What's New in Agile Product Lifecycle Management

Whitepaper

Release 9.3.5

E61170-01

December 2015

This document addresses new capabilities added in Agile PLM 9.3.5 as compared to prior Agile PLM releases. As with the last releases, there are detailed Transfer of Information (TOI) recordings accessed through My Oracle Support that cover all of these features.

> **Note:** This document is a supplement to the release Readme and all other manuals, like the Capacity Planning Guide. It is intended to be an overview of the other documentation and does not replace the need to read and understand those documents. Errors contained in this document are not commitments to provide features.

1 Agile PLM Resources provided by Oracle

Oracle offers extensive training and documentation for customers to learn about Agile PLM 9.3.5. Below are some of the resources:

- Installation software is available as a download from Oracle Software Delivery Cloud: http://edelivery.oracle.com/
  - New versions of Automated Upgrade Tool (AUT) and Averify are published to My Oracle Support. Patch numbers will be available on the Resource Summary Blog Post: https://blogs.oracle.com/PLM/entry/agile_plm_resources_know_agile
- Agile PLM Documentation Page at Oracle Technology Network (OTN): http://www.oracle.com/technetwork/documentation/agile-085940.html
- Samples for Agile PLM 9.3.5 are added to the new Sample Code website http://www.oracle.com/technetwork/indexes/samplecode/agileplm-sample-520945.html
- Transfer of Information Recordings available through My Oracle Support: https://support.oracle.com/

> **Note:** These are recording of Agile PLM Product Managers discussing the major new features each release. They are available to any customer with licenses and support for Agile PLM.

  - 9.3.5 recordings are available through Support Note 2090862.1
  - 9.3.4 recordings are available through Support Note 1962485.1
  - 9.3.3 recordings are available through Support Note 1589164.1

- 9.3.2 recordings are available through Support Note 1512952.1
- 9.3.1 recordings are available through Support Note 1220374.1
- 9.3.0 recordings are available through Support Note 854537.1

- Agile PLM blog: http://blogs.oracle.com/PLM
- Agile PLM Solution Space: http://www.oracle.com/goto/plmsolutionspace
- Twitter: http://twitter.com/agileplm
- Facebook: https://www.facebook.com/OracleAgilePLM

2 Design File Release Process

Prior to 9.3.5, Designs use a routing slip that lacks workflow capabilities. The routing slip only approves one Design, not a set of related Design objects. Many customers release a set of Design objects on a change order, using their related Items.

The 9.3.5 release allows a set of Designs to be put on a change order without having related items using a new Affected Files tab. Design files are added to the change order Affected Files tab where they can be redlined and updated. This allows designers to route multiple designs for approval without having to first create items. Approvers can review the entire set of designs and approve using one signature.

There is a detailed Transfer of Information (TOI) recording that covers these features. Note that the features are disabled for new upgrade onto 9.3.5. Please review the documentation and TOI to learn how to enable these features. Below is a summary of the new features.

