	Parameter values	Description

Parameter name in section [Initialize]	Parameter values	Description
AcpDebug	**0** / 1 / 2 / 3	0 → no Debug 1 → write full debuginfo to ...AcpUser\log\acp.log (bad performance) 2 → write additional timer info to Pro/E message log (trail.txt), no acp.log will be generated 3 → write only timer info to ...AcpUser\log\acp.log AcpDebug
JNI_DEBUG	**0** / 1	0 → no JNI Debug 1 → write JNI debug info to ...AcpUser\log\proxy.log
AcpInitialRenameObject	**1** / 0	0 → no Pro/ENGINEER file renaming 1 → Pro/ENGINEER file rename during initial check-in
AcpSaveDrwFrm	**1** / 0	1 → Pro/ENGINEER drawing formats (FRM) are stored in Agile 0 → ignore Pro/ENGINEER drawing formats (FRM)
AcpSaveLay	**1** / 0	1 → Pro/ENGINEER layouts (LAY) are stored in Agile 0 → ignore Pro/ENGINEER layouts (LAY)
AcpHelpPartIdent	**ITEM**	Name of Pro/E parameter used to identify helper parts. These objects are saved into Agile as design objects, but are filtered out when create Item/BOM
AcpHelpPartValue	**N**	Value that the Pro/E parameter should be set to in order to activate the filter
AcpHelpPartSkeletonCheck	**1** / 0	1 → Automatically identify skeleton parts as helper parts. Skeleton parts are filtered out when create Item/BOM 0 → use AcpHelpPartIdent / AcpHelpPartValue settings to identify skeleton parts as helper parts

Parameter name in section [Initialize]	Parameter values	Description
AcpReadFindNumber	**1** / 0	1 → reading "FindNo" during "Update properties" and provide parameter AGILE_FIND_NO for use with Pro/REPORT 0 → not reading FindNo" during "Update properties"
AcpCreateInterchangeRelation	**1** / 0	1 → create additional relation for components of interchange ASM's during "Save" 0 → not creating additional relation for components of interchange ASM's
AcpLoadUpdateDrwProperties	**1** / 0	1 → automated call of function "Update properties" after load a DRW from Agile 0 → No action after load a DRW from Agile

Mapping Options for [ProEToAgile.XXXX] Sections

Each mapping consists of a pair of objects. The right side of the pair defines information that can be extracted from Pro/E. Here, Pro/E is the source of the attribute value. The left side of the pair defines the attribute value's target location in Agile.

There are several configuration options for the "right side" that define what kind of data should be extracted from Pro/E, and what kind of transformation can be applied to the data. Each right side attribute consists of three sections, for example:

```
DESCRIPTION = Std.ObjectName-Type.ToUpper
```

The first section is either Std or Par. "Std" refers to Pro/E system attributes such as file name, object type, version of Pro/E that is being used, and so forth.

Table: Standard mapping values using "Std2 prefix

Std.CreSystem	Pro/E version such as "Pro/E Wildfire 5"
Std.VerStamp	Timestamp
Std.FileName	File name, for example "BOLT.PRT"
Std.ObjectName	Pro/E file name without the extension - "BOLT"

Std.ObjectName-Type	Object name with the type appended. This creates an easy way to differentiate an assembly from a part. Examples include: BOLT-PRT, BOLT-ASM, or BOLT-DRW.
Std.ObjectType	Pro/E object type. Possible values are PRT, ASM, DRW, or FRM.

"Par" is a reference to user-defined parameter in Pro/ENGINEER, such as MATERIAL, DESCRIPTION, or ENGINEER. These types of mappings are only useful where the Pro/ENGINEER file has a parameter corresponding to the name mentioned in the mapping.

Finally, the final suffix is a description of how the data should be modified. The following modifiers are possible:

Table: Suffix Options for Mapping

ToUpper	Transfer all characters to upper case
ToLower	Transfer all characters to lowercase
None	Do not modify the data
Range-<idx1>-<idx2>	Range of the string from position idx1 to idx2, example: Part.PartNumber.Range-0-2
Prefix	Prefix to be added in front of the string, example: Par.PartNumber.PrefixPRT
Suffix	Suffix to append to the string, example: Par.PartNumber.SuffixPRT

There are two special values that are used on the left side of these mappings. In the [ProEToAgile.Create] section, you use the value CAX_NEW_NUMBER to represent the Number field that will be assigned to the newly created design object.

The following example maps a Pro/ENGINEER parameter "NAME" to the Agile attribute "DESCRIPTION" and the Pro/ENGINEER version to Agile attribute" CAX_CRE_SYSTEM":

Table: Example Mapping Definitions

DESCRIPTION	Par.NAME.None
CAX_CRE_SYSTEM	Std.CreSystem.None

Mapping Options for [AgileToProE.XXXX] Sections

These sections are used to define mappings from Agile to Pro/E, which occur automatically during the Save process. As this will add time to the Save process, the list of attributes should be kept to the bare minimum that absolutely needs to be kept synchronized. Other attributes can be synchronized using "Update Properties", as described in the next section. The format of this section is:

```
DocNumber    =    NUMBER
```

Where the left side value is the name of the Pro/E parameter to be updated, and the right side is the Agile attribute value to be used as the source.

Mapping Options for [AgileGetProperties.XXX] Sections

These sections are used to define mappings from Agile to Pro/E, which occur when the user runs the Update Properties command manually. For standard attributes the format of this section is:

CAD Parameter = <Source Table Field>.Format

For example:

Agile_Des = DESCRIPTION.ToUpper

Where the left side value is the name of the Pro/E parameter to be updated, and the right side is the Agile attribute value to be used as the source.

For part history and change history attributes, which are arranged in a table, the format of this section is:

CAD Parameter = <Filter Table>_Field,<Filter Value>,<Filter>,<Source Table>_Field.Format

For example:

Agile_CreUser = History_Action,Create,first,History_User.None

HIS_RELDATE_1 = Change History_Status,Released,last,Change History_Rel Date_int.Date01

Where the left side value is the name of the Pro/E parameter to be updated, and the right side specifies how to find the desired row and column in the table below:

Section	Represents	Example
<Filter Table>	Agile tab name to search	Title Block
Field	Desired column to search	Action
<Filter Value>	Value to detect in the column	Create

Section	Represents	Example
<Filter>	Which row to select, with these options: first first+n n=integer value last last-n n=integer value	first
<Source Table>	Agile tab name to retrieve value from	History
Field	Desired column to retrieve value from	User
Format	Text processing	None

Options for "Format"

The Format string allows you to perform additional processing on the text string being passed back into CAD. This includes predefined formats and general TCL format procedures.

Predefined formats

Format	Description
None	no processing
ToLower	convert the value to lower case
ToUpper	convert the value to upper case
Range-x-y	substring of the value from index x to index y (y may be numeric or "end")
Date01	convert int dateformat to "%d.%m.%y %H:%M:%S" example: 01.01.2007 00:00:00
Date02	convert int dateformat to "%d.%m.%Y" example: 01.01.2007
Date03	convert int dateformat to "%d.%m.%y" example: 01.01.07
Date04	convert int dateformat to "%d-%m-%y" example: 01-01-07
Date05	convert int dateformat to "%m/%d/%y" example: 01/01/07
Date06	convert int dateformat to "%d-%b-%y" example: 01-Jan-07
Prefix<str>	append a prefix <str> to the value

Format	Description
Suffix<str>	append a suffix <str> to the value

TCL format procedures

Any registered (tclIndex) TCL procedure that gets the current value as input and returns the formatted string. For instance:

```
proc MyFormat { value } {
  set formatedvalue $value
  return $formatedvalue
}
```

Mapping Part Attributes

In addition to mapping attributes from the CAD Document back into CAD, you can map attributes from the corresponding Part object that has been associated to the Design object. In order to specify a Part attribute, simply prefix the attribute value with "PART:". This example shows how to map both the Document Number and Part Number into CAD:

Agile_DocId = NUMBER.None

Agile_PartId = PART:NUMBER.None

CATIA V5 Connector Administration

This section provides a complete summary of configuration options available for the CATIA V5 connector. Once the basic installation has been done following the instructions in the Installation Guide, you can refer here for details of all possible settings.

Note that in addition to the configuration files listed here, the EC Web Connector must be additionally configured to provide complete operation of the CATIA V5 Connector. See the EC Web Connector Configuration Options section for details.

Table: List of all Configuration Files for the CATIA V5 Connector

Configuration file	Purpose	Location
Acc.cfg	System configuration	<Install Directory>\acc\com
AccInitialize.ini	Configuration	<Install Directory>\xacc\ini
AccCustomer9.ini	Mapping	<Install Directory>\xacc\ini

Note Configuration files typically change content between connector releases. When upgrading to a new release, please incorporate your site's configuration settings into the new version of the configuration files. Failure to do so will cause unpredictable behavior of the connector.

Configuration file Acc.cfg

The configuration file **Acc.cfg** contains basic system parameters. It is described fully in the Installation Guide, Section "Editing the Configuration File" on page 14.

Configuration file AccInitialize.ini

This is the main file for controlling the behavior of the CATIA V5 Connector. This file has a single [Initialize] section. A comment line starts with the # sign.

Note Please make sure not to leave blank lines when editing the file.

Table: [Initialize] Section Parameters

Parameter name in Section [Initialize]		Parameter values	Description

Parameter name in Section [Initialize]		Parameter values	Description
AccCustomerId	=	None	System setting (do not change)
AccLanguage	=	**English**	Language setting
AccMappingFile	=	Acc.ini	Mapping file name
AccCustomerFile	=	AccCustomer9.ini	Customer file name
AccMessages	=	AccMessages.ini	Messages file name
AccDebug	=	**1**../..0	Turns debug mode on (1) and off (0). A log file is written to the user's working directory.
AccHelpPartIdent	=	ITEM	Name of CATIA V5 property used to identify models in the design that should not be included in the BOM. These objects are saved into Agile as Documents, but are filtered out when using the Create Item/BOM function.
AccHelpPartValue	=	NO	Value that the CATIA V5 property should be set to in order to activate the filter
AccAgileBackupId	=	AgileID	Indicates the field to use for re-associating a file to the correct Agile Document. This assignment tracks the Agile Document number.
AccAgileBackupName	=	AgileName	Indicates the field to use for re-associating a file to the correct Agile Document. This assignment tracks the Agile filename.
AccEnableRename	=	1	0 = files are not renamed 1 = files are renamed to match the Agile Number field or custom mapping
AccSchemeOfFileName	=	%	Format definition (in "C" style) used to define the CATIA filename
AccFileNameValues	=	NUMBER / CATIAFILE	Basis of the filename. Standard values are either NUMBER (Agile Document Number) or CATIAFILE (original filename)

Filename creation

During the first Save into Agile, a new CATIA V5 filename can be created. In the file

AccInitialize.ini are two variables that control this process:

- AccFilenameValues
- AccSchemeOfFileName

AccFilenameValues can contain a list of attributes from Agile either defined in the EC Web Connector definition file or simply “CATIAFILE”. “CATIAFILE” means the usage of the original Catia file name. AccSchemeOfFileName is a format definition based on the “C” style.

```
#
AccSchemeOfFileName  = %s
```

AccFileNameValues = NUMBER

After check in of a part to Agile, the object will be renamed to D00444.CATPart because D00444 is the number of the Agile document.

```
#
AccSchemeOfFileName  = %s
AccFileNameValues  = CATIAFILE
```

After check in of a part to Agile the object will not be renamed.

```
#
AccSchemeOfFileName  = CAT-%s
AccFileNameValues  = NUMBER
```

After check in of a part to Agile the object will be renamed to CAT-D00444.CATPart.

[Customer Functions] Section

To better support the ability for project-based customization of TCL scripting, entry points are now provided for TCL add-ins through the [CustomerFunctions] section in AccInitialize.ini.

[CustomerFunctions]

...

<EntryPoint> = <Customer specific procedure>

....

There are 7 predefined entry points:

1. CatiaScanTree-01
2. CatiaScanTree-02
3. CatiaScanTree-03

4. CatiaAccSaveToAgile-01
5. CatiaAccLoad-01
6. CatiaAccSave-01
7. CatiaAccUpdateFrame-01

Setup the Attribute Mapping

Please use the Mapping Editor to define the Attribute Mapping. The legacy Mappings as described in the following sections is still supported.

Mapping file AccCustomer9.ini

This is the main file for controlling attribute mapping in the CATIA V5 Connector. This file is structured in several sections. The first line of a section starts with a left square bracket followed by a space and its name again followed by a space and the right square bracket. Each section starts with the section name. A comment line starts with the # sign.

Note Please make sure not to leave blank lines when editing the file.

The following table gives a description of all sections in **AccCustomer9.ini**, and the following tables provide the details of each section.

Table: Description of all sections in AccCustomer9.ini

Section name	Description
CatiaToAgile.DOCUMENT	This mapping section is used for assigning attributes when Documents using the **Save** command.
CatiaToAgileUpdate.DOCUMENT	This mapping section is used for assigning attributes when updating Documents using the **Save** command.
CatiaToAgile.FILEFOLDER	OBSOLETE
CatiaToAgile.ITEM	This mapping section is used for creating and updating Parts using the **Create Item/BOM** command.
AgileTo.Catia	Defines those Agile attributes that are saved automatically into all CATIA V5 files, during the **Save** command.
AgileTo.CATPart	Defines those Agile attributes that are saved automatically into CATIA V5 CATPart files, during the **Save** command.

