
AGILE ENGINEERING COLLABORATION

RELEASE NOTES FOR MCAD CONNECTORS AND EC CLIENT

MCAD CONNECTOR RELEASE 2.3.1

EC CLIENT RELEASE 1.1 SP2

April 12, 2007

Introduction

These release notes apply to the following Agile Engineering Collaboration MCAD Connectors: Pro/Engineer, SolidWorks, Solid Edge, UG NX, CATIA V4, and CATIA V5.

Release 2.3.1 includes important new CAD Connector features, such as major enhancements to family table and external reference handling for Pro/Engineer and UG NX, and CGR handling for CATIA V5. In addition, many new user interface and process enhancements are provided in EC Client 1.1 SP2.

Agile Version Support

Release 2.3.1 of the MCAD Connectors and the EC Client 1.1 SP2 are supported on the following versions of Agile PLM:

- Agile 9.0 (SP4 HF2 or higher)
- Agile 9.2 and all SPs
- Agile 9.2.1 and all SPs
- Agile 9.2.2

CAD System and Version Support

For a full list of all supported CAD systems, versions, and operating systems, see the document “EC System and Version Support”.

CAD Connectors

New Capabilities - Pro/Engineer and UG NX Connectors

Improved Family Table Handling

Significant new capability has been added to handle Pro/E Family Tables and UG NX Part Families:

- All main EC Client dialogs (Save, Manage Change, Load, Create Item/BOM) now clearly indicate family tables Generics and Instances. Two additional columns are provided – “Model Type”, which shows an icon indicating Generic or Instance, and “Family Reference”, which lists the Generic name that the Instance refers to. These columns only appear in the dialogs if family table parts are present.
- New Document attributes track the family table information and permit more options for search within Agile.
- The new “Save Family Table” command allows the user to save an entire family table at once. With Pro/E, this process also validates the family table. The user is prompted if there are any errors with the validation process, and a log file is created for review.
- The new “Manage Family Table” command allows the user to create a new revision of a Generic and all related Instances within Agile, at the same time.

Improved External Reference Handling

Significant new capability has been added to handle Pro/E Merge References and UG NX Wave links:

- ❑ All main EC Client dialogs (Save, Manage Change, Load, Create Item/BOM) now clearly indicate external reference information for both master and reference parts. Two additional columns are provided – “Link Type”, which shows and icon indicating master or reference, and “Link Reference”, which lists the master name that the reference part refers to. These columns only appear in the dialogs if family table parts are present.
- ❑ The capability works in conjunction with the family table handling described above. A part that is, for example, a family table Generic and also refers to an externally referenced part will be clearly indicated in the dialogs.

New Capabilities – CATIA V5 Connectors

New CGR Support

The CATIA V5 connector now fully supports the ability to manage CGR format files (lightweight representation) along with native files. The following new functions are provided:

- ❑ **Insert CGR** – Adds a CGR model to the current CATProduct
- ❑ **Save with CGR** – Saves the CGR file along with the native CATPart or CATProduct file, and establishes the relationship between them
- ❑ **Open Native File** – Opens the native CATPart or CATProduct files for the selected CGR file(s)
- ❑ **Reload CGR** – Update the selected CGR file(s) with the latest version from PLM
- ❑ The standard Save and Load commands are also updated to handle CGR files.

New Update Properties Options

Three options are now available for the Update Properties command: Current object, First level, and All levels.

TCL Customization Add-in Capability

To better support the ability for project-based customization of the TCL scripting, entry points are now provided for TCL add-ins.

New Drawing Frame Text Formatting Options

New text formatting options are provided, to support topics like date format conversion and username conversion.

EC Client

New Capabilities – General Client Enhancements

The following functions are available in the EC Client.

Saved Searches execute immediately

Previously, double-clicking on the Saved Search would cause the advanced search dialog to appear, and then the search could be executed. Now the search executes immediately, as in the web client.

Column Sorting in dialogs

You can now sort by any column in the main EC dialogs (Save, Load, Manage Change, Create Item/BOM). The sort column is indicated by an arrow icon.

Bookmarks Now Supported

Bookmarks are now supported within the EC Client. They can be created by clicking on the new Create Bookmark icon from any form, and the Bookmark folders can be displayed and edited.

Expand/Collapse buttons in BOM tab

The BOM tab within Documents and Parts can be expanded to any level, or all levels, by using the new button within the tab. All levels can also be collapsed.

Two-table Tab layout

The “Changes” and “Where Used” tabs are now displayed in two-table format. “Changes” consists of “Pending Changes” and “Change History”, and “Where Used” consists of “Where Used” and “Pending Change Where Used”.

Headings display & one column layout

Headings within Page Two and Page Three tabs are now supported, and as a result the layout has been changed to one column, which is consistent with the Agile web and Java clients.

Required Fields marked in Bold

Fields designated by the Agile Administrator as Required are marked in the EC Client UI and bold text. This includes the object form display, as well as the Save and Create Item/BOM dialogs.

Description Column added to Dialogs

The Manage Change and Create Item/BOM commands now include columns for Description, to assist in identifying CAD designs.

Change Load Option Terminology

The load option formerly called “Latest Released” is now called “As Released”. This more accurately describes the fact that this option can be used to retrieve revisions that are not the latest, but that the BOM resolution of the structures does use the default Agile “As Released” logic.