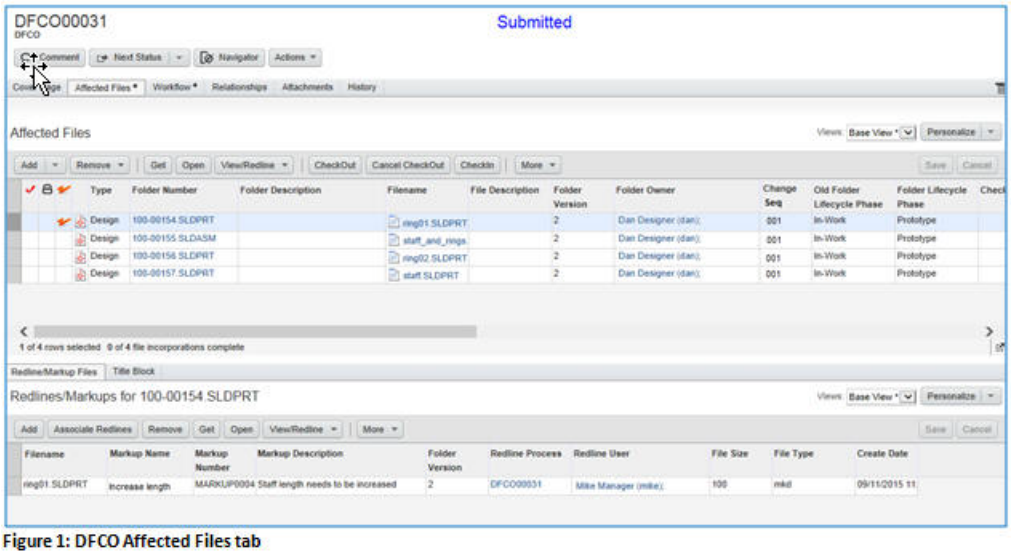

Figure 1: DFCO Affected Files tab

2.1 Design Change Order Affected Files Tab

- Out of the box, we deliver a new Change Subclass called Design File Change Orders (DFCO). This is a change order with an Affected Files tab instead of an Affected Items tab.
- In 9.3.5, you can enable either Affected Items or Affected Files, but you cannot enable both tabs

- The Affected Files tab has an upper table and a lower table. The upper table contains the Design files themselves, and the lower table contains redlines against files in the selected file folder in the upper table.
- A folder owner can be assigned, and privileges can be created, to restrict access to checkout files to only the folder owner. Functional teams can be used on the Design Change cover page to help limit the selection for folder owner.
- Change Sequence is used to track which version of a Design was released on the DFCO
- Use of DFCOs with an Affected Files tab is optional

2.2 Design Change Order Affected Files Redlines/Markups

- Users can add redlines against the Affected Files using AutoVue.
- Users can add local redlines or associate redlines against the file from different objects, like ECO, ECR and adhoc redlines against the Design itself.
- This enables the user to have access to multiple redlines from different sources in a single location.

2.3 Design Incorporation

- There is an incorporated flag on the Design that can be set when the user checks in the Design.
- The incorporated flag is only set from a change order, not on the Design itself. When incorporated, the Design cannot be checked out on the change order.

Publishing a DFCO

- The first release status publishes the changes to the Design, meaning the Design change attributes are written back to the Design title block.
- A new smart rule determines if the Design must be incorporated before publish.
- A release audit checks for unreleased structure files. If found, they are automatically added to the Affected Files table.

Enhanced Version Dropdown

- The Design version dropdown is configurable by the administrator and can include Change Sequence and Design Change Number. This provides more information about the version of the Design, similar to the Item revision dropdown.

3 GANTT Enhancements

In order to provide better management of multiple projects and to enable a user to perform resource balancing, we made several improvements to the GANTT client. These improvements include managing Multiple Projects, adding Project Navigator in GANTT, adding Filtering in GANTT, verifying Modify Privileges, and improving the Task Assignment view.

3.1 Enable Multiple Projects Manipulating in GANTT

In Agile PLM 9.3.5, multiple projects can be viewed and edited in the same GANTT session, which helps executive users or program managers to make decision in program level or more broad level.

3.1.1 Multi-Project GANTT Launch

Multiple projects can be launched in GANTT via three paths:

- Select multiple projects in certain tables of Dashboard and then launch GANTT through the menu options of those tables;
- Associate target projects to the PLM Reference attribute in General Info tab of a root project and then launch the root project into GANTT;
- Launch any root project in GANTT and then add additional projects through Project Navigator.

3.1.2 Multi-Project GANTT View

With Multi-Project GANTT, a user will be able to view more visual information including inter-project dependencies, comparative schedule among dependent projects or independent projects, etc. Multiple projects can be differentiated by name in bold or black color in GANTT table.

3.1.3 Multi-Project GANTT Update

With Multi-Project GANTT, user will be able to manipulate multiple projects simultaneously, which could be leveraged as a sandbox to help user simulate future changes and the impacts.

3.2 Project Navigator in GANTT

A new feature named Project Navigator is introduced in Agile PLM 9.3.5 to help user perform the following actions:

- Add Project(s) into GANTT
- Remove Projects from GANTT
- Full Lock Project(s)
- Internal Lock Project(s)
- Unlock Project(s)

3.3 Filtering in GANTT

Filtering feature is also introduced in Agile PLM 9.3.5, including Custom Filters based on visible attributes in GANTT and Predefined Filters related to resource management.

