



Agile PLM 9.3.2 New Features Quick Overview

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Agile PLM 9.3.2 introduces –

- Approval Matrix providing Functional Teams and other Workflow improvements to enable better automation,
- Support for Design for REACH in PG&C,
- Key Web Client improvements,
- PPM improvements tied to better program management,
- Additional use case improvements across PQM, and PCM, and
- Updates to several platform components.

This document addresses new capabilities added in 9.3.2 as compared to prior Agile PLM releases. As with the last 2 releases, there are detailed Transfer of Information (TOI) recordings available through Oracle University, 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.

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1 Agile PLM 9.3.2 Resources provided by Oracle

Oracle offers extensive training and documentation for customers to learn about Agile PLM 9.3.2. Below is a list of resources that can be leveraged:

- Software is available as a download from Oracle Edelivery: <http://edelivery.oracle.com/>
- Agile PLM Documentation Page at Oracle Technology Network (OTN):
<http://www.oracle.com/technetwork/documentation/agile-085940.html>
- Support through Oracle Support: <https://support.oracle.com/>
- Samples for 9.3.2 are added to the new Sample Code website
 - <http://www.oracle.com/technetwork/indexes/samplecode/agileplm-sample-520945.html>
- Agile PLM blog: <http://blogs.oracle.com/PLM>
- Transfer of Information Recordings available through Oracle Support: <https://support.oracle.com/>
 - Note: These are recording of Agile PLM Product Managers discussing the major new features of Agile PLM 9.3.1. They are available to any customer with licenses and support for Agile PLM.
 - 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 Solution Factory: <http://www.oracle.com/goto/plmsolutionspace>
- Twitter: <http://twitter.com/agileplm>
- Agile PLM Community Page available through Support or at <https://communities.oracle.com/>
 - In Support, select Community link in the top tab bar
 - On the top left side of the page, find or select “Agile PLM Product Lifecycle Management”
- External Yahoo! User Groups (note: content is not managed or controlled by Oracle)
 - <http://tech.groups.yahoo.com/group/WRAU/>
 - <http://tech.groups.yahoo.com/group/IAUG/>
 - <http://tech.groups.yahoo.com/group/AgileAPI/>

2 Features Added in Agile PLM 9.3.2

New Features added in Agile PLM 9.3.2 can be grouped into several categories:

- Approval Matrix and Workflow Automation

- Design for REACH
- User Experience Improvements
- Program Management in PPM
- Module Enhancements for PQM and PCM
- Integration to Enterprise Data Quality
- Common Service Improvements
- Agile Content Service Improvements

This section will explore the features in these main categories.

2.1 Approval Matrix and Workflow Automation

Agile PLM 9.3.2 offers several new Workflow related features that can be used to better manage the typical Approval Matrix needs of customers. Today many customers have Process Extensions that pull approvers from Excel files, databases, or other flexible methods that map users to reasons they should be part of the Approval process. The set of new features in Agile PLM introduced in this release intend to enable the mapping of users to be able to take place inside Agile PLM.

There is a detailed Transfer of Information (TOI) recording that covers these features. Note that the features are disabled for new upgrades onto 9.3.2. Please review the documentation and TOI to learn how to enable these features. Below is a summary of the new capabilities:

- **Functional Teams**
 - A new Class of User Groups has been added called Functional Teams. These new Functional Teams can be created and administrated in a similar manner as user groups.
 - Many objects in PLM have a new Cover Page or Title Block multi-list attribute for Functional Teams. This attribute is not automatically populated.
- **Job Functions**
 - The Agile Administrator has a new list available called Job Functions. This list can be extended by Administrators.
 - Users and User Groups have a new Cover Page multi-list attribute for Job Functions.
 - When assigning users or user groups to Job Functions in a Functional Team, the list of users or user groups will be filtered by who has that Job Function in their cover page attribute.
 - Job Functions can now appear when selecting Approvers.
 - Job Functions can also be enabled on the Workflow Table for Workflow objects. This permanently records the reason a user has engaged in the Workflow process.
- **Workflow Criteria**
 - The set of available Job Functions is available to Workflow Criteria for Approvers, Acknowledgers, and Observers alongside Users and User Groups.
 - A new Group Expansion setting is available to determine how to deal with User Groups who may be assigned to a Job Function. During Workflow Execution, if the system encounters a User Group, this setting, by Criteria, will be used to determine whether to Expand the Group (All) or just add the Group (Any).
- **Workflow Execution**
 - When the workflow is executed, Agile PLM will look at the matching Workflow Criteria to determine which Job Functions are required to approve.

