
What's New in Agile PLM 9.3.4

Agile PLM 9.3.4 adds Calendars, Large Text Fields, and many other capabilities to the product.

This document addresses new capabilities added in Agile PLM 9.3.4 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.

Agile PLM Training and Educational Resources provided by Oracle

Oracle offers extensive training and documentation for customers to learn about Agile PLM 9.3.4. Below is a list of 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 9.3.4 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.

- 9.3.4 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>

Global Product Development

The first release theme concerns how new features impact the ability of our customers to better execute Global Product Development. For a934, this means the addition of new PPM features that impact project management in a global context.

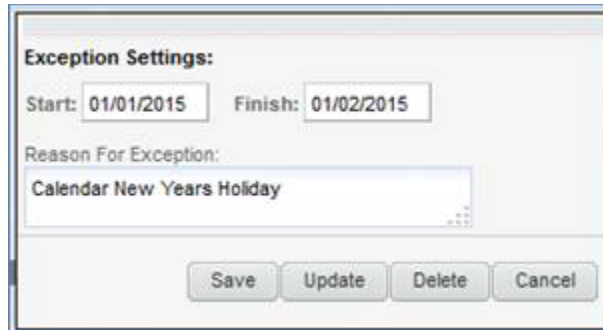
PPM Calendars

Within Product Portfolio Management (PPM), administrators can define multiple Working Day Calendars to establish exceptions to normal working and non-working days, primarily to account for regional holidays. These Calendars are used by the PPM Schedule Engine to accurately reflect the actual working days available for an activity.

In its simplest implementation, the Working Day Calendar feature enables a company to define calendars for the official working and non-working days for that company. In more complex and Global organizations, the company can define calendars for each region in which project work is performed to define the working and non-working days for that region. When building up a project, calendars can be assigned at the activity (task) level. This allows a project manager to assign work to multiple regions within a single project, and the project schedule will recognize the actual working days available, based on the calendars assigned.

As an example, for the 2015 calendar New Year, a company in China declared time off (exception to normal working day) for Thursday January 1 and Friday January 2. The company declared time on (exception to normal non-working day) for Sunday January 4. Prior to this release, the schedule for projects would not have been able to account for this work variance. With 9.3.4, the company can create a China Calendar, define working and non-working exceptions for the 3 impacted days, and accurately schedule projects with activities worked by resources in China, while still controlling and executing tasks in other regions using their regional calendars.

The process of setting up working day and non-working day exceptions are shown in the next three images. The first image shows the screen used to add an exception, with the option to specify a single day or a range of multiple days and provide the reason for that exception. The reason will be used as a "tooltip" when reviewing exceptions. Selecting any day in the calendar will prompt for an exception, such as switching Working to Non-Working, or Non-Working to Working. Exceptions are clearly displayed in the Calendar's annual display, with the tooltips available to help users understand the reason for any exceptions.



Exception Settings:

Start: 01/01/2015 Finish: 01/02/2015

Reason For Exception:

Calendar New Years Holiday

Save Update Delete Cancel

Figure 1: Adding a multiple day exception, with reason for exception

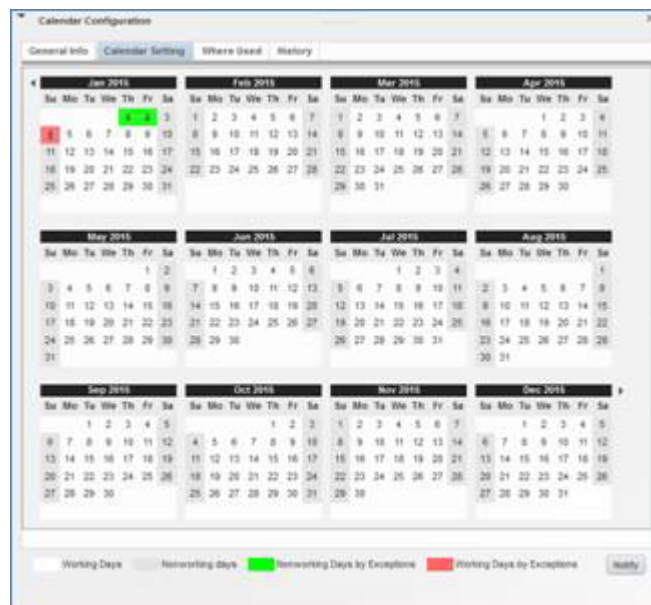


Figure 2: Annual calendar view, with exceptions highlighted

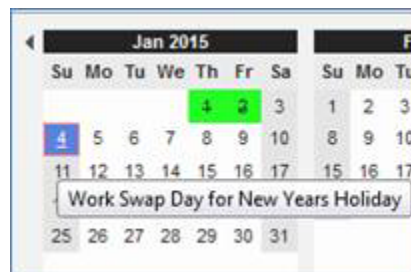


Figure 3: Tooltip displays Reason for Exception

In general, Calendar exceptions should be created and updated as soon as future holidays are available. For longer projects, this will prevent potential re-scheduling activities. If a Calendar changes the impact to existing ongoing projects, several features are available that notify project owners of calendar changes, with options on how to implement the calendar change for that project. In addition, import and export capability is provided to allow migration of Calendar configurations between systems.

Once Calendars are set up, a new Calendar attribute on every activity in PPM can be used to reflect the region or country where the work will be performed. If your company has Quality resources in China working on a project, the project manager can

associate tasks to the China Calendar, by changing the task calendar attribute. Once this change is saved, the tasks will be re-scheduled, honoring all exceptions in the China Calendar.

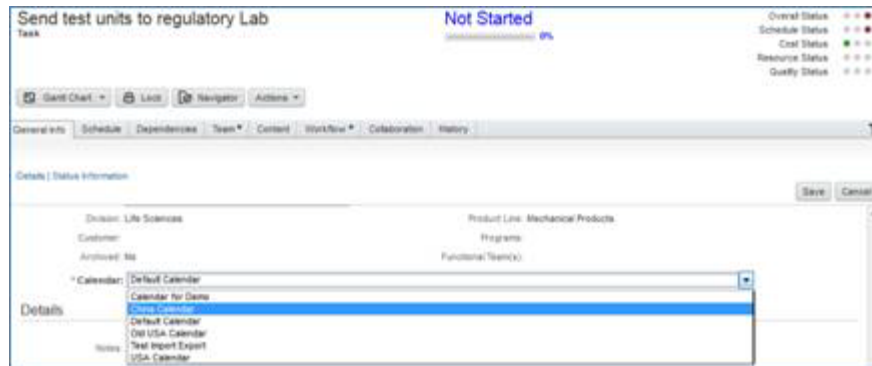


Figure 4: Calendar attribute on PPM task

Each user can also specify their "Preferred Calendar". This helps the project manager identify whether any resource assigned to a task shares the same calendar as the activity/task. Note that PPM will not prevent a project or resource manager from creating a calendar conflict, where the user preferred calendar is different than the activity calendar. The user preferred calendar is clearly displayed in the Team tab to help the manager make a correct decision about resource assignment. In addition, a new report is provided to highlight any conflicts between the user's preferred calendar and the activity's assigned calendar.

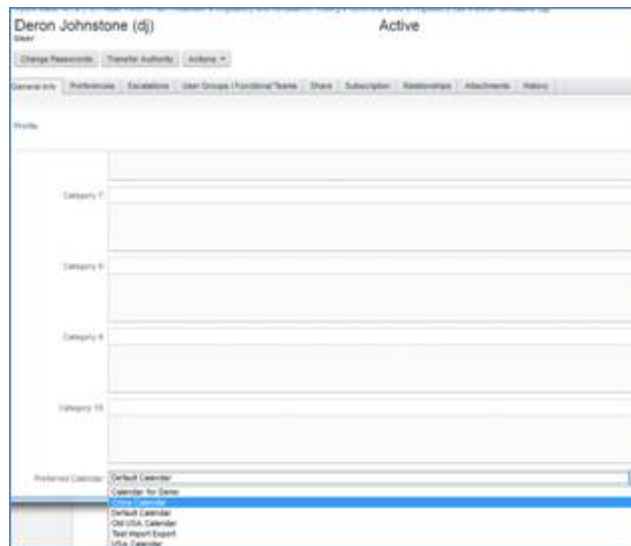


Figure 5: User can select their Preferred Calendar

| Team | | | | | | | | | |
|--|--------------------|---------------------|-------------|-------------|---------------|--------------|---------------------|--------------|--------------------|
| 0 total days effort, 12 scheduled days (Fixed) | | | | | | | | | |
| Views: Base View * Personalize | | | | | | | | | |
| Add Remove Utilization Substitute More | | | | | | | | | |
| Name | Assigned From | Roles | Days Effort | Is Resource | Rejected Flag | % Allocation | Pool Owner | Actual Hours | Preferred Calendar |
| Deron Johnstone (dj) | Product Management | Program Manager | 0.00 | No | No | 0.00 | Dan Clement (dc) | 0 | Default Calendar |
| Operations | Operations | Program Team Member | 5.28 | Yes | No | 44.00 | admin Administrator | 0 | Default Calendar |
| Quality Assurance | Quality Assurance | Program Team Member | 2.64 | Yes | No | 22.00 | Dan Clement (dc) | 0 | Default Calendar |

Figure 6: User or User Group Preferred Calendar is shown on Team table

As a final point, each calendar can define the default working and non-working days. This will allow for regional variances, but also will enable definition of a global 7 day calendar with no holidays. This No Time Off calendar could be used for tasks that require working over weekends or where the resources will be expected to work through a holiday.