Section name	Description
AgileTo.CATDrawing	Defines those Agile attributes that are saved automatically into CATIA V5 CATDrawing files, during the **Save** command.
AgileTo.CATProduct	Defines those Agile attributes that are saved automatically into CATIA V5 CATProduct files, during the **Save** command.
AgileGetProperties.Catia	Defines those Agile attributes that are saved into all CATIA V5 files, when using the **Update Properties** command.
AgileGetProperties.CATPart	Defines those Agile attributes that are saved into CATIA V5 CATPart files, when using the **Update Properties** command.
AgileGetProperties.CATDrawing	Defines those Agile attributes that are saved into CATIA V5 CATDrawing files, when using the **Update Properties** command.
AgileGetProperties.CATProduct	Defines those Agile attributes that are saved into CATIA V5 CATProduct files, when using the **Update Properties** command.
FrameDefinition	Defines those Agile attributes that are mapped onto drawing title blocks, when using the **Update Title Block** command.
AccCreateObjectTypes	Not used
CatiaToAgileNew.DOCUMENT	This mapping section is used for assigning attributes when creating Documents using the New command.
AccSaveViewable.CATPart	Defines types of viewable files that can be saved for CATParts in the **Save With**... command
AccSaveViewable.CATProduct	Defines types of viewable files that can be saved for CATProducts in the **Save With**... command
AccSaveViewable.CATDrawing	Defines types of viewable files that can be saved for CATDrawings in the **Save With**... command

Mapping Options for [CatiaToAgile.XXXX] Sections

Each mapping consists of a pair of objects. The right side of the pair defines information that can be extracted from CATIA V5. Here, CATIA V5 is the source of the attribute value. The left side of the pair defines the attribute value's target location in Agile.

There are several configuration options for the "right side" that define what kind of data should be extracted from CATIA V5, and what kind of transformation can be applied to the data. Each right side attribute consists of three sections, for example:

```
DESCRIPTION    =  Std.DescriptionReference.ToUpper
```

The first section is either Std, Par, or Def. “Std” refers to CATIA V5 system attributes, as listed here:

Table: Standard mapping values using “Std” prefix

Std.DescriptionReference
Std.Extension
Std.PartNumber
Std.Definition
Std.Nomenclature
Std.Revision

“Par” is a reference to user-defined property in CATIA V5, such as MATERIAL, DESCRIPTION, or ENGINEER. These types of mappings are only useful where the CATIA V5 file has a property corresponding to the name mentioned in the mapping.

“Def” is a default fixed string value.

Finally, the final suffix is a description of how the data should be modified. The following modifiers are possible:

Table: Suffix Options for Mapping

ToUpper	Transfer all characters to uppercase
ToLower	Transfer all characters to lowercase
None	Do not modify the data
Range-<idx1>-<idx2>	Range of the string from position idx1 to idx2, for example: Part.PartNumber.Range-0-2
Prefix	Prefix to be added in front of the string, for example: Par.PartNumber.PrefixPRT
Suffix	Suffix to append to the string, for example: Par.PartNumber.SuffixPRT

There are two special values that are used on the left side of these mappings. In the [CatiaToAgile.DOCUMENT] section, you use the value CAX_NEW_NUMBER to represent the Number field that will be assigned to newly created Documents. In the [CatiaToAgile.ITEM] section, you use the value ITEM to represent the Number field that will be assigned to newly created Parts.

Mapping Options for [AgileTo.XXXX] Sections

These section are used to define mappings from Agile to CATIA, which occur automatically during the Save process. As this will add time to the Save process, the list of attributes should be kept to the bare minimum that absolutely needs to be kept synchronized. Other attributes can be synchronized using "Update Properties", as described in the next section. For formatting details, see Mapping Options for Update Properties Sections - CATIA.

Mapping Options for [AgileGetProperties.XXX] Sections

These section is used to define mappings from Agile to CATIA V5, which occur when the user runs the Update Properties command manually. For formatting details, see Mapping Options for Update Properties Sections - CATIA.

Mapping Options for [FrameDefinition] Section

These section is used to define mappings from Agile attributes to the CATIA V5 drawing title block, which occurs when the user runs the Update Title Block command. For formatting details, see Mapping Options for Update Properties Sections - CATIA.

Mapping Options for Update Properties Sections - CATIA

Multiple sections of the AccCustomer9.ini file, as listed above, are used to define mappings from Agile to CATIA. For standard attributes the format of this section is:

CAD Parameter = <Source Table>_Field.Format

For example:

Agile_Des = Title Block_Description.ToUpper

Where the left side value is the name of the CATIA parameter to be updated, For the [AgileTo.XXXX] and [AgileGetProperties.XXX] sections, the formatting of the left side matches the description shown for the RIGHT side of the [CatiaToAgile.XXXX] section (see above for details). For the [FrameDefinition] section, the left side represents a CATIA text property in the format Text.n, where n is an integer.

The right side can be either the symbolic attribute name from the CaxClient.xml file (such as NUMBER, DESCRIPTION, etc.) or any Agile attribute represented as follows:

Section	Represents	Example
<Source Table>	Agile tab name	Title Block
Field	Agile attribute name	Description
Format	Text processing	ToUpper

For history and change history attributes, which are arranged in a table, the format of this section is:

CAD Parameter = <Filter Table>_Field,<Filter Value>,<Filter>,<Source Table>_Field.Format

For example:

Agile_CreUser = History_Action,Create,first,History_User.None

HIS_RELDATE_1 = Change History_Status,Released,last,Change History_Rel Date_int.Date01

Where the left side value is the name of the CATIA parameter to be updated, and the right side specifies how to find the desired row and column in the table below:

Section	Represents	Example
<Filter Table>	Agile tab name to search	Title Block
Field	Desired column to search	Action
<Filter Value>	Value to detect in the column	Create
<Filter>	Which row to select, with these options: first first+n n=integer value last last-n n=integer value	first
<Source Table>	Agile tab name to retrieve value from	History
Field	Desired column to retrieve value from	User
Format	Text processing	None

Options for "Format"

The Format string allows you to perform additional processing on the text string being passed back into CAD. This includes predefined formats and general TCL format procedures.

Predefined formats

Format	Description
None	no processing

Format	Description
ToLower	convert the value to lower case
ToUpper	convert the value to upper case
Range-x-y	substring of the value from index x to index y (y may be numeric or "end")
Date01	convert int dateformat to "%d.%m.%y %H:%M:%S" example: 01.01.2007 00:00:00
Date02	convert int dateformat to "%d.%m.%Y" example: 01.01.2007
Date03	convert int dateformat to "%d.%m.%y" example: 01.01.07
Date04	convert int dateformat to "%d-%m-%y" example: 01-01-07
Date05	convert int dateformat to "%m/%d/%y" example: 01/01/07
Date06	convert int dateformat to "%d-%b-%y" example: 01-Jan-07
Prefix<str>	append a prefix <str> to the value
Suffix<str>	append a suffix <str> to the value

TCL format procedures

Any registered (tclIndex) TCL procedure that gets the current value as input and returns the formatted string. For instance:

```
proc MyFormat { value } {
  set formatedvalue $value
  return $formatedvalue
}
```

Mapping Part Attributes

In addition to mapping attributes from the CAD Document back into CAD, you can map attributes from the corresponding Part object that has been associated to the Document using the Create Item/BOM command. In order to specify a Part attribute, simply prefix the attribute value with “PART:”. This example shows mapping both the Document Number and Part Number into CAD:

Agile_DocId = Title Block_Number.None

Agile_PartId = PART:Title Block_Number.None

SolidWorks Connector Administration

This section provides a complete summary of configuration options available for the SolidWorks connector. Once you have completed the basic installation based on instructions in the Installation Guide,, you can refer here for details of all possible settings.

Note that in addition to the configuration files listed here, the EC Web Connector must also be configured to provide complete operation of the SolidWorks Connector. See the EC Web Connector Configuration Options section for details.

Connector Configuration Settings

The configuration of the connector is done in XML files, which are located in the components/xml subdirectory of the integration. The following files are important for the connector:

XPlmSolidWorksConnector.xml – base configuration of the SolidWorks connector

XPlmSWAgileAddin.xml – contains the Agile menu definition and Addin registration. This file should not be changed.

xPLMAgile9SolidWorksTransaction.xml – contains the configured transactions for the Agile load and save processes. This file should not be changed.

Renaming, Configuration Handling and Options

This section describes the available settings and valid values for the connector in XPlmSolidWorksConnector.xml.

Attention: Do not enable the RenameOnSave or RenameOnInitialSave options if you use big assemblies, suppressed components, or external references. Rely on the RenameOnLoad feature in these cases. Otherwise, references and assemblies may be destroyed during save if not all related components are loaded or available.

Setting	Purpose and available values
`RenameOnLoad`	NUMBER – rename file names equally to the PLM number CAX_FIL_NAME – don't rename on load Any other value **Default: CAX_FIL_NAME**

RenameOnInitialSave	true – rename files on initial save false – no renaming on save Default: **false** **ATTENTION: Do not use this option if you use large assemblies or external references and suppressed components. Use the RenameOnLoad feature in these cases!**
RenameOnSave	true – rename files on save as false – no renaming on save Default: **false** **ATTENTION: Do not use this option if you use large assemblies or external references and suppressed components. Use the RenameOnLoad feature in these cases!**
RenamingRule	Renaming rule for building the filename Default %CAX_NEW_NAME%
ConfiguredProperty	If the given property name is contained in a file and set to No the no configurations are created in PLM. Default: **Configured**
MasterConfigProperty	If the given property name is contained in the configuration specific properties and the value of this property points to an existing configuration in the same file, the linked configuration is used and no extra configuration object is created in PLM. Default: **MasterConfig**
EnableSolidWorksLogging	false - logging disabled true - logging enabled Default: **false**
SolidWorksLogFile	Value is the full path to a logfile, required if logging is enabled e.g. C:\caxlog\SolidWorks.log
EnableScriptEngineLogging	false - logging disabled true - logging enabled Default: **false**
ScriptengineLogFile	Value is the full path to a logfile, required if logging is enabled. If you do not specify a path the log file is written to the user home AgileCache folder. e.g. C:\caxlog\xacw.log Default: xacw.log
SolidWorksMenuFiles	The AddIn Menu file in the xml directory Default: **XPlmSWAgileAddin.xml**

SolidWorksStandardPartDir	Directory root under which parts are detected as standard parts Default: C:\SolidWorks Data
SolidWorksCreateUniqueFileNames	true – create unique file names false – no special logic Default: **true**
SolidWorksUseLocalFileCache	true – use local cache false – no local cache Default: **true**
AllowRecursiveStructure	true – allow transfer of recursive structure false – no recursing structure Default: **true**
SWAddins	Additional addins to be loaded Default: **empty**
IgnoreMissingParts	true – ignore missing parts false – throw error for missing parts Default: **true**
SolidWorksCreateBitmapPreview	true – create preview bitmap false – no special logic Default: **false**
SolidWorksCommandTabName	String to display Default: **xPLM Solution**
SolidWorksScriptEngine	Do not change Default: **intern**
SolidWorksEvent_StartNotify	true – startup integration immediately to preserve memory false – start integration on demand Default: **true**

Setup the Workspace Root

The Java environment and workspace root are set in xacw\components\ini\xacw_ini.bat

Configure the workspace root by setting these values:

set cax_temp=C:\agile\wspaces\Default
set CAX_WORKSPACE_ROOT=C:\agile\wspaces

Setup the Java Environment and Workspace Root

The Java Environment is set in xacw\components\ini\xacw_ini.bat

Usually there is no need to modify the JAVA settings that are delivered with the connector. The script detects the system architecture and initializes the right JRE in xacw_ini.bat during the initial registration and also on startup of the connector.

Setup the Attribute Mapping

Please use the Mapping Editor to define the Attribute Mapping.

SolidEdge Connector Administration

This section provides a complete summary of configuration options available for the SolidEdge connector. Once the basic installation has been done following the instructions in the Installation Guide, you can refer here for details of all possible settings.

Note that in addition to the configuration files listed here, the EC Web Connector must be additionally configured to provide complete operation of the SolidWorks Connector. See the EC Web Connector Configuration Options section for details.

Connector Configuration Settings

The configuration of the connector is done in XML files, which are located in the components/xml subdirectory of the integration. The following files are important for the connector:

XPlmSolidEdgeConnector.xml – base configuration of the SolidEdge connector

XPlmSEA9Addin.xml – contains the Agile menu definition and Addin registration. This file shouldn't be changed.

XPlmAgile9SolidEdgeTransaction.xml – contains the configured transactions for the Agile load and save processes. This file shouldn't be changed.

Renaming, Configuration Handling and options

This section describes the available settings and valid values for the connector in XPlmSolidEdgeConnector.xml.