- Agile PLM will then look to the Routable Object cover page for Functional Teams. Users or User Groups assigned to matching Job Functions on the Functional Teams will be added to approve the Object in the status.
- If there are no matching users or user groups for the Job Function, then the Job Function will be added as required without any users or user groups. This will need to be resolved later but a Routing Manager.
- **Acknowledgers**
 - An additional approval option has been added where a user must only Acknowledge in order to complete their action on the Object.
 - This is different than Approver because they do not have a choice to Reject.
 - This is different from Observer because it is required, not optional.
 - The intent for this new option is to force users to verify they have performed their tasks for the workflow object.
- **View Workflows**
 - The Action – View Workflows screen has been enhanced to indicate what will happen if the current object is taken through the Workflow process.
 - This enables the user to see how the Workflow Criteria will be resolved to select Approvers, Observers, and Acknowledgers.
- **Workflow Approvals Report**
 - This new Admin report indicates which Job Functions are required for each Workflow Status Criteria.
 - This report is intended to enable fast verifications that the Agile PLM configuration is consistent with corporate procedures.

2.2 Design for REACH

The European regulation for **R**egistration, **E**valuation, **A**uthorisation and **R**estriction of **C**hemical substances requires the weight based rollup of substances in products to determine compliance against the regulation. Prior to 9.3.2, Agile PLM Product Governance and Compliance did not have the ability to perform these weight based rollups. PG&C only was able to perform status rollups (compliant, non-compliant). The status rollups work well for regulations like ROHS, but cannot perform the complex calculations required to determine overall product mass percentages of substances required by REACH.

In 9.3.2, Agile PLM will create rolled up compositions based on specific rollup logic in a PL/SQL procedure run in the Agile PLM database and publish them back into the PG&C application. PL/SQL is used because it is more memory and processor efficient than Java for this use case. These summary compositions allow PG&C to evaluate compliance against a spec.

Design of the spec is up to customers in light of their legal interpretation of REACH and the amount of products they ship. This feature is intended to enable companies to Design for REACH, meaning to determine the risks of meeting REACH specifications by the design BOMs stored in PLM. If manufactured BOMs are very different from the As Designed BOMs, the Design for REACH calculations from Agile PLM could also be different than what was built.

This is a very complex new capability that is fully covered in a Transfer of Information recording. Some highlights of the features added to support Design for REACH are below.

- Import and export IPC 2.0 format

- Agile PLM now supports the IPC 2.0 format, including multiple parts.
- Existing classes IPC 1752-1 and IPC 1752-2 have new attributes to support IPC 2.0
- External Specifications and Database Rollup
 - A specification in Agile PLM can be flagged to be External.
 - New database capabilities have been added to extract the information needed for a weight based rollup into a set of documented staging tables in the database.
 - A documented PL/SQL procedure is added to perform the substance rollup and place the results into documented results tables.
 - At the completion of the rollup procedure, PG&C retrieves the information from the results tables and publishes them back into the application.
 - The PL/SQL procedure is documented in order to enable customers to extend the logic in case the out of the box rollup logic does not meet their legal interpretations.
 - The staging table is documented to enable potential extensions, like adding shipping projections in order to calculate potential shipments to different countries.
 - SDK and Web Services can be used to initiate the compliance determinations.
- Two new reports — the Exemptions Report and the External Rollup Report

2.3 User Experience Improvements

The Oracle Agile PLM development team continues to improve how users interact with Agile. This is a continuous improvement process that began with the major Web Client update in Agile PLM 9.3.0. As with previous releases, these improvements are intended to make users more productive in their use of the client.