“ECO” Terminology is now “Change”

In the Manage Change command, the ECO menu and options now use the generic term “Change” rather than the specific “ECO”.

New Capabilities – Creating New CAD Models

The “New” command has been enhanced with these new capabilities.

Definition of Numbering Mode

A standard numbering mode can be defined for the EC Client, so that when using the New command, the created Document will be, for example, “P12345.PRT” and the Part will be “P12345”.

Option to Create Part and Documents together

The New command can now be configured to create a new Document and Part at the same time. The numbers will use the Numbering Mode option described above.

New Capabilities – Change Process

The change process has been further automated with these new options.

Auto-creation of initial Document revision

The EC Client can now be configured so that a change object is assigned when the CAD model is first saved into Agile. Both the change object sub-class and the initial revision designation can be configured. This option avoids some process difficulties associated with the Introductory revision.

Auto-creation of initial Part revision

Similar to the option described above, Parts created through the Create Item/BOM command can be automatically placed on a change object, where the change sub-class and initial revision can be configured.

Parts can be auto-added to Document Change object

The EC Client can be configured so that the Part which is associated to a given Document will automatically be included as an affected item on the Document’s change object.

Non-latest Revisions can be saved as Pending

Previously, if you loaded a non-latest revision and tried to create a new pending revision within Manage Change, you would see stop sign icons and could not proceed. Now, you will see a warning icon, but will not be prevented from proceeding. This allows you to go back to earlier design options and make them the current revision.

Option to Assign without Saving

In the Save dialog, the “Assignment” popup now has an option to assign without saving. This is useful for designating your files to point to existing models in Agile, without overwriting them, for example as in the case of standard parts.

Option to Remove non-Source files from new Revision

Currently, when a new Document revision is made, all files are copied forward to the new revision. This includes all viewable and baseline files, which don’t really belong to the new revision. A new option is now available to automatically purge everything but the native CAD file, when the new revision is created.

Revision Sequences can be defined for multiple Sub-classes

You can now define different revision sequences for different change sub-classes. For example, you can have one change sub-class identified for minor revisions, using the sequence “1, 2, 3, 4, ...” and another change sub-class identified for major revisions, using the sequence “A, B, C, D, ...”.

Default Workflow can be defined for multiple Sub-classes

You can now define a different default workflow for different change sub-classes. This allows you to have different complexities of workflows for different types of changes, for example minor revisions versus major revisions.

New Capabilities – Create Item/BOM

The following new options are provided as part of the EC Client “Create Item/BOM” command.

New Option to additionally link the Drawing to the Part

During the BOM creation process, you can the Document of the 2D drawing, as well as the 3D part or assembly, linked within the Part BOM structure.

New Option to not link Parts and Documents together

Previously, when using the Create Item/BOM command, each Document would get linked to its corresponding Part, creating a merged BOM structure. A new option allows you to publish the Part BOM, but not link the structures. Instead of linking, the Parts and Documents are referenced through attributes.

Better “Stop Sign” behavior

Previously, the stop sign icon would appear within the Create Item/BOM command, if the Documents were released. Since this condition does not prevent publishing the Part BOM, the icons are now not displayed in this situation. If the Parts are released, the stop sign still appears.

New Capabilities – Administration

The EC Client has these new administrator-level capabilities.

Java Customization Options

New options are provided within the CAXClient.xml file to support advanced customization efforts. Use of these options should be limited to implementation experts such as Agile’s Solution Delivery Organization:

- New switch to enable Java Object Cache, default is OFF.
- New switch to disable interactive caxsession.xml writing. Default is ON; if OFF the xml is written on logout/close of the client only.
- New switch to allow setting field values in single calls, default is OFF.

Pending Where-Used Handling

The pending where-used tab is now used within the EC Client, requiring that additional attributes be configured for this tab in the Agile Admin client.

New “Like” Search Option

Called from within TCL customizations, a new “Like” search option provides greater search flexibility.

Incorporated Hotfixes

SolidWorks – Hotfix 2.3.0.1: Fix configuration handling in the Create Item/BOM command, so that files with configurations, but not marked as configured, only show up once in the part BOM. This is the proper behavior for parts containing configurations that don't represent different part numbers, such as a compressed and uncompressed spring.

Known Issues

- 1 The EC Client requires the CopyFilesToRev smart rule to be set to either “Reference” or “Reference with Warning”. The new “Copy” and “Copy with Warning” options are not yet supported. Note also that in this release of the EC Client, the “Copy with Warning” setting does not generate warning messages in the client, so that user input is reduced.
- 2 When using the EC Client with Agile 9.2.2, the Bookmarks capability is limited to a flat list of Bookmarks, similar to how the functionality worked in 9.2.1 and before.
- 3 For the Pro/ENGINEER connector, display of the Family Table and Merge Reference columns are not enabled by default in the Create Item/BOM command. To enable this, copy the 4 lines listed below from the [ProEToAgile.Create_DOCUMENT] section to the [ProEToAgile.Update_ITEM] section, in the AcpCustomer9.ini file:

```
CAX_LINK_TYPE = Std.ReferenceType.ToUpper
```

```
CAX_LINK_REF = Std.ReferenceModel.Range-0-180
```

```
CAX_MODEL_TYPE = Std.FamilyType.ToUpper
```

```
CAX_MODEL_REF = Std.FamilyModel.Range-0-180
```