Setting	Purpose and available values
`SolidEdge_RenameOnLoad`	NUMBER – rename file names equally to the PLM number CAX_FIL_NAME – don't rename on load, use value in CAD filename field **Default: CAX_FIL_NAME**
`EnableSolidEdgesLogging`	False: Logging disabled True: logging enabled Default: **false**
`SolidEdgeLogFile`	Value is the full path to a logfile, required

	if logging is enabled e.g. C:\caxlog\SolidWorks.log
SolidEdge_EnableScriptEngineLogging	False: Logging disabled True: logging enabled Default: **false**
SolidEdge_ScriptengineLogFile	Value is the full path to a logfile, required if logging is enabled. If you don't specify a path the log file is written to the user home AgileCache folder. e.g. C:\caxlog\xace.log Default: xace.log
SolidEdgeMenuFiles	The AddIn Menu file in the xml directory Default: **XPlmSWAgileAddin.xml**
SolidEdgeStandardPartDir	Directory root under which parts are detected as standard parts Default: C:\SolidEdge Data
SolidEdgeIgnoreMissingParts	true – ignores missing files false – error on missing files Default: **true**
SolidEdgeEvent_StartNotify	true – startup integration immediately to preserve memory false – start integration on demand Default: **true**
SolidEdge_SuppressUnusedMembers	true – suppress unused members in normal save false – show all available members on normal save Default: **true**
SolidEdge_SuppressTemplateMemberLinks	true – suppress circular reference from template to all members false – show external reference from template to all members. Needs SuppressUnusedMembers to be set to false as well Default: **true**
SolidEdge_RenameOnInitialSave	NOT SUPPORTED
SolidEdge_RenameOnSave	NOT SUPPORTED

Setup the Workspace Root

The java environment and workspace root are set in xace\components\ini\xace_ini.bat

Configure the workspace root by setting these values:

set cax_temp=C:\agile\wspaces\Default
set CAX_WORKSPACE_ROOT=C:\agile\wspaces

Setup the Java Environment and Workspace Root

The java environment and is set in xace\components\ini\xace_ini.bat

Usually there is no need to modify the JAVA settings that are delivered with the connector. The script detects the system architecture and initializes the right JRE in xace_ini.bat during the initial registration and also on startup of the connector.

Setup the Attribute Mapping

Please use the Mapping Editor to define the Attribute Mapping.

SolidEdge has different property pages which are treated transparently by the integration. The properties are read and written to the Custom page with the following exceptions.

CAD Property Name	Solidedge Property Page
Title	Summary
Subject	Summary
Author	Summary
Keywords	Summary
Comments	Summary
Last Author	Summary
Username	Extended Summary
Document Number	Project
Revision	Project
Project Name	Project
Category	Document
Company	Document
Manager	Document

ATTENTION: Then name of the CAD properties below is language specific to the language of your CAD system. In case you use a non English Solidedge you can enable the Scriptenginelogging in order to check the available CAD property names in $HOME\AgileCache\xace.log. Search for this section in the logfile, the available names are seperated by colons:

```
SolidedgeProperties - Properties are language specific to the CAD system language
SolidedgeProperties - Non Custom Properties must be mapped to one of the following
indentifiers
SolidedgeProperties - ProjectInformation - ;Document Number;Revision;Project Name;
SolidedgeProperties - DocumentSummaryInformation - ;Category;Presentation Format;…
SolidedgeProperties - SummaryInformation - ;Title;Subject;Author;…
SolidedgeProperties - ExtendedSummaryInformation - ;Name of Saving Application;DocumentID;…
```

EC Web Connector Administration

This section provides a complete summary of configuration options available for the EC Web connector. Once the basic installation has been done following the instructions in the Installation Guide, you can refer here for details of all possible settings.

Preferences Settings on MCAD-CONFIG folder

The preferences are stored in PLM in a Design filefolder called MCAD-CONFIG. The user needs the Administrator role in PLM assigned in order to update the template Attributes.xml.

The Attributes.xml is stored locally first and only if you are an administrator the template will be updated and uploaded to PLM. This is done using the save button in the preferences panel. You can also reset the template manually by checking out the MCAD-CONFIG filefolder in web client, adding your local Attributes.xml to the files tab, and checking the filefolder back in after upload. The next time a user logs in, the new template will be downloaded. In case the system can't generate the MCAD-CONFIG filefolder automatically, create a Design object with this name in the PLM system.

To lock an entry from user modification, you need to edit the Attributes.xml. The template in PLM must also be replaced manually. You need to search for a section "GeneralDefaults", there are several FieldCollections contained. Each collection describes one default. There are 3 fields with name/value pairs for each default:

Name	Value
CAX_NAME	Internal setting name (for instance, DesignClass)
Default	The default setting as a string
Editable	true/false (whether the preference is editable or not).

	If you set to editable=false, even the administrator will get a setting, which is not editable anymore.

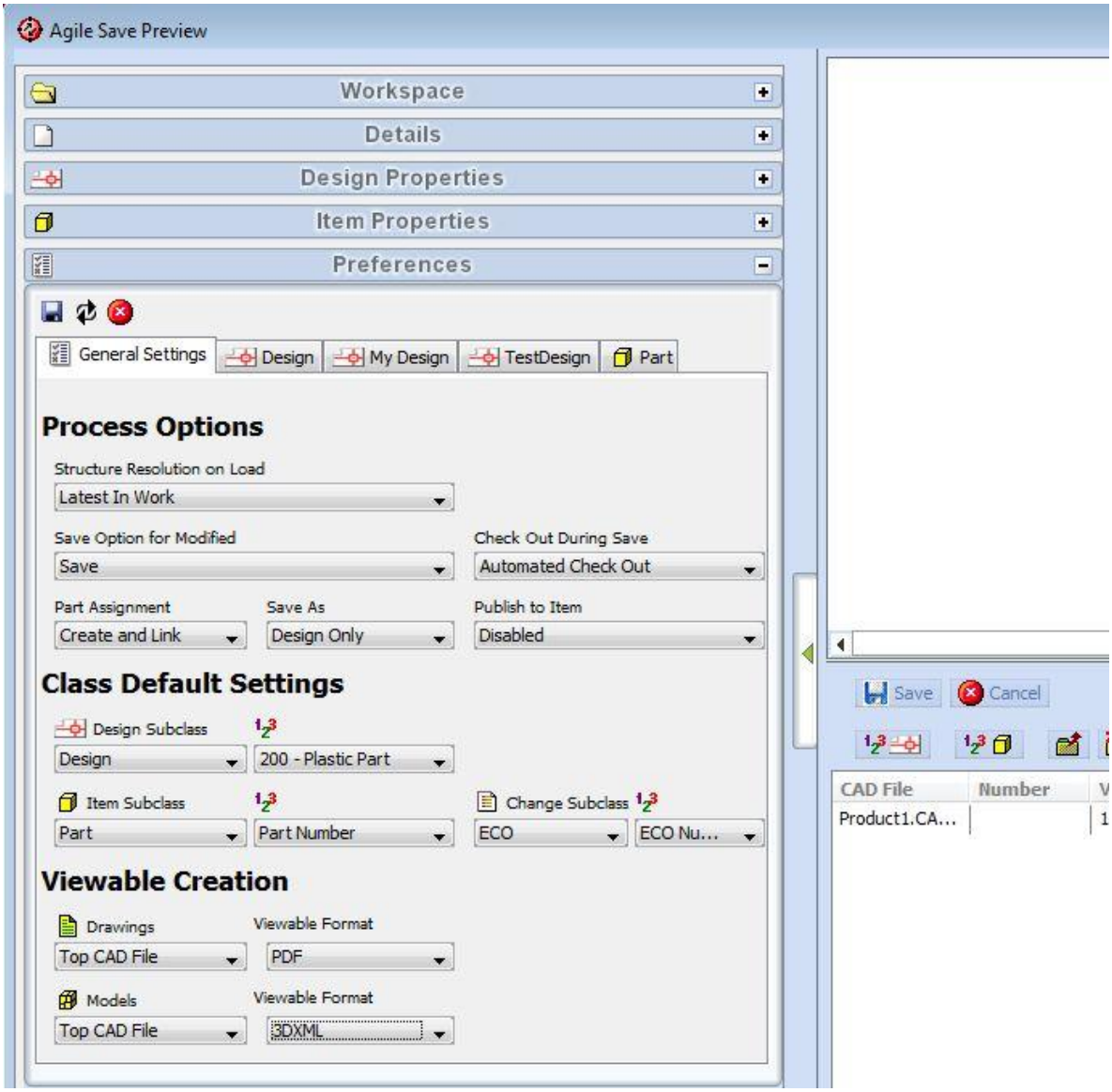
Note that the preferences are saved locally first in any case (it is saving to the latest version of attributes.xml in users home AgileCache folder, for instance Attributes.xml.8). If the upload fails due to missing privileges, you can still upload to the MCAD-CONFIG manually and set the defaults properly. The file on the MCAD-CONFIG filefolder must be named Attributes.xml. Don’t forget to remove the version extension of the local file in this case.

The following table lists the valid preference settings in Attributes.xml:

CAX_NAME	**Purpose**
DesignClass	Default Design Subclass
PartClass	Default Part Subclass
ChangeClass	Default Change Subclass
DesignAutonumber	Default Design Autonumber Source
PartAutonumber	Default Part Autonumber Source
ChangeAutonumber	Default Change Autonumber Source
LoadOption	Default Structure resolution on Load 0 – Latest in Work 1 – Latest Checked In 2- Latest Published 3 – As Saved
SaveOption	Default Save Option 0 – Save 1 – Checkin 2 - Increment
SaveCheckoutOption	Default Save behavior 0 – Force User Checkout 1 – Automated Checkout
SaveAsOption	Save As behavior for Autonumbers and Design/Part 0 – Design only 1 – Part and Design
ItemOption	Item Creation and Linking option 0 – Create and Link 1 – Update and Link 2 – Link only 3 – Disabled
PublishOption	BOM and Attachments Publishing 0 – Disabled 1 – BOM and Attachments 2 – BOM 3 - Attachments
DrawingViewableCreation ModelViewableCreation	Viewable Creation Option 0 – All CAD Files 1 – Top CAD File 2 - disabled
DrawingViewables ModelViewables	Selected viewables to create during save

Preferences Dialog

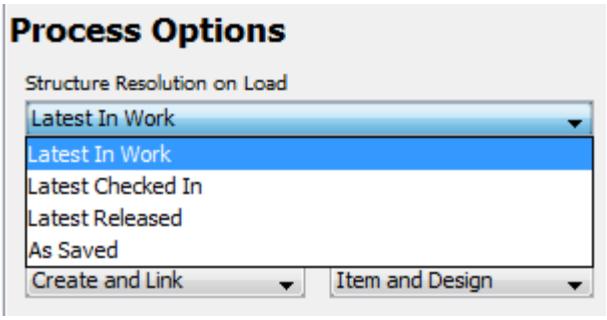
The Preferences dialog is accessed using the button in the Save or Load dialogs or by expanding the left sidebar and the contained preferences container.



The Process Options define the behavior during load and save operations. The Class Default Settings predefine the default subclasses and autonumbers to be used, if new Parts, Designs or Change Orders are created.

Load Preferences

The default structure resolution on load is configured using the “Structure Resolution on Load” preference. This defines which versions of children in design structures will be used in an assembly.



The valid values and their meanings are:

Latest in Work Select the latest possible Design version of a component, including versions that are currently checked out by the current user

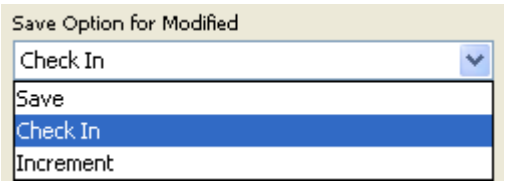
Latest Checked In Select the latest Checked In Design version of a component

Latest Released Select the latest Design version, which is attached to a released Part

As Saved Select the Design version that was saved within the parent assembly

Save Preferences

Default Save Option



The default save option for modified files defines the preselected option in the save dialog. The valid options are:

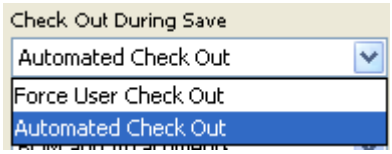
Save The file will be saved into the currently checked out Design version. The Design remains checked out after save.

Check In The file will be saved into the currently checked out Design version and then

the Design will be checked in.

Increment — The file will be saved into the currently checked out Design version and then the Design will be checked in and then checked out again immediately. This way the Design remains checked out after save with an incremented version.

Checkout during Save



The checkout behaviour during save is controlled by this switch. The valid options are:

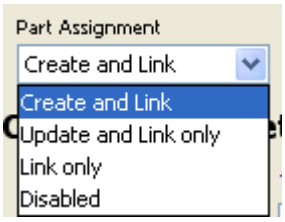
Automated Checkout — The Design will be checked out automatically, when it is saved to PLM.

Force user Check Out — The user has to check out the Design in order to be able to save.

Item and Publish Preferences

In order to achieve a transparent Part/Design creation and linking process, some defaults are required to control the simultaneous creation of Parts and Designs.

Part Assignment



The Part Assignment controls whether or not Parts will be created simultaneously. The options and their meanings are:

Create and Link — This will create new Part objects, if a new Design is created. The Part will be linked to the Design and the Part properties will be updated.

Update and Link — This will not create Parts, but existing Parts will be linked to the Design and the Part properties will be updated.

Link only — This will not create or update Parts. Only the relationship link between the part and the design will be created.

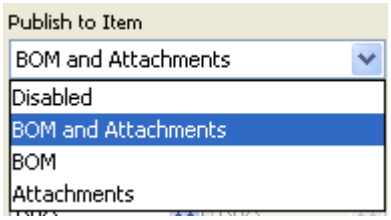
Disabled — Part assignment or creation is disabled completely

Save As Behaviour

The Save As Option controls, whether or not Parts will be created during initial save and "SaveAs" of a CAD model. The valid options and their meaning are:

Design Only	No Part objects will be created.
Part and Design	Autonumber will be used as the basis for new Design objects, with the CAD extension appended. Part objects are created if the Part Assignment option is set to "Create and Link".