- Improved Audit Screen
 - All Warnings and Errors are hyperlinked to take the user to the issue that needs to be resolved
 - Selecting the Unreleased Child link will add the referenced Item
 - Audit Window has an Audit button that enables re-auditing the Workflow Object without having to return to the main screen
- Enhanced Navigator
 - Items and File Folders have expanded tables – like Pending Changes, Released Changes, Manufacturers, Relationships, etc.
 - Projects now include Content
 - Changes, Quality Change Requests, Product Service Requests, Part Groups, Declarations, Specifications, and Sourcing Projects can all be sent to Navigator with the majority of their tables
- Two Column Title Block
 - Title Block or Cover Page can be configured to be 1 or 2 columns
 - Applies to Page 1, Page 2, and Page 3
 - Agile PLM leverages the Input Width property on each attribute to determine display
 - Short or Medium displays in 1 column, Long displays across the 2 columns
 - Web Client will display attributes Left to Right, then Down, based on the Order setting in Admin

Agile PLM 9.3.2 adds several key new features to help with Program management in PPM. Many customers have strong Project Management Offices (PMO) users who require PPM to satisfy their use cases. These users have run into several issues that Agile PLM attempts to address in this release.

- **Stationary Gates**
 - Some companies plan integration events and model them as Gates or Milestones. These events are set at a specific date and should not be changed without management approval.
 - Prior to 9.3.2, the Agile PLM PPM scheduling engine allowed Gates to be moved through dependencies, even if the user did not have specific privilege to edit the Gate end date.
 - In 9.3.2, a new Gate attribute is added called Enable Stationary Gate
 - When set to Yes, only a user with Modify on the Gate End Date will be able to move the Gate, whether directly or through a Dependency
- **Replicating Inter-Project Dependencies**
 - Some companies relate projects in PPM through Inter-Project, or External, dependencies to ensure alignment of key milestones.
 - When working with the idea of an overall Release Project and several Feature Delivery projects, it is convenient to setup these Inter-Project dependencies between an Active Release Project and a Template Feature Project. When the Template is instantiated, it's Activities will be correctly aligned with the overall Release Project.
 - In 9.3.2, External dependencies can be configured to align an Active project with a Template project to meet this use case
- **GANTT Locking Options**
 - When dealing with External References, one complication is that when a user launches to GANTT, all the related projects are locked along with the current project.
 - In 9.3.2, users have the option to launch GANTT in 3 modes:
 - Full Lock – pre-9.3.2 behavior
 - Internal Lock – only locks current project
 - Read Only – no locks are set
- **Expanded PLM References Attribute**
 - The PLM References attribute was added to enable a Program or Project to reference key additional Projects or other Agile PLM objects.
 - In addition, Product Lifecycle Analytics uses the PLM References attribute to tie Programs to all of its related Projects to enable Program analysis.
 - With 9.3.2, there is no effective limit to the number of objects in the PLM References attribute.
- **GANTT Enhanced Snap to Times**
 - In 9.3.1, scheduling of Activities was enhanced to include detailed Times. This led to some complications in GANTT when dragging activities because they were not snapping to Hours or another valid time.
 - In 9.3.2, the following rules apply when dragging activities in GANTT:
 - When dragging a Start Time, snap to Working Start Time. This could be on the same or other days.
 - When dragging an End Time – snap to Working End Time.
 - When dragging an entire Activity in GANTT, the Activity will always be moved by complete Days

- Does NOT change the Times of the task, only the Day, and the Duration will be retained.
- If a fractional task is dragged (i.e. Duration of 0.5 day for example that starts at 10 AM), it should move to start at 10 AM on a different day when dragging.
- Note: Working Start Time and Working End Time are configured in Agile.Properties. By default, these are 8:00:00 and 17:00:00.

2.5 Module Enhancements for PQM and PCM

Many Agile PLM customers using Product Cost Management are increasing their use of PCM and the integrations with their supply chains. The features in 9.3.2 assist with integrating supply chain users by adding an option for RFQ responses and better enabling automation when interacting with PCM.

- Enhancements for Restricting suppliers from proposing alternates
- SDK support for AML splits
- SDK support for retrieving AML

In Product Quality Management, as customers continue implementing more processes to address Supplier and Customer quality, the ability to see which Quality Change Requests are impacting specific Suppliers and Customers has become more important. 9.3.2 adds the QCR table to Supplier and Customer objects.

- Add QCR tabs to Supplier and Customer

2.6 Integration to Enterprise Data Quality

Several years ago Oracle purchased Silvercreek and released its capability as Enterprise Data Quality (EDQ). EDQ has many potential use cases including data validation and data enrichment – please visit their Oracle website for more detailed information at <http://www.oracle.com/us/products/middleware/data-integration/enterprise-data-quality/overview/index.html>.