3.3.1 Custom Filter

Custom Filter is introduced in Agile PLM 9.3.5 to help user filter their target data among projects especially those big ones. User can pick any visible attribute or attributes combination in GANTT as the filter criteria and then filter the data. The target data will still be grouped by root project.

3.3.2 Predefined Filters

Several predefined filters are provided as the out-of-the-box feature, which are all related to resource management including:

- Unassigned Resources - There are predefined three filters that allow you to narrow down tasks that have resource pools that are assigned, yet no individual is assigned. The three filters check for unassigned tasks within 30 days, 90 days, and 180 days of the start date.
- Allocation Overload - Any activity with utilization greater than 100%, which is an overloaded resource/resource pool, is displayed.
- Resource Budget Overload - Any activity with over-budgeted (Actual Hours/8 > Days Efforts) resources is displayed.

3.4 Modify Privilege Check in GANTT

In Agile PLM 9.3.4, Create and Delete privilege checks have been introduced to prevent user from wasting time on unauthorized actions. In Agile PLM 9.3.5, a Modify privilege check will immediately block the user from executing modify requests for which they have no authorization. This new feature in the GANTT editor provides immediate feedback by blocking the user from making unauthorized actions, and eliminates an end of session surprise that negates the users work.

3.5 Improvements to Task Assignment View

Task Assignment view has been designed as a productive tool to help project managers to manage the resource assignments. In Agile PLM 9.3.5, several improvements are implemented to make the tool more productive and accurate.

3.5.1 Two Columns are Added in Manage Resource Table

Days Effort and Actual Hours columns are added to Manage Resource table in Task Assignment view, which helps project managers see the accurate budgeted efforts and actual charged efforts, especially when user is using Resource Budget Overload filter to fix resource issues.

3.5.2 Threshold Line is Added to Utilization

A threshold line in red color is added to the Utilization charts (bar chart and line chart only), located in 100%. This will help user easily find the overloaded assignments.

3.5.3 More Information in Tooltips

Tooltips in the Utilization charts can show more details about the utilization, for instance, if a user has 80% allocations in a certain day, except for the total allocation 80%, project details like 20% assigned to project A and 35% assigned to project B can be displayed if both project A and project B are loaded in GANTT; the rest of allocations to the unloaded projects will be displayed as Others with portion, like 25% in this case.

3.5.4 Resource Calculation Logic Change

In Agile PLM 9.3.5, the resource calculation logic in GANTT is changed as below:

- Allocations in active projects are calculated, whether the projects are loaded in GANTT or only on the server. Projects that are not loaded into GANTT are displayed in the sub-total in Others in the tooltip.

- Allocations in Proposed Projects are only calculated when the projects are loaded into GANTT. Projects that are have not been loaded are not displayed in Others in the tooltip.
- Allocations in Template Projects are never calculated even if the projects are loaded in GANTT.

The logic change is applied to both Task Assignment view and Resource Utilization view.

3.6 More Effective Management of Programs and Resource Balancing

Beside the above main improvements, the following improvements have also been added to GANTT in 9.3.5.

3.6.1 Improvement to Comparative GANTT View

A new option named Latest Load from Server is added to the Comparative GANTT view. This option is added to provide user with a view that can simulate some changes to the project schedule without really implementing the changes. User can visually find the variance between their pending changes and original schedule. Until user saves the latest change or click Refresh from server, the data will not be updated.

3.6.2 Insert Behavior Change

In 9.3.5, Insert Activity/Gate behavior is aligned among the Edit menu option, toolbar button and context menu option, which is a pop-up window instead of inline editing.

3.6.3 Improvement to Resource View

Root Parent information is added to tooltip in Resource view to help user differentiate the assignments among projects, especially when the assignments have duplicated names.

3.6.4 Improvement to Resource Utilization View

Root Parent column is added to Resource Utilization view to help user differentiate the assignments among projects, especially when the assignments have duplicated names.

4 Platform Changes

The following platform changes were made:

4.1 Software Support

- Application Server:
  - Oracle FMW Infrastructure (WebLogic) 12c (12.1.3) on 64-bit JDK 7

Note: Only 64-bit JDK 8u20+ certified

Note: WebLogic Suite, WebLogic Server Enterprise Edition, WebLogic Server Standard Edition certified.