Publish Behaviour



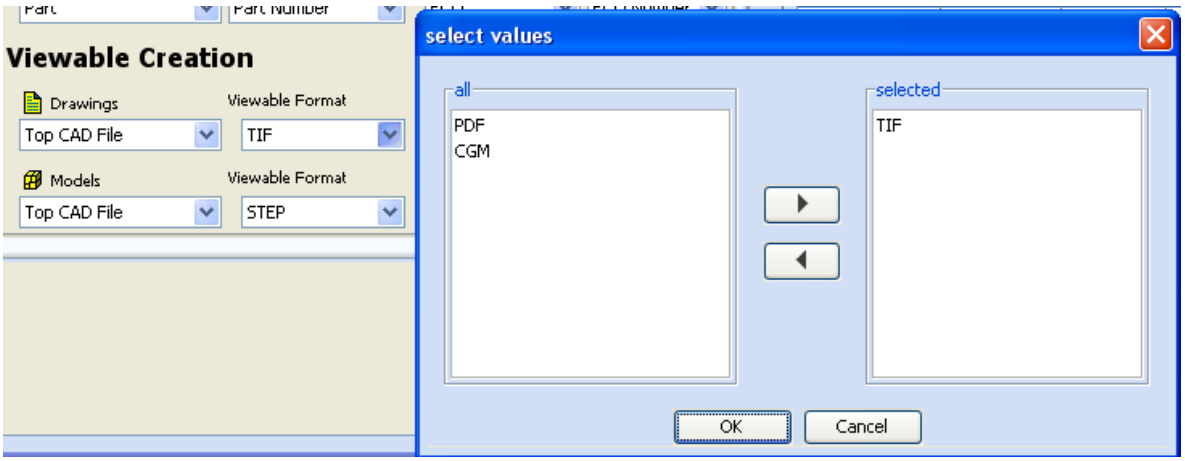
The Publish to Item Option controls whether or not a Part BOM is created or updated, and the Design files are attached to the Part objects, after the Design is checked in. The valid options and their meanings are:

Disabled	No Part BOM will be updated and no attachments will be updated.
BOM and Attachments	Part BOM will be updated and the Design files will be attached to the Parts.
BOM	Part BOM will be updated. No Design files will be attached.
Attachments	No Part BOM will be updated. Design files will be attached.

Class Preferences

This section defines the default subclasses and default autonumber sources for all parts, designs and change orders created by the CAD integration. These settings are mainly used in save use cases.

Viewable Creation Preferences



Viewable File Creation Preferences – The types of viewable files that will be automatically created and attached in PLM along with the native file. This can be set independently for Drawings and Models (parts and assemblies), and can be set to generate the viewable files for all CAD files, only the top CAD file, or no CAD files. Also note that depending on the CAD system, additional configuration work may be necessary to automatically create the viewable files (please contact your administrator). The available Viewable Types are defined in the <Install Directory>\ini\CAXConfig.xml in the Viewables Structure:

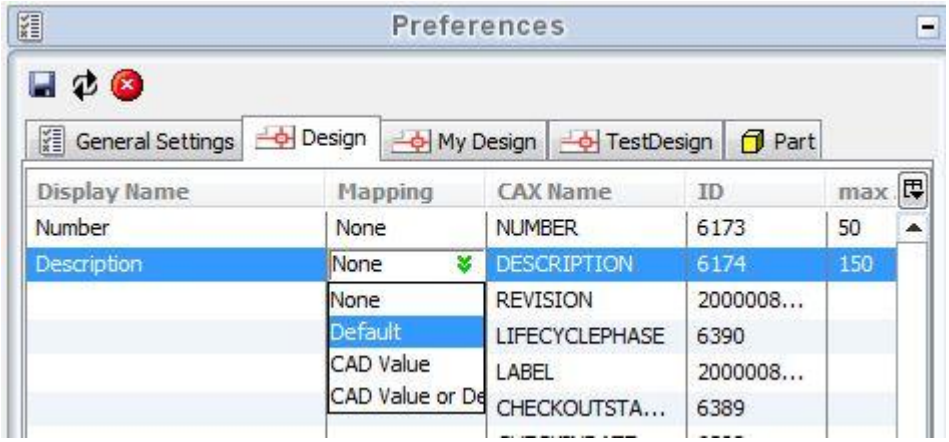
…

```
<Structure>
   <Name>Viewables</Name>
      <FieldCollection>
         <Field><Name>ViewablesDrawing</Name><Value>PDF;TIF;CGM</Value></Field>
         <Field><Name>ViewablesModel</Name><Value>CGR;WRL;STEP;IGES;3DXML;JT</Value></Field>
      </FieldCollection>
</Structure>
```

…

Property Value Preferences

Each Design and Part class is represented in the preferences in order to configure the mapping of symbolic CAX properties to fields in PLM. The administrator can setup the mapping interactively. The preferences will be saved into a MCAD-CONFIG filefolder object in PLM if the current user is a member of the admin group. The values have to be set in each subclass independently.



Additionally each field may get a value default mapping.

Property Value Preferences – This section allows you to pre-define the properties that are mapped between CAD and PLM, as part of the Save process. By setting these preferences appropriately, you can reduce the use of the interactive save dialog and speed up the save process. The four mapping options are:

- **None** – No value is to be set for this property.
- **CAD Value** – Use the value defined in the CAD properties, based upon the mapping defined by your administrator.
- **CAD Value or Default** – Use the value defined in the CAD properties, but if no value exists then use the default value in the "Default" column.
- **Default** – Use the value in the "Default" column.

CAXConfig.xml Settings

The CAXConfig.xml file controls general and numbering options for Load and Save. The different sections control the communication between client and server, logic for display in the client, parameters for part families and the numbering schemes and change process.

Basic Section

```
<Aliasname>BasicCAXConfig</Aliasname>
<Import>
    <Parameter>
        <FieldCollection>
            <Field><Name>FIELD_FOR_NUMBER</Name><Value>DESCRIPTION</Value></Field>
            <Field><Name>TRANSFER</Name><Value>MULTITHREADED</Value></Field>
            <Field><Name>OVERWRITE</Name><Value>FALSE</Value></Field>
            <Field><Name>PRIVILEGES</Name><Value>FALSE</Value></Field>
            <Field><Name>NonExistingPartsFromCAD</Name><Value>allow</Value></Field>
        </FieldCollection>
```

Setting	Purpose and available values
FIELD_FOR_NUMBER	do not change
TRANSFER	MULTITHREADED – simultaneous upload of files SINGLETHREADED – sequential upload of files
OVERWRITE	FALSE – do not change
PRIVILEGES	FALSE – disable privilege detection to increase performance on LDAP authenticated systems TRUE – enable privilege detection to show up in save preview
NonExistingPartsFromCAD	remove – will remove non-existing Item numbers from the save preview, if the given Item number does not exist in PLM (Item.NUMBER field is checked) allow – allows CAD mapping to create new Items using the Item.NUMBER field

ConnectionProperties Section

```
<Structure>
    <Name>ConnectionProperties</Name>
    <FieldCollection>
        <Field><Name>timeout</Name><Value>900000</Value></Field>
        <Field><Name>agile.selector</Name><Value>Agile</Value></Field>
        <Field><Name>agile.extensions</Name><Value>/integration/services</Value></Field>
        <Field><Name>agile.coreservices</Name><Value>/CoreService/services</Value></Field>
        <Field><Name>attributes.location</Name><Value>use_internal\Attributes.xml</Value></Field>
        <Field><Name>bulksize</Name><Value>25</Value></Field>
        <Field><Name>resolution_max_toplevels</Name><Value>5</Value></Field>
        <Field><Name>resolution_max_depth</Name><Value>2</Value></Field>
        <Field><Name>compression</Name><Value>false</Value></Field>
        <Field><Name>upload</Name><Value>asynchron</Value></Field>
        <Field><Name>handling</Name><Value>asynchron</Value></Field>
        <Field><Name>thumbnail</Name><Value>false</Value></Field>
    </FieldCollection>
</Structure>
```

Setting	Purpose and available values
`timeout`	Timeout in milliseconds for webservice requests Default: **900000**
`agile.selector`	The Agile PLM application identifier. Default: **Agile**
`agile.extensions`	The URL path appendix to your server name where the webservice extensions are located Default: **/integration/services**
`agile.coreservices`	The URL path appendix to your server name where the PLM Core services like BusinessObject are located Default: **/CoreService/services**
`attributes.location`	Path to a local Attributes.xml master file to override the internal file. Do not change! Default: **use_internal**
`bulksize`	The server calls are divided into packages of this number of objects per call. Depending on the server and network performance you can increase or decrease the value Default: **25**
`resolution_max_toplevels`	On Load to CAD the structure resolution is called with this maximum number of top elements. If there are more top elements given, the structure resolution is called multiple times in packages to reduce the server load Default: **5**
`resolution_max_depth`	On Load to CAD the structure resolution retrieves only this number of levels per call to reduce the server load. Incomplete nodes are detected and the structure resolution runs recursively for incomplete nodes Default: **2**
`compression`	Do not change! Default: **false**
`upload`	asynchron – upload files and free CAD session during

	upload and PLM commit synchron – free CAD session after file upload and PLM commit. Default: **asynchron**
handling	asynchron – upload files while CAD action is in progress and free CAD session during upload and PLM commit synchron – upload files after CAD action is complete. Default: **asynchron**
thumbnail	true – trigger assembly thumbnail regeneration on save false – no thumbnail regeneration on save. Default: **false**

CAD_SYSTEMS and CAD_FILE_EXTENSIONS Section

```
<Structure>
    <Name>CAD_SYSTEMS</Name>
    <FieldCollection>
        <!-- Value: CAD files can have copies/backups (Yes/No)-->
        <Field><Name>Catia</Name><Value>No</Value></Field>
        <Field><Name>ProE</Name><Value>Yes</Value></Field>
        <Field><Name>NX</Name><Value>No</Value></Field>
        <Field><Name>SolidEdge</Name><Value>No</Value></Field>
        <Field><Name>SolidWorks</Name><Value>No</Value></Field>
        <Field><Name>Inventor</Name><Value>No</Value></Field>
    </FieldCollection>
</Structure>
```

```
<Structure>
    <Name>CAD_FILE_EXTENSIONS</Name>
    <FieldCollection>
        <Field><Name>CATProduct</Name><Value>Catia</Value></Field>
        <Field><Name>CATPart</Name><Value>Catia</Value></Field>
        <Field><Name>CATDrawing</Name><Value>Catia</Value></Field>
        <Field><Name>prt</Name><Value>ProE</Value></Field>
        <Field><Name>asm</Name><Value>ProE</Value></Field>
        <Field><Name>drw</Name><Value>ProE</Value></Field>
```

The CAD_SYSTEMS section defines the list of supported CAD Tools.

Setting	Purpose and available values
CAD Tool Name	Yes – there are multiple file versions per object No – there is only one CAD file per object

The entries are required for handling of file versions like in Pro/E and to define the valid file extensions in the CAD_FILE_EXTENSIONS section. Only files listed in the CAD_FILE_EXTENSIONS section are displayed in the Workspace Manager.

Processes Section

```
<Structure>
    <Name>Processes</Name>
    <FieldCollection>
        <Field><Name>cnext</Name><Value>OnlyNamesUsed</Value></Field>
        <Field><Name>xtop</Name><Value>OnlyNamesUsed</Value></Field>
        <Field><Name>ugraf</Name><Value>OnlyNamesUsed</Value></Field>
        <Field><Name>edge</Name><Value>OnlyNamesUsed</Value></Field>
        <Field><Name>sldworks</Name><Value>OnlyNamesUsed</Value></Field>
        <Field><Name>inventor</Name><Value>OnlyNamesUsed</Value></Field>
    </FieldCollection>
</Structure>
```

Setting	Purpose and available values
Process name list	Only process names are listed here. If none of the listed processes is running then the EC Web Connector and Workspace Manager is shut down automatically.