In 9.3.2, EDQ has access to Agile PLM administrative information and to the entire Item data set through direct database access. This access allows EDQ to be integrated to Agile PLM in a highly performing manner to enable use cases around data validation and enrichment that ensures the cleanliness of the enterprise product record.

2.7 Common Service Improvements

There are several general improvements to the product.

- Default Filters in ACS replace internal Export filters
 - This enables the Admin to exactly control the filter used when a user selects all the defaults when using Export.
 - Typically, Admins should reduce the tables being Filtered in order to protect the server
- New option for Change Filter Affected Items
 - Admin can now select from Tab Only, Tab and Redlines, and Tab, Redlines and Items for more control over how much data is extracted using the Change filter
- New preference Report Results
 - There are now 2 preferences – one for BOM and one for Non-BOM

- Import can now Update Relationships
- Added support for special chars in Lists
- Enable filtering duplicates in Search
 - Admins now have 2 options on how duplicates in Search Results are filtered
- Agile Configuration Propagation
 - Personalization Support for Global Searches, Tab Configuration, Personalization Global Views, and Global Reports

2.8 Agile Content Service Improvements

Agile Content Service (ACS) publishes XML packages from Agile. This is the primary tool used on the Agile PLM side when integrating to ERP systems. In order to enable better integrations, Agile PLM 9.3.2 adds 3 key new features.

- XML Conversion within ACS
 - New ability in Admin to define new output formats
 - Ability to load an XSLT on the output format to convert Agile XML into a custom format
 - 2 samples to demonstrate how XSLT can be used to create JDE and flat file output formats
- Publishing information about Change Dependencies
 - AXML can including information about other Changes the current Change is dependent upon
 - Dependencies could include non-completed ECOs, MCOs, or SCO against the current object, its children, or its where used
 - ERP Integration solutions can be extended to leverage this new information in order to better manage Change failures. As an example, this can be used to enable other Changes to continue processing when one fails.
- Action Items on Transfer Orders
 - 9.3.2 adds an Action Items tab to Transfer Orders (TOs) along with Web Services to publish Action Items
 - ERP Integration solutions can call the Agile PLM Web Service to create Action Items against TOs
 - When there is a failure in the ERP Integration, the TO Action Item can be used to communicate to an Agile user that they must correct something and retransmit the TO

3 Platform Changes

- Key Platform Certification Changes
 - Application Server:
 - Updated WebLogic Version – 12gR1 (12.1.1) only on 64-bit JDK 7
 - Eliminated support for iAS
 - Database:
 - Continued support for 11gR1 (11.1.0.7+) and 11gR2 (11.2.0.3+) (RAC and standalone)
 - Eliminated support for 10gR2 (10.2.0.4+)
 - Agile PLM 9.3.2 will add support for Database 12cR1 after it is released
 - Browser:

- Continued support for Firefox (now 14 and 3.6.9+) on Windows and Solaris
 - Continued support for Safari 4 and 5 on Mac OS
 - Continued support for Internet Explorer 8 and 9
 - Note that the RMW modules are only supported on IE
 - Added support for Chrome 18
 - Server Operating Systems:
 - Oracle Solaris 11 and 10 (SPARC64, x86-64)
 - Oracle Linux 6 and 5 (64-bit)
 - Red Hat Enterprise Linux 6 and 5 (64-bit)
 - Microsoft Windows Server 2008 R2
 - IBM AIX 7.1 and 6.1 (POWER 64-bit)
 - SUSE Linux 11 and 10 (64-bit)
 - AutoVue for Agile:
 - Oracle AutoVue for Agile PLM 20.2.1
 - Server Virtualization:
 - Oracle VM 3 with OEL and Windows Server
 - Oracle Solaris Containers/Zones
 - IBM AIX LPARs
- Note: Review the Oracle Agile PLM 9.3.2 Capacity Planning Guide for the official, detailed platform certification matrix. Any errors in the list above do not override the official intended software support.*
- LDAP Server
 - Continue support for Oracle Internet Directory (OID) 11g and 10gR3
 - 11g was added as a supported version on Agile PLM 9.3.1.2
 - Add Oracle Virtual Directory (OVD) support for 11g
 - Single Sign On (SSO) support for Oracle Access Manager (OAM) 11g along with NTLM

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