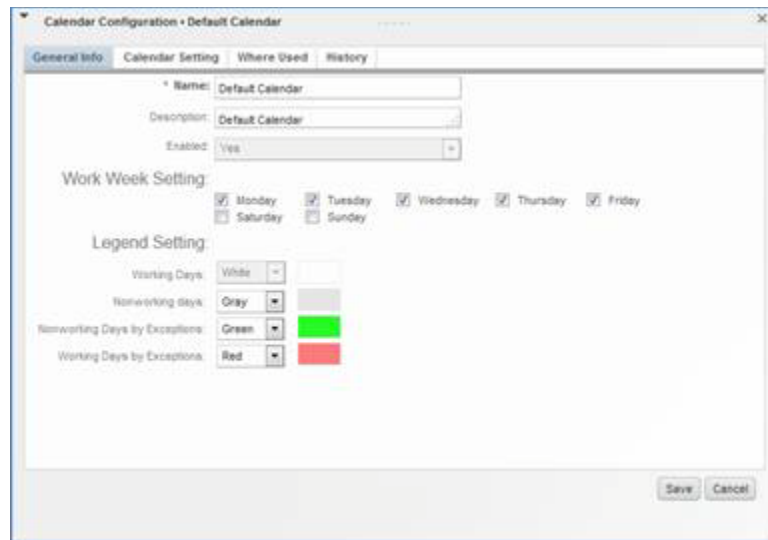


Figure 7: Setting up a Calendar with Work Week Setting

PPM GANTT Improvements

As PPM expands in function and reach, making the GANTT editor as productive as possible is critical to Global companies rolling out PPM to their Project Managers. In release 9.3.4, the following features have been added to GANTT client

Check Create and Delete privileges for activities

The GANTT editor will block users from creating or deleting activities if they do not have the appropriate Agile PLM privileges. Prior to release 9.3.4, users would only receive errors when they chose to save their work to the server. This was not an optimal model, as users were often frustrated that their work was rejected at the end of the process.

Now, in 9.3.4, the GANTT editor will immediately block the user from executing create or delete 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.

Refresh from PLM option

In an active New Product Development environment, users can be updating projects on the server while the project manager has a project open in GANTT. These users could be updating completion statuses, signing off on Gates, allocating resources, or any number of other distributed task management project changes. Prior to 9.3.4, the project manager would need to exit GANTT and reopen to align the project with these changes executed on the server.

A new "Refresh" button is available in 9.3.4 that allows the project manager to bring all changes made on the server into the project open in GANTT. This eliminates unnecessary, unproductive actions and improves project manager productivity.

Show Successors column

Project managers often want or need to see the successors to the current task in addition to the predecessors in tasks that are linked by dependencies. A new read-only column is now available in the GANTT to show the task successors.

Duplicating a completed or cancelled task creates the new copy in "Not Started" status

There are many situations where projects need to repeat tasks or groups of tasks. The project manager may also need to reintroduce cancelled tasks in a different area of the project. With 9.3.4, a project manager in GANTT can create copies of completed or cancelled tasks using copy and paste. The new copies are created in a "Not Started" status and can be scheduled as needed.

Workflow Status Change Content Tab rules are now triggered on "Save"

Content Tab Rules are used to trigger updates between objects in PLM, typically based on Workflow Status changes. Prior to 9.3.4, these triggers on rules between activities in an open project or program would not execute reliably. With 9.3.4, the rule triggers are executed with the necessary updates back to GANTT when the project is saved.

Enhanced Content Authoring

The second release theme is Broad and Deep Collaboration. Adding content to PLM is a precursor to all of the other distributions of product design information throughout the enterprise. With release 9.3.4, Large Text fields are now available across all core Agile PLM objects which provide configurable, auditable, visible, secure, and embedded content authoring.

Large Text Fields with HTML Markup and Journaling

Release 9.3.4 provides a set of user configurable "Large Text Fields" that directly address the need to author large amounts of text-based data around the product record. These fields can contain HTML Markup or Rich Text. They can also be set up to capture a stream of updates, or a "Journal".