ThreadPool Section

```
<Structure>
    <Name>ThreadPool</Name>
    <FieldCollection>
        <Field><Name>NumberOfThread</Name><Value>10</Value></Field>
        <Field><Name>Timeout</Name><Value>1800000</Value></Field>
        <Field><Name>MaxRetryNumber</Name><Value>3</Value></Field>
    </FieldCollection>
</Structure>
```

Setting	Purpose and available values
NumberOfThread	Number of simultaneous file uploads and downloads. Default: **10**
Timeout	Timeout for file operations in milliseconds. Default: **1800000**
MaxRetryNumber	If an upload or download fails, the system retries the operation this number of times. If the operation still fails, an error is thrown. Default: **3**

OverrideConfiguration Section

```
<Structure>
    <Name>OverrideConfiguration</Name>
    <FieldCollection>
        <Field><Name>DisplayedDesignClasses</Name><Value>Design</Value></Field>
        <Field><Name>DisplayedItemClasses</Name><Value>All</Value></Field>
        <Field><Name>DisplayedChangeClasses</Name><Value>All</Value></Field>
        <Field><Name>DisplayedDesignAutonumbers</Name><Value>Designs Number</Value></Field>
        <Field><Name>DisplayedItemAutonumbers</Name><Value>All</Value></Field>
        <Field><Name>DisplayedChangeAutonumbers</Name><Value>All</Value></Field>
    </FieldCollection>
</Structure>
```

Setting	Purpose and available values
DisplayedDesignClasses	List of Design classes that display in UI Default: **All**
DisplayedItemClasses	List of Item classes that display in UI Default: **All**
DisplayedChangeClasses	List of Change classes that display in UI Default: **All**
DisplayedDesignAutonumber	List of Design autonumbers that display in UI Default: **All**
DisplayedItemAutonumber	List of Item autonumbers that display in UI Default: **All**
DisplayedChangeAutonumber	List of Change autonumbers that display in UI Default: **All**

Viewables Section

```
<Structure>
    <Name>Viewables</Name>
    <FieldCollection>
        <Field><Name>ViewablesDrawing</Name><Value>PDF;TIF;CGM</Value></Field>
        <Field><Name>ViewablesModel</Name><Value>CGR;WRL;STEP;IGES;3DXML;JT;X_T</Value></Field>
    </FieldCollection>
</Structure>
```

Setting	Purpose and available values
`ViewablesDrawing`	List of viewable types for drawings available in UI Default: **PDF;TIF**
`ViewablesModel`	List of viewable types for drawings available in UI Default: **STEP;IGES;JT**

PartFamilies Section

```
<Structure>
    <Name>PartFamilies</Name>
    <FieldCollection>
        <Field><Name>FamilySelection</Name><Value>false</Value></Field>
        <!-- FamilyInstanceNumbering: false or not set, GENERIC_CONFIG, GENERIC_INDEX -->
        <Field><Name>FamilyInstanceNumbering</Name><Value>GENERIC_INDEX</Value></Field>
        <Field><Name>CountDelimiter</Name><Value>_</Value></Field>
    </FieldCollection>
</Structure>
```

Setting	Purpose and available values
`FamilySelection`	true – on selection of a generic or instance always all instances and the generic is selected all together false – don't handle all in one Default: **false**
`FamilyInstanceNumbering`	GENERIC_INDEX – Instances and configurations get the same number as the generic, plus a counter. GENERIC_CONFIG – Instances and configurations get the same number as the generic, plus the configuration name. False – Instances and configurations get independent numbers from the generic. Default: **GENERIC_INDEX**
`CountDelimiter`	Separator char between the number and the counter for drawings an part family members Default: **_**

ChangeProperties Section

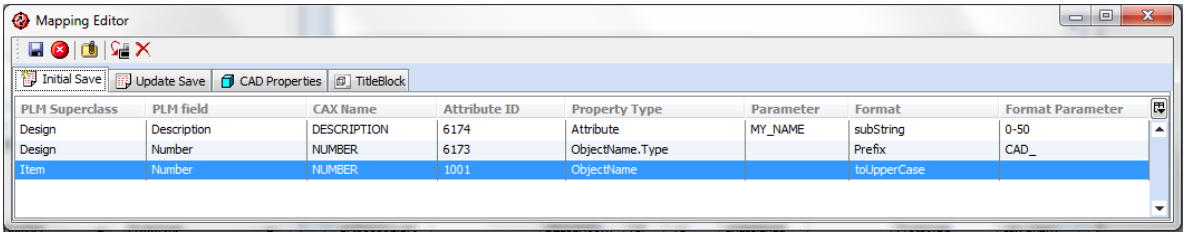
```
<Structure>
    <Name>ChangeProperties</Name>
    <FieldCollection>
        <Field><Name>InitialRevision</Name><Value>-</Value></Field>
        <Field><Name>RevisionSequence</Name><Value>-,A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z</Value></Field>
        <Field><Name>RevisionSequenceEditor</Name><Value>true</Value></Field>
        <Field><Name>SetLifecyclePhase</Name><Value>true</Value></Field>
        <!-- DesignRevisionLogic: increment=increase minor number on checkout, publish=set major rev from attached part,
        <Field><Name>DesignRevisionLogic</Name><Value>increment,editable,publish,noparentheses</Value></Field>
        <Field><Name>InitialDesignRevision</Name><Value>-</Value></Field>
        <Field><Name>VersionSeparator</Name><Value>.</Value></Field>
        <Field><Name>InitialVersion</Name><Value>1</Value></Field>
        <Field><Name>InitialVersionCheckin</Name><Value>checkin</Value></Field>
        <Field><Name>InitialPublishVersion</Name><Value>1</Value></Field>
        <Field><Name>PartDesignNumbering</Name><Value>false</Value></Field>
        <Field><Name>PushPartRevisionToDesign</Name><Value>true</Value></Field>
        <Field><Name>PushDesignRevisionToPart</Name><Value>true</Value></Field>
        <Field><Name>PublishAttachments</Name><Value>any</Value></Field>
        <Field><Name>PublishIntroductory</Name><Value>true</Value></Field>
        <Field><Name>PublishPartSite</Name><Value>none</Value></Field>  <!-- Site to use when publishing Item/BOM, NONE
    </FieldCollection>
</Structure>
```

Setting	Purpose and available values
`InitialRevision`	Initial Item revision value
`RevisionSequence`	Comma separated list of valid revision codes for Items
`RevisionSequenceEditor`	true – enable the editor in the save preview table false – disable the editor Default: **true**
`SetLifecyclePhase`	true - transfer and set the Item lifecycle phase false – don't set the Item lifecycle phase Default: **true**
`DesignRevisionLogic`	Comma separated list of the following values. If set the values control the following behavior: increment – increase the minor revision code in the design revision field. editable – the Design revision field is editable in the save preview. publish – the Design revision is reset on publish to fit the item revision code. The minor revision is calculated or reset. noparentheses – remove any parentheses from the design revision Default: **increment,editable,publish,noparentheses**
`InitialDesignRevision`	Initial Design revision value
`VersionSeparator`	Separator char between the major and minor design revision code. Default: **. (Dot)**
`InitialVersion`	Initial Version number Default: **1**
`InitialVersionCheckin`	Checkin – checkin the initial Design version Increment – checkin the initial Design version and

	checkout again to keep reservation. false – no automated checkin of initial Design versions Default: **checkin**
`InitialPublishVersion`	Initial Version number on publish Default: **1**
`PartDesignNumbering`	false – Item and Design have different number sources and numbers don't have to match between the part and the design. true – Designs use Part autonumbers and the Design number matches the Part number. Default: **false**
`PushPartRevisionToDesign`	true – On editing the part revision editor in the save preview the part revision is set to the Design major revision. false – no synchronization on edit Default: **true**
`PushDesignRevisionToPart`	true – On editing the design revision in the save preview the major design revision is set to the Part revision. false – no synchronization on edit Default: **true**
`PublishAttachments`	Comma separated list of file extensions that will be attached to the Item during the publish step. Default: **any**
`PublishAttachmentType`	Value to be set to the Item Attachments in the Attachment Type field for files attached by EC. **Note that the value must be contained in the available values list for the attachment type field. Use Agile administration to edit the list.** Default: **NONE**
`PublishIntroductory`	true – publish to Introductory Item revisions with no change object is allowed. false – don't publish to Introductory Item revisions Default: **true**
`PublishPartSite`	none – no specific manufacturing site is set to the Item on publish Any other value is interpreted as the desired Site name to be set to the Item on publish Default: **none**

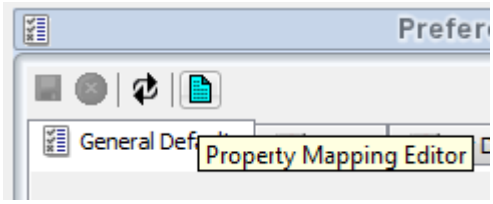
Mapping Editor

This section provides a complete summary of the options that are available in the Mapping Editor. The Mapping Editor is used to define mappings of CAD properties to PLM fields during save and for mapping of PLM values to CAD properties or the drawing titleblock.

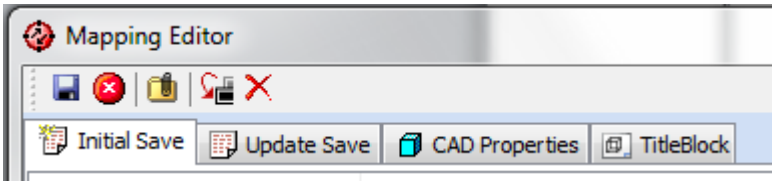


Using the Mapping Editor

The mapping is CAD-specific. For each CAD system, a separate mapping is created. The Mapping Editor is launched using the blue button from the preferences dialog in the save preview. The button is only visible if you have admin privileges in PLM.



The toolbar of the Mapping Editor has the following functionality.



Save the mapping to disk. In order to use or test the new mapping, you have to exit the save preview and launch the save preview again from CAD. The mapping definition is read on each start of a save, update properties or update titleblock command.

Attention: The local save doesn't make the mapping available to all users and will be lost if you restart the integration. In order to have a permanent mapping, store it to PLM as explained below.

Save and attach the mapping into PLM and make it available to all users. In order to use or test the new mapping, you have to exit the save preview and launch the save preview again from CAD. The mapping definition is read on each start of a save, update properties or update titleblock command. **All other client machines have to relogin using the "Disconnect Session" command in order to download the updated mapping.**

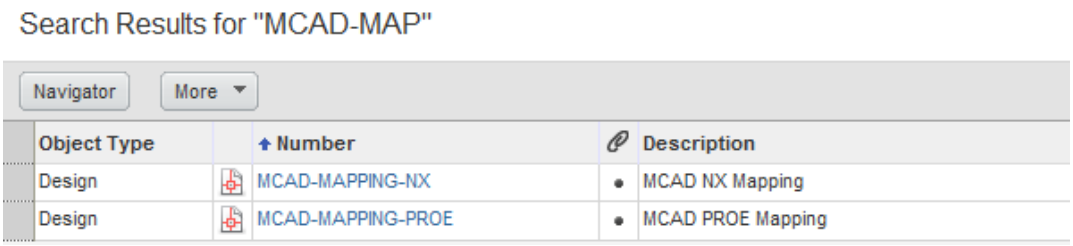
Cancel all changes to the mappings and reread the latest saved mapping.

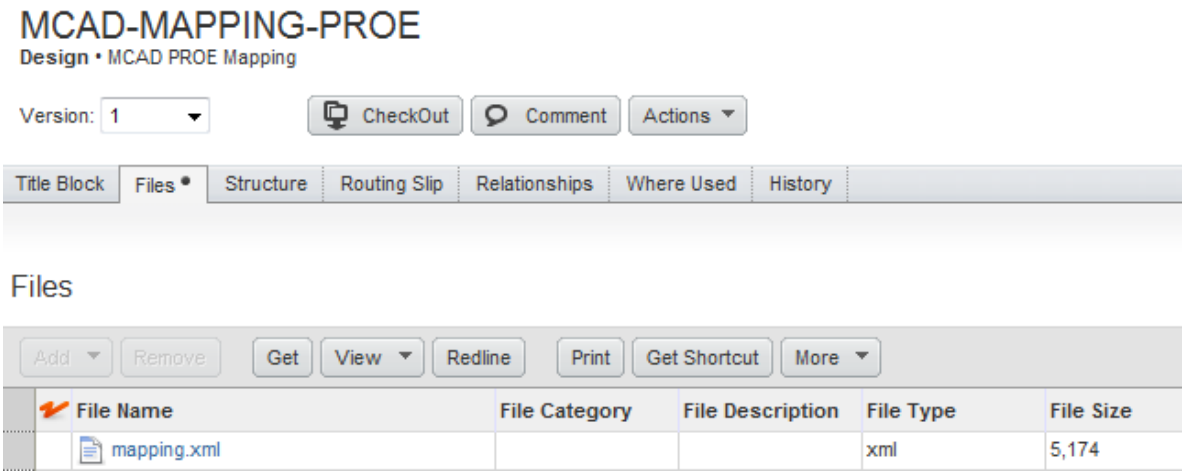
Append a row into the current active mapping tab.

Remove a selected row in the current active mapping tab.

MCAD-MAPPING folders - How the mapping is handled

The system creates a design called MCAD-MAPPING-(CADSystem) and attaches the mapping to that design. On the next login of any user with the same CAD system, the mapping is downloaded automatically and used on the client machine.

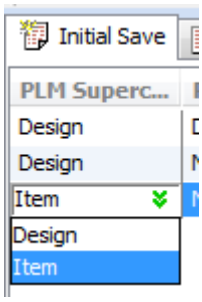



MCAD-MAPPING-PROE
Design • MCAD PROE Mapping
Version: 1
CheckOut
Comment
Actions
Title Block
Files
Structure
Routing Slip
Relationships
Where Used
History
Files
Add
Remove
Get
View
Redline
Print
Get Shortcut
More
File Name
File Category
File Description
File Type
File Size
mapping.xml
xml
5,174

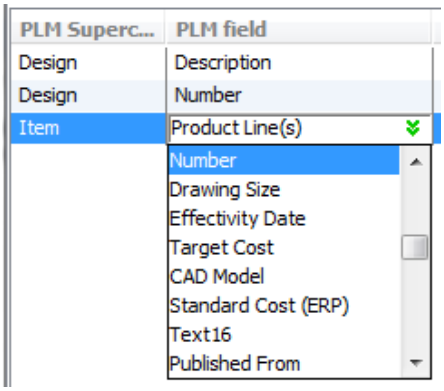
Mapping CAD properties to PLM fields

The first two tabs define the mappings of CAD properties to PLM fields. For CAD objects that aren't known in PLM the mapping in the "Initial Save" tab is used. The "Update Save" tab is used for CAD objects that already have an assigned Agile object. Both sections are configured the same way but may contain different settings. For instance on initial save the predefinition of the Design number or the assigned Item number is important. On update save there is only the need to map attributes like dimensions or descriptions.