- Database:
  - Only Database 12cR1 (12.1.0.1+)

    Note: Enterprise Edition, Standard Edition, Standard Edition One, Standard Edition Two certified.

- Web Browser:
  - Firefox (ESR 38 and 32) on Windows
  - Safari 8 and 7 on Mac OS
  - Internet Explorer 11 and 10 on Windows

    Note: The RMW modules are only supported on IE.

  - Chrome 46 and 37 on Windows
- Server Operating Systems:
  - Oracle Solaris 11.2+ and 10 (SPARC64, x86-64)
  - Oracle Linux 7 and 6 (64-bit)
  - Red Hat Enterprise Linux 7 and 6 (64-bit)
  - Microsoft Windows Server 2012 R2 and 2012
  - IBM AIX 7.1 and 6.1 (POWER 64-bit)
  - USE Linux 11 (64-bit)
  - Add HP-UX 11.31 (Itanium64)
  - Also certified on Exadata (database) and Exalogic (app server)
- AutoVue for Agile:
  - Oracle AutoVue for Agile PLM 21.0.0
- Server Virtualization:
  - Oracle VM 3 with Oracle Linux, Solaris, and Windows Server
  - Oracle Solaris Containers/Zones
  - IBM AIX LPARs
  - Microsoft HyperV (see Support Note 1563794.1)

    Note: Review the Oracle Agile PLM 9.3.5 Capacity Planning Guide for the official, detailed platform certification matrix. Any errors in the list above do not override the official intended software support.

5 AutoVue for Agile 21.0 Enhancements (Releases after 9.3.5)

The following are AutoVue for Agile 21.0 Enhancements::

5.1 Redesigned 3D Visualization Engine

- Shortened time to market for new version support
- Support for core 3D formats
- Significant performance and fidelity improvements
- Creo/ProE 3D performance improves an average of approximately 55% and SolidWorks 3D approximately 15%. We also added Support for Creo/ProE Combined views and Inventor Views Representations

5.2 Enable Model-Based Enterprise

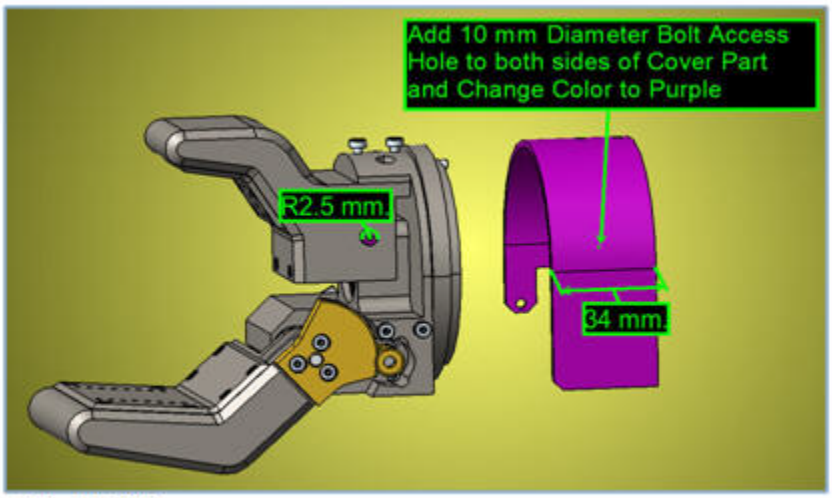

Figure 2: Enable MBE

AutoVue 21 adds support to view PMI and GD&T data that is designed into 3D models. This reduces cost and development time by allowing Customers to eliminate 2D drawings.

- Streamline NPI/NPD processes with a single 2D Data set
- Foster Design reuse
- Reduce manufacturing costs by optimizing manufacturing tolerances

5.3 3D Viewing Support for Agile PLM Mobile

Figure 3: Agile PLM Mobile Support

AutoVue 21 provides Agile PLM Mobile users quick and easy viewing access to 3D files in the context of their workflows.

- Easily view 3D files while on the go.
- Support major 3D CAD formats ProE / Creo, SW, Inventor, JT,
- Enable basic 3D navigation - pan/zoom/rotate
- Available on both iOS and Android platforms

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