These new fields will address a wide variety of use cases. Many customers have created engineering WIKIs to capture actions, comments, and design ideas around their products. With Large Text fields, many of the WIKI use cases can be incorporated directly into Agile PLM and become part of the product record. Many quality teams need to store large amounts of text about an incident or instructions to remediate a problem. Large Text fields enable these use cases. Project teams often want to communicate meeting minutes around tasks or decisions from gates. Large text fields enable this information to be directly accessed within PLM.

Ten (10) new large text fields are available on Page 2 and on Page 3 for every object type in the system. These fields can contain up to 2 million characters, with admin control over maximum length. When required, any of these fields can be configured to be a Journal, with options to display posts from newest to oldest, or oldest to newest. The Agile Administrator has control over which HTML tags are available to be used in every field. This allows some fields to have minimal HTML (for example: bold, italics, underline), while others have a more complete HTML experience (including tables, external images, URL links, and more). Large Text fields are searchable. For Journaling fields, only the most recent entry is searched.

In addition to using journaling, history logging is also available with a different capability to find changes made to these fields between updates. Non-Journaling fields

can be made Change Controlled. When exporting data from PLM, the user can choose whether or not to include Large Text fields. The XMLPublishing WXML format can include Large Text content, which will be protected by a CDATA block.

The first 4000 characters of a Large Text field will be shown in line with the object data. Users need to select the open icon next to the Large Text field to see the full content. Only the most recent Journal entry will show in-line.



Figure 8: In line display of Large Text fields

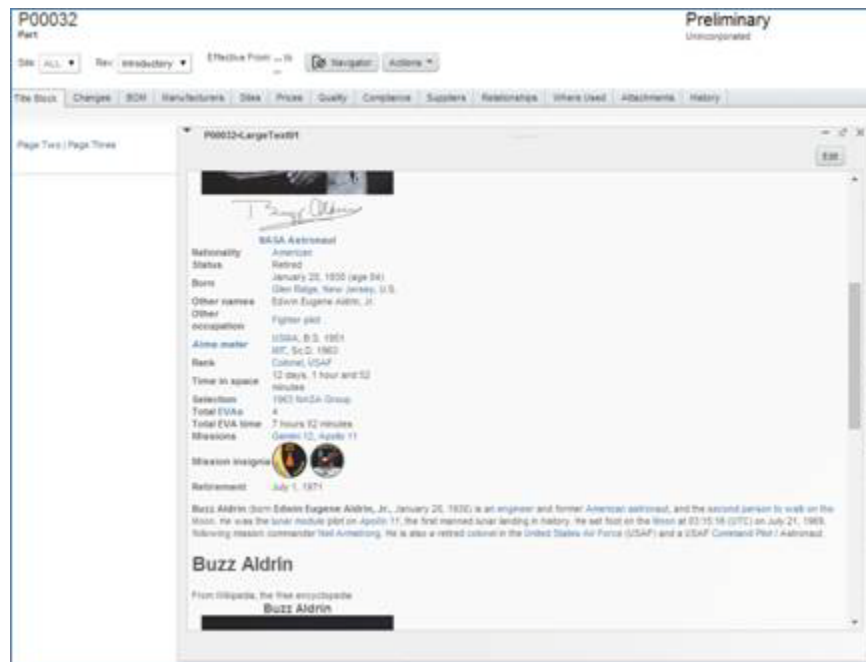


Figure 9: Expanded display of a Large Text Field

When editing a Large Text field, the buttons on the toolbar are controlled by the settings features which are enabled for this field in Admin. Removing features immediately removes buttons. In addition, if a user attempts to enter non-supported tags through Source, the tags will be removed. The server itself also blocks un-supported tags from being entered through programmatic means. Finally, malformed HTML is also cleaned by the edit window.

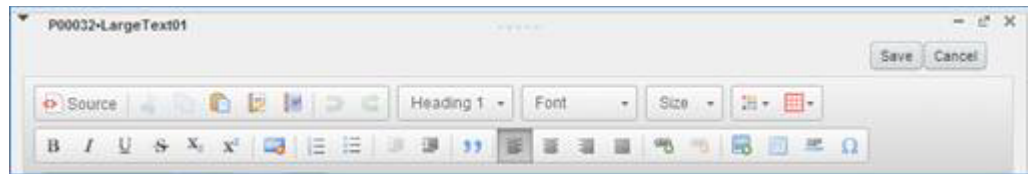


Figure 10: Large Text Field toolbar for HTML editing