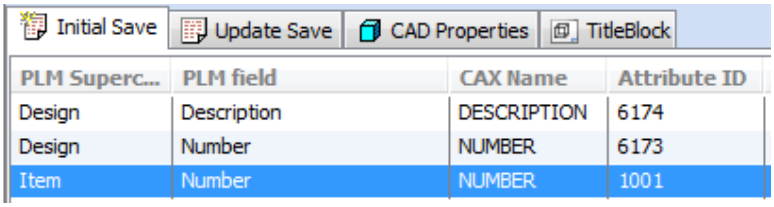
The first column switches the target Agile superclass, which can be "Design" or "Item".



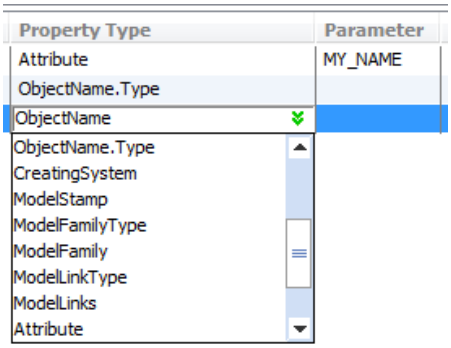
Depending on the selection in the PLM superclass column the available PLM fields are filtered from the current class configuration. Only visible and editable fields in PLM are available.



After selecting the target field, additional information for this field displays in the CAX Name and the Attribute ID column. Both are read-only.



In the Property Type column, you can select from CAD internal integration parameters and from CAD properties. If you set the value to “Attribute” you have to specify a CAD property name in the Parameter column.



Note: A parameter with this name is searched in the configuration specific properties first. If there is no configuration specific property with this name, the standard or custom properties of the part are scanned.

The available property types are CAD dependent and listed in the table below.

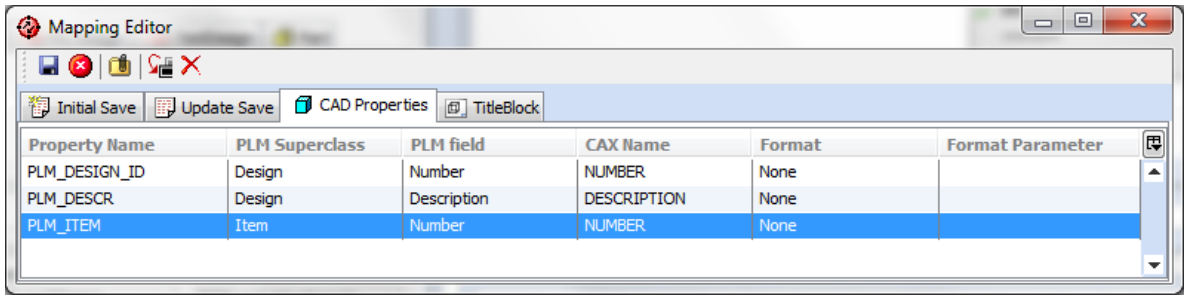
Property Type	**Purpose**
`ModelFullName`	File name including Path
`ModelName`	File name without Path
`ModelExtension`	File extension
`ModelType`	File type, equals extension in most CAD system
`ModelPath`	File path location
`ModelNameOrConfiguration`	File name or configuration name
`ModelNameAndConfiguration`	File name plus configuration name
`ObjectName`	File name without path and extension
`ObjectName.Type`	File name without path
`CreatingSystem`	CAD version the file is created with
`Attribute`	Retrieve the CAD Property defined in the Parameter column
`String`	Set the string defined in the Parameter column
`Code`	Execute the CAD callback code defined in the Parameter column
`$USER`	Set the current login user name as value
`$USERID`	Set the current login user ID as value
`Configuration`	Configuration name
`ModelConfigurationNames`	Contained configuration names
`ModelStamp`	Internal timestamp of the file

ModelFamilyType	Part family type or configuration type
ModelFamily	Part family or configuration master or generic
ModelLinkType	Linked references type
ModelLinks	Linked source file
SimplifiedRep	Simplified representation identifier (Pro/E)
DrawingModel	Model assigned to the drawing (Pro/E)
DrawingModelName	Model name assigned to the drawing (Pro/E)
DrawingModelType	Model extension assigned to the drawing (Pro/E)
HelperPartIdent	Helper part ident

Additionally you can now specify a format as described in the chapter “Formatting values during mapping”. Save the mapping, as needed locally, and into PLM if you want all engineers to use it.

Mapping PLM values to CAD Properties

The mapping of PLM values back into CAD properties is defined in two sections. The CAD tab defines the mappings to CAD properties. Some CAD systems support special logic for Drawing titleblocks. Especially if the displayed texts in the drawing cannot be linked to CAD properties. For this use case the second TitleBlock tab is used by some CAD tools.



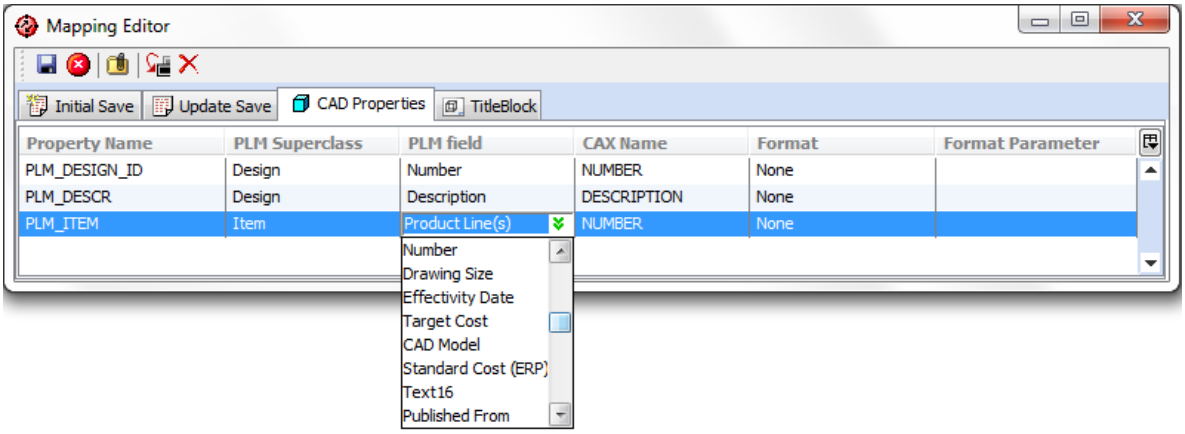
The first column contains the name of the target CAD property. In the CAD tab this is the name of the CAD part attribute, CAD property or configuration-specific property.

Attention: Some CAD Tools use predefined placeholders for some internal CAD property names like listed in the table below.

CAD Tool	Property Name	Purpose
CATIA V5	PartNumber	Internal Part ID
CATIA V5	Nomenclature	Internal Part Description
CATIA V5	Definition	Internal Definition field
CATIA V5	Description	Internal Description field
CATIA V5	DescriptionReference	Internal Reference field

CATIA V5	Revision	Internal Revision ID

In the second column you define the PLM superclass, from which the value should be send to CAD. You can map values from the Item and the Design object. Once you have selected the desired super class you can choose from the list of available attributes of this class.

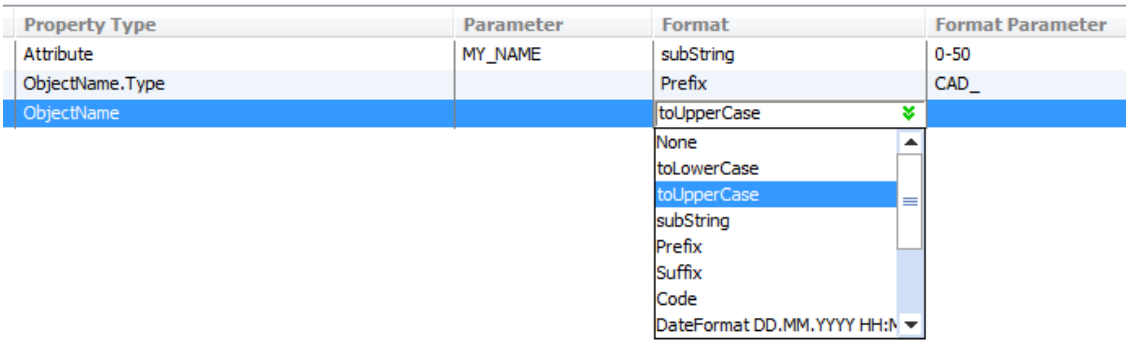


The CAX_Name column is now set with the default symbolic name or the attribute ID if no such symbolic name exists. Note that the CAX Name column is editable to support editing complex legacy logic for data extraction in drawing titleblocks.

Additionally, you can now specify a format as described in the chapter “Formatting values during mapping”. Save the mapping as needed locally and into PLM if you want all engineers to be using it.

Formatting values during mapping

The Format and Format Parameter columns provide basic formatting options for values mapped between CAD and PLM and vice versa.



Valid format options are listed in the table below. The date formats work only if the value to be formatted is given in an integer value.

Format	Purpose
`None`	No formatting action is executed
`toLowerCase`	Convert the value to lower case characters
`toUpperCase`	Convert the value to upper case characters
`subString`	Cut a substring from the value with the start and end index defined in the Format Parameter column. Valid values are for example 0-end, 3-end, 0-50.
`Prefix`	Append the prefix defined in the Format Parameter column in front of the value
`Suffix`	Append the suffix defined in the Format Parameter column at the end of the value
`Code`	Execute the CAD callback code defined in the Format Parameter column to format the value
`DateFormat DD.MM.YYYY HH:MI:SS`	Format the Date like 15.12.2010 23:30:00
`DateFormat DD.MM.YYYY`	Format the Date like 15.12.2010
`DateFormat DD.MM.YY`	Format the Date like 15.12.10
`DateFormat DD-MM-YY`	Format the Date like 15-12-10
`DateFormat MM/DD/YY`	Format the Date like 12/15/10
`DateFormat DD-MMM-YY`	Format the Date like 15-Dec-2010

Language and Localization Administration

This section provides information about how to setup the GUI languages for the integration. Languages are set up on three different components. The CAD connector, EC Web Components and the PLM user language. All are independent from each other.

PLM User and Data Language

The preferred user language controlled the data values which are displayed in EC dialogs and transferred between CAD and PLM. The setup is done in the user preferences settings in PLM.

EC Web Components

The EC Web Component dialogs are localized. The desired language on runtime is defined using a switch in (components)/com/acx.bat. Valid values are EN, FR, DE.

```
start /b javaw.exe %JAVA_HEAP_SIZE% -Dcom.xplm.agile.Language=EN -Djava….
```

Use the disconnect session command or restart the CAD Tool after changing the setting.

CAD Connector Components

Due to different techniques for integration in CAD tools, the Addin in CAD (CAD menus and Icons) must be configured CAD-specific.

CAD Tool	How to configure Addin Language
SolidWorks	The CAD Addin language is configured in components/xml/xPLMConnector.xml in this setting: <Language>**EN**</Language>. Valid values are EN, FR, DE.
SolidEdge	The CAD Addin language is configured in components/xml/xPLMConnector.xml in this setting: <Language>**EN**</Language>. Valid values are EN, FR, DE.
Pro/ENGINEER and Creo	The CAD Addin language is configured in xACP.cfg with the AcpLang=English setting. Valid values are English, French, German.
CATIA V5	The CATIA CAD system language controls the language of EC menus and toolbars

Agile PLM Server Class Administration

This section provides a complete summary of class configuration options required for the EC Web connector. Once the basic installation has been done following the instructions in the Installation Guide, you can refer here for details of all required settings.

The EC Web Connector requires an essential minimum set of fields enabled to work properly. Make sure all the fields listed in the following chapters are visible and enabled on your Agile server. You may need to enable additional fields according to the desired CAD property mapping.

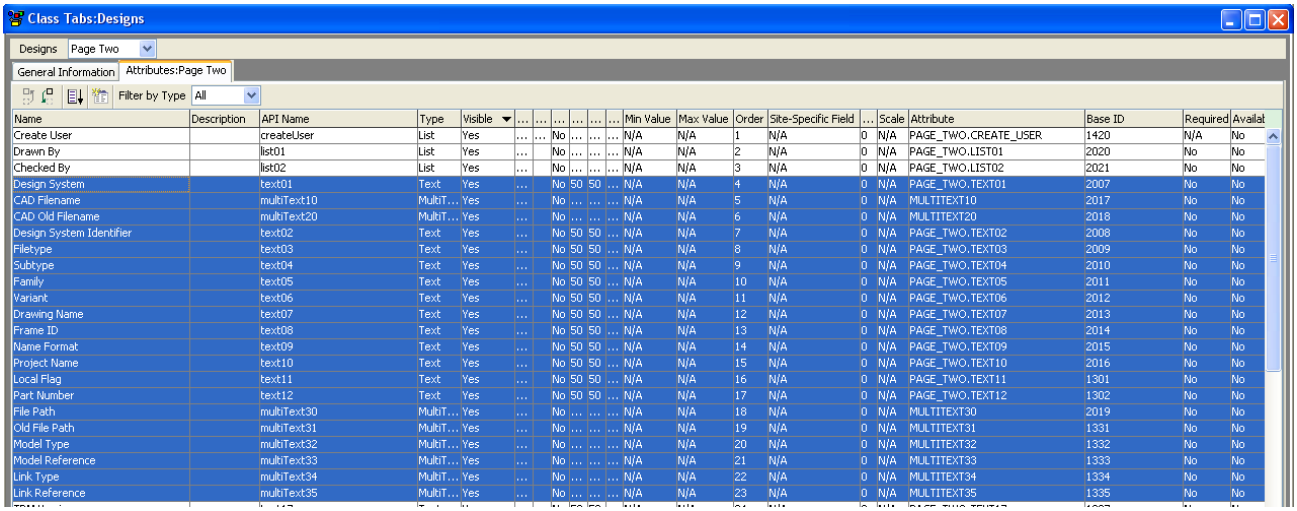
Note that in most cases, the attribute name is predefined, although it may be disabled (OFF) by default. Make sure these are all turned ON. Attributes where the name is not predefined are mentioned below.

Designs Page Two

Make sure the following fields are enabled:

- Design System (ID: 2007)
- CAD Filename (ID: 2017)
- Identifier (ID: 2008)
- File Type (ID: 2009)
- Sub Type (ID: 2010)
- Family (ID: 2011)
- Variant (ID: 2012)
- Drawing Name (ID: 2013)
- Frame ID (ID: 2014)
- Name Format (ID: 2015)
- Project Name (ID: 2016)
- Local Flag (ID: 1301)
- Part Number (ID: 1302)
- File Path (ID: 2019)

- Model Type (ID: 1332)
- Model Reference (ID: 1333)
- Link Type (ID: 1334)
- Link Reference (ID: 1335)

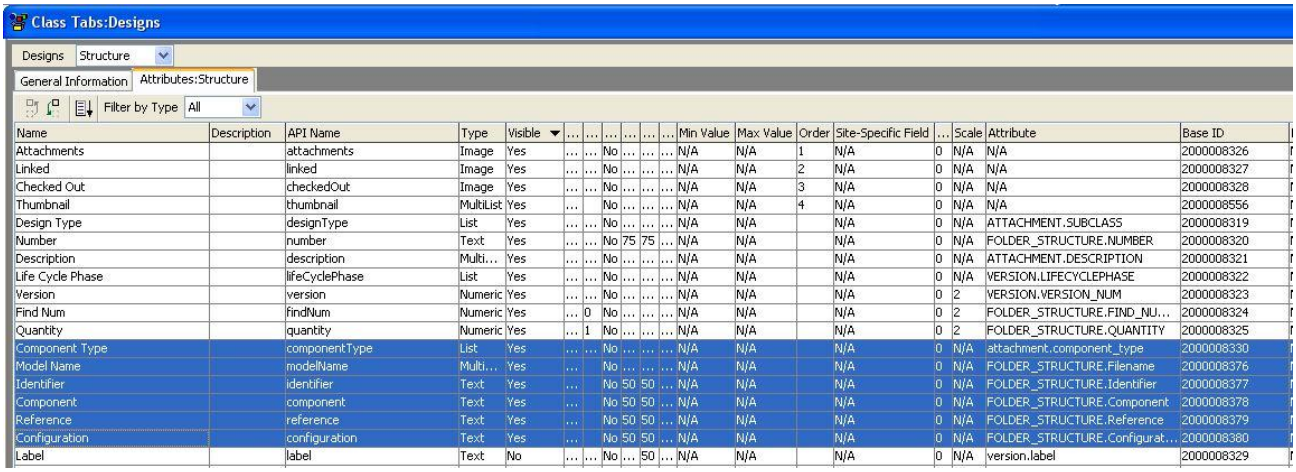


Name	Description	API Name	Type	Visible	Min Value	Max Value	Order	Site-Specific Field	Scale	Attribute	Base ID	Required	Availat
Create User		createUser	List	Yes	N/A	N/A	1	N/A	0	N/A	PAGE_TWO.CREATE_USER	1420	N/A	No
Drawn By		list01	List	Yes	N/A	N/A	2	N/A	0	N/A	PAGE_TWO.LIST01	2020	No	No
Checked By		list02	List	Yes	N/A	N/A	3	N/A	0	N/A	PAGE_TWO.LIST02	2021	No	No
Design System		text01	Text	Yes	N/A	N/A	4	N/A	0	N/A	PAGE_TWO.TEXT01	2007	No	No
CAD Filename		multiText10	MultiT...	Yes	N/A	N/A	5	N/A	0	N/A	MULTITEXT10	2017	No	No
CAD Old Filename		multiText20	MultiT...	Yes	N/A	N/A	6	N/A	0	N/A	MULTITEXT20	2018	No	No
Design System Identifier		text02	Text	Yes	N/A	N/A	7	N/A	0	N/A	PAGE_TWO.TEXT02	2008	No	No
Filetype		text03	Text	Yes	N/A	N/A	8	N/A	0	N/A	PAGE_TWO.TEXT03	2009	No	No
Subtype		text04	Text	Yes	N/A	N/A	9	N/A	0	N/A	PAGE_TWO.TEXT04	2010	No	No
Family		text05	Text	Yes	N/A	N/A	10	N/A	0	N/A	PAGE_TWO.TEXT05	2011	No	No
Variant		text06	Text	Yes	N/A	N/A	11	N/A	0	N/A	PAGE_TWO.TEXT06	2012	No	No
Drawing Name		text07	Text	Yes	N/A	N/A	12	N/A	0	N/A	PAGE_TWO.TEXT07	2013	No	No
Frame ID		text08	Text	Yes	N/A	N/A	13	N/A	0	N/A	PAGE_TWO.TEXT08	2014	No	No
Name Format		text09	Text	Yes	N/A	N/A	14	N/A	0	N/A	PAGE_TWO.TEXT09	2015	No	No
Project Name		text10	Text	Yes	N/A	N/A	15	N/A	0	N/A	PAGE_TWO.TEXT10	2016	No	No
Local Flag		text11	Text	Yes	N/A	N/A	16	N/A	0	N/A	PAGE_TWO.TEXT11	1301	No	No
Part Number		text12	Text	Yes	N/A	N/A	17	N/A	0	N/A	PAGE_TWO.TEXT12	1302	No	No
File Path		multiText30	MultiT...	Yes	N/A	N/A	18	N/A	0	N/A	MULTITEXT30	2019	No	No
Old File Path		multiText31	MultiT...	Yes	N/A	N/A	19	N/A	0	N/A	MULTITEXT31	1331	No	No
Model Type		multiText32	MultiT...	Yes	N/A	N/A	20	N/A	0	N/A	MULTITEXT32	1332	No	No
Model Reference		multiText33	MultiT...	Yes	N/A	N/A	21	N/A	0	N/A	MULTITEXT33	1333	No	No
Link Type		multiText34	MultiT...	Yes	N/A	N/A	22	N/A	0	N/A	MULTITEXT34	1334	No	No
Link Reference		multiText35	MultiT...	Yes	N/A	N/A	23	N/A	0	N/A	MULTITEXT35	1335	No	No

Designs Structure

Make sure the following fields are enabled:

- Component Type (ID: 2000008330)
- Model Name (ID: 2000008376)
- Identifier (ID: 2000008377)
- Component (ID: 2000008378)
- Reference (ID: 2000008379)
- Configuration (ID: 2000008380)
- Quantity (ID: 2000008325)

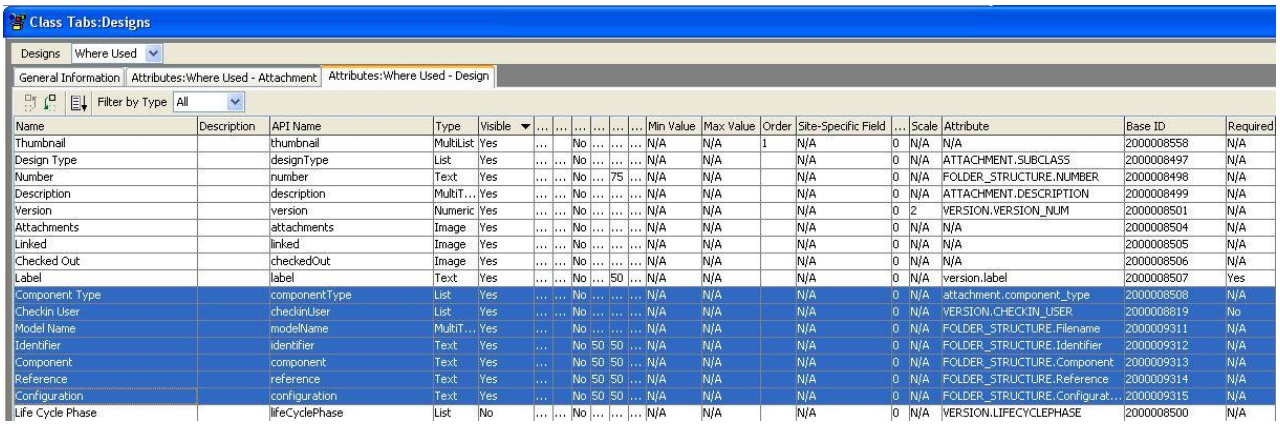


Name	Description	API Name	Type	Visible	...	...	...	...	...	...	Min Value	Max Value	Order	Site-Specific Field	...	Scale	Attribute	Base ID
Attachments		attachments	Image	Yes	...	...	No	...	...	...	N/A	N/A	1	N/A	0	N/A	N/A	2000008326
Linked		linked	Image	Yes	...	...	No	...	...	...	N/A	N/A	2	N/A	0	N/A	N/A	2000008327
Checked Out		checkedOut	Image	Yes	...	...	No	...	...	...	N/A	N/A	3	N/A	0	N/A	N/A	2000008328
Thumbnail		thumbnail	MultiList	Yes	...		No	...	...	...	N/A	N/A	4	N/A	0	N/A	N/A	2000008556
Design Type		designType	List	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	ATTACHMENT.SUBCLASS	2000008319
Number		number	Text	Yes	...	...	No	75	75	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.NUMBER	2000008320
Description		description	Multi...	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	ATTACHMENT.DESCRIPTION	2000008321
Life Cycle Phase		lifeCyclePhase	List	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	VERSION.LIFECYCLEPHASE	2000008322
Version		version	Numeric	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	2	VERSION.VERSION_NUM	2000008323
Find Num		findNum	Numeric	Yes	...	0	No	...	...	...	N/A	N/A		N/A	0	2	FOLDER_STRUCTURE.FIND_NU...	2000008324
Quantity		quantity	Numeric	Yes	...	1	No	...	...	...	N/A	N/A		N/A	0	2	FOLDER_STRUCTURE.QUANTITY	2000008325
Component Type		componentType	List	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	attachment.component_type	2000008330
Model Name		modelName	Multi...	Yes	...		No	...	...	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Filename	2000008376
Identifier		identifier	Text	Yes	...		No	50	50	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Identifier	2000008377
Component		component	Text	Yes	...		No	50	50	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Component	2000008378
Reference		reference	Text	Yes	...		No	50	50	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Reference	2000008379
Configuration		configuration	Text	Yes	...		No	50	50	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Configurat...	2000008380
Label		label	Text	No	...	...	No	...	50	...	N/A	N/A		N/A	0	N/A	version.label	2000008329

Designs Where Used Design

Make sure the following fields are enabled:

- Component Type (ID: 2000008508)
- Model Name (ID: 2000009311)
- Identifier (ID: 2000009312)
- Component (ID: 2000009313)
- Reference (ID: 2000009314)
- Configuration (ID: 2000009315)
- Version (ID: 2000008501)

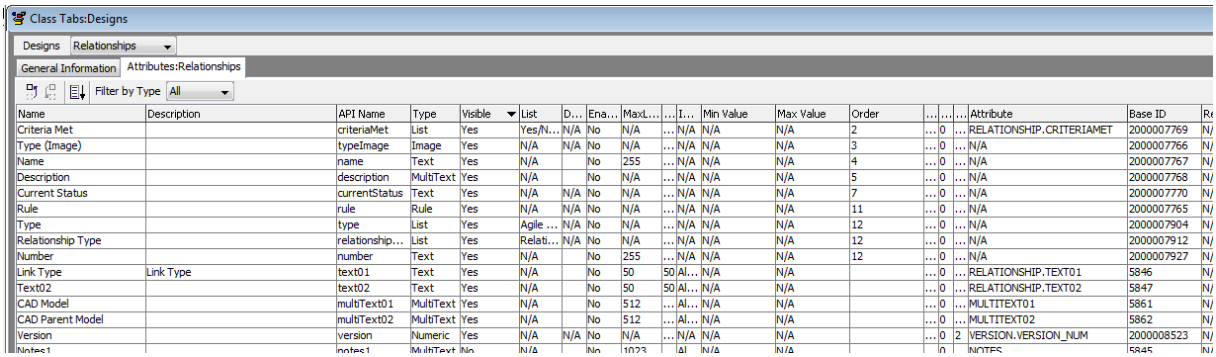


Name	Description	API Name	Type	Visible	...	...	...	...	...	...	Min Value	Max Value	Order	Site-Specific Field	...	Scale	Attribute	Base ID	Required
Thumbnail		thumbnail	MultiList	Yes	...		No	...	...	...	N/A	N/A	1	N/A	0	N/A	N/A	2000008558	N/A
Design Type		designType	List	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	ATTACHMENT.SUBCLASS	2000008497	N/A
Number		number	Text	Yes	...	...	No	...	75	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.NUMBER	2000008498	N/A
Description		description	MultiT...	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	ATTACHMENT.DESCRIPTION	2000008499	N/A
Version		version	Numeric	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	2	VERSION.VERSION_NUM	2000008501	N/A
Attachments		attachments	Image	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	N/A	2000008504	N/A
Linked		linked	Image	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	N/A	2000008505	N/A
Checked Out		checkedOut	Image	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	N/A	2000008506	N/A
Label		label	Text	Yes	...	...	No	...	50	...	N/A	N/A		N/A	0	N/A	version.label	2000008507	Yes
Component Type		componentType	List	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	attachment.component_type	2000008508	N/A
Checkin User		checkinUser	List	Yes	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	VERSION.CHECKIN_USER	2000008819	No
Model Name		modelName	MultiT...	Yes	...		No	...	...	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Filename	2000009311	N/A
Identifier		identifier	Text	Yes	...		No	50	50	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Identifier	2000009312	N/A
Component		component	Text	Yes	...		No	50	50	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Component	2000009313	N/A
Reference		reference	Text	Yes	...		No	50	50	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Reference	2000009314	N/A
Configuration		configuration	Text	Yes	...		No	50	50	...	N/A	N/A		N/A	0	N/A	FOLDER_STRUCTURE.Configurat...	2000009315	N/A
Life Cycle Phase		lifeCyclePhase	List	No	...	...	No	...	...	...	N/A	N/A		N/A	0	N/A	VERSION.LIFECYCLEPHASE	2000008500	N/A

Designs Relationships

Make sure the following fields are enabled:

- Relationship Type (ID: 2000007912)
- Number (ID: 2000007927)
- Version (ID: 2000008523)
- Link Type (ID: 5846) – not the standard attribute name, must be modified manually
- Published Change (ID: 5847) – not the standard attribute name, must be modified manually
- CAD Model (ID: 5861) – not the standard attribute name, must be modified manually
- CAD Parent Model (ID: 5862) - not the standard attribute name, must be modified manually



Name	Description	API Name	Type	Visible	List	D...	Ena...	MaxL...	...	I...	Min Value	Max Value	Order	...	...	...	Attribute	Base ID	Re
Criteria Met		criteriaMet	List	Yes	Yes/N...	N/A	No	N/A	...	N/A	N/A	N/A	2	...	0	...	RELATIONSHIP.CRITERIAMET	2000007769	N/
Type (Image)		typeImage	Image	Yes	N/A	N/A	No	N/A	...	N/A	N/A	N/A	3	...	0	...	N/A	2000007766	N/
Name		name	Text	Yes	N/A		No	255	...	N/A	N/A	N/A	4	...	0	...	N/A	2000007767	N/
Description		description	MultiText	Yes	N/A		No	N/A	...	N/A	N/A	N/A	5	...	0	...	N/A	2000007768	N/
Current Status		currentStatus	Text	Yes	N/A	N/A	No	N/A	...	N/A	N/A	N/A	7	...	0	...	N/A	2000007770	N/
Rule		rule	Rule	Yes	N/A	N/A	No	N/A	...	N/A	N/A	N/A	11	...	0	...	N/A	2000007765	N/
Type		type	List	Yes	Agile ...	N/A	No	N/A	...	N/A	N/A	N/A	12	...	0	...	N/A	2000007904	N/
Relationship Type		relationship...	List	Yes	Relati...	N/A	No	N/A	...	N/A	N/A	N/A	12	...	0	...	N/A	2000007912	N/
Number		number	Text	Yes	N/A		No	255	...	N/A	N/A	N/A	12	...	0	...	N/A	2000007927	N/
Link Type	Link Type	text01	Text	Yes	N/A		No	50	50	Al...	N/A	N/A		...	0	...	RELATIONSHIP.TEXT01	5846	N/
Text02		text02	Text	Yes	N/A		No	50	50	Al...	N/A	N/A		...	0	...	RELATIONSHIP.TEXT02	5847	N/
CAD Model		multiText01	MultiText	Yes	N/A		No	512	...	Al...	N/A	N/A		...	0	...	MULTITEXT01	5861	N/
CAD Parent Model		multiText02	MultiText	Yes	N/A		No	512	...	Al...	N/A	N/A		...	0	...	MULTITEXT02	5862	N/
Version		version	Numeric	Yes	N/A	N/A	No	N/A	...	N/A	N/A	N/A		...	0	2	VERSION.VERSION_NUM	2000008523	N/
Notes1		notes1	MultiText	No	N/A		No	1023		Al...	N/A	N/A			0		NOTES	5845	N/

Designs Files

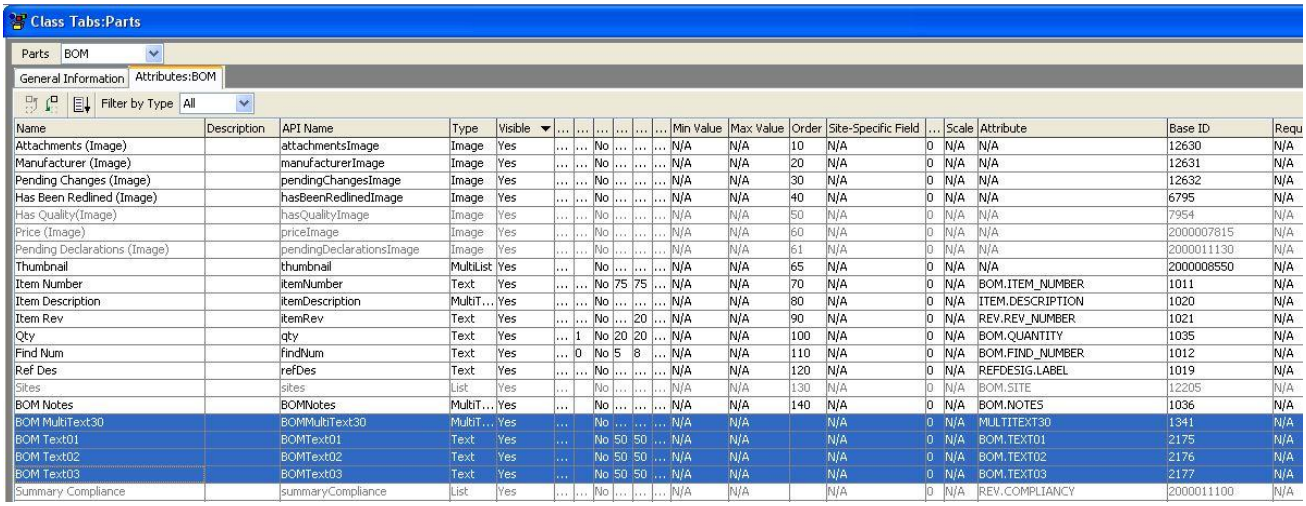
Make sure the following fields are enabled:

- File Category (ID: 2000008509) with a list of available values containing the “Source” and “Viewable” values.

Parts BOM

Make sure the following fields are enabled, if Find number support or BOM publishing is desired:

- BOM Quantity (ID: 1035)
- CAD Filename (ID: 1341) – not the standard attribute name, must be modified manually
- Identifier (ID:2175) – not the standard attribute name, must be modified manually
- Component (ID: 2176) – not the standard attribute name, must be modified manually
- Reference (ID:2177) – not the standard attribute name, must be modified manually

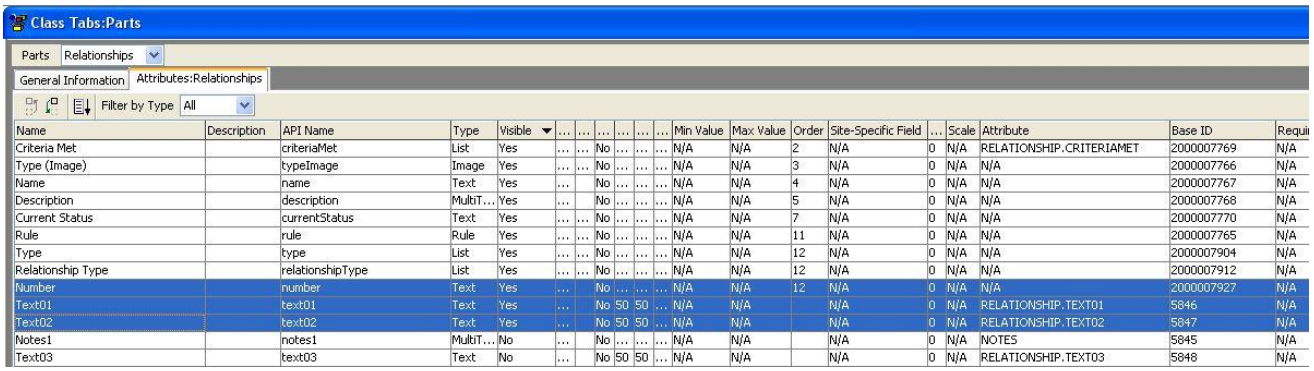


Name	Description	API Name	Type	Visible	Min Value	Max Value	Order	Site-Specific Field	Scale	Attribute	Base ID	Requ
Attachments (Image)		attachmentsImage	Image	Yes	N/A	N/A	10	N/A	N/A	N/A	12630	N/A
Manufacturer (Image)		manufacturerImage	Image	Yes	N/A	N/A	20	N/A	N/A	N/A	12631	N/A
Pending Changes (Image)		pendingChangesImage	Image	Yes	N/A	N/A	30	N/A	N/A	N/A	12632	N/A
Has Been Redlined (Image)		hasBeenRedlinedImage	Image	Yes	N/A	N/A	40	N/A	N/A	N/A	6795	N/A
Has Quality(Image)		hasQualityImage	Image	Yes	N/A	N/A	50	N/A	N/A	N/A	7954	N/A
Price (Image)		priceImage	Image	Yes	N/A	N/A	60	N/A	N/A	N/A	2000007815	N/A
Pending Declarations (Image)		pendingDeclarationsImage	Image	Yes	N/A	N/A	61	N/A	N/A	N/A	2000011130	N/A
Thumbnail		thumbnail	MultiList	Yes	N/A	N/A	65	N/A	N/A	N/A	2000008550	N/A
Item Number		itemNumber	Text	Yes	N/A	N/A	70	N/A	N/A	BOM.ITEM_NUMBER	1011	N/A
Item Description		itemDescription	MultiT...	Yes	N/A	N/A	80	N/A	N/A	ITEM.DESCRIPTION	1020	N/A
Item Rev		itemRev	Text	Yes	N/A	N/A	90	N/A	N/A	REV.REV_NUMBER	1021	N/A
Qty		qty	Text	Yes	N/A	N/A	100	N/A	N/A	BOM.QUANTITY	1035	N/A
Find Num		findNum	Text	Yes	N/A	N/A	110	N/A	N/A	BOM.FIND_NUMBER	1012	N/A
Ref Des		refDes	Text	Yes	N/A	N/A	120	N/A	N/A	REFDESIG.LABEL	1019	N/A
Sites		sites	List	Yes	N/A	N/A	130	N/A	N/A	BOM.SITE	12205	N/A
BOM Notes		BOMNotes	MultiT...	Yes	N/A	N/A	140	N/A	N/A	BOM.NOTES	1036	N/A
BOM MultiText30		BOMMultiText30	MultiT...	Yes	N/A	N/A		N/A	N/A	MULTITEXT30	1341	N/A
BOM Text01		BOMText01	Text	Yes	N/A	N/A		N/A	N/A	BOM.TEXT01	2175	N/A
BOM Text02		BOMText02	Text	Yes	N/A	N/A		N/A	N/A	BOM.TEXT02	2176	N/A
BOM Text03		BOMText03	Text	Yes	N/A	N/A		N/A	N/A	BOM.TEXT03	2177	N/A
Summary Compliance		summaryCompliance	List	Yes	N/A	N/A		N/A	N/A	REV.COMPLIANCY	2000011100	N/A

Parts Relationships

Make sure the following fields are enabled, if Find number support or BOM publishing is desired:

- Number (ID: 2000007927)
- Link Type (ID: 5846) – not the standard attribute name, must be modified manually
- Published Change (ID: 5847) – not the standard attribute name, must be modified manually



Name	Description	API Name	Type	Visible	Min Value	Max Value	Order	Site-Specific Field	Scale	Attribute	Base ID	Requi
Criteria Met		criteriaMet	List	Yes	N/A	N/A	2	N/A	0	N/A	RELATIONSHIP.CRITERIAMET	2000007769	N/A
Type (Image)		typeImage	Image	Yes	N/A	N/A	3	N/A	0	N/A	N/A	2000007766	N/A
Name		name	Text	Yes	N/A	N/A	4	N/A	0	N/A	N/A	2000007767	N/A
Description		description	MultiT…	Yes	N/A	N/A	5	N/A	0	N/A	N/A	2000007768	N/A
Current Status		currentStatus	Text	Yes	N/A	N/A	7	N/A	0	N/A	N/A	2000007770	N/A
Rule		rule	Rule	Yes	N/A	N/A	11	N/A	0	N/A	N/A	2000007765	N/A
Type		type	List	Yes	N/A	N/A	12	N/A	0	N/A	N/A	2000007904	N/A
Relationship Type		relationshipType	List	Yes	N/A	N/A	12	N/A	0	N/A	N/A	2000007912	N/A
Number		number	Text	Yes	N/A	N/A	12	N/A	0	N/A	N/A	2000007927	N/A
Text01		text01	Text	Yes	N/A	N/A		N/A	0	N/A	RELATIONSHIP.TEXT01	5846	N/A
Text02		text02	Text	Yes	N/A	N/A		N/A	0	N/A	RELATIONSHIP.TEXT02	5847	N/A
Notes1		notes1	MultiT…	No	N/A	N/A		N/A	0	N/A	NOTES	5845	N/A
Text03		text03	Text	No	N/A	N/A		N/A	0	N/A	RELATIONSHIP.TEXT03	5848	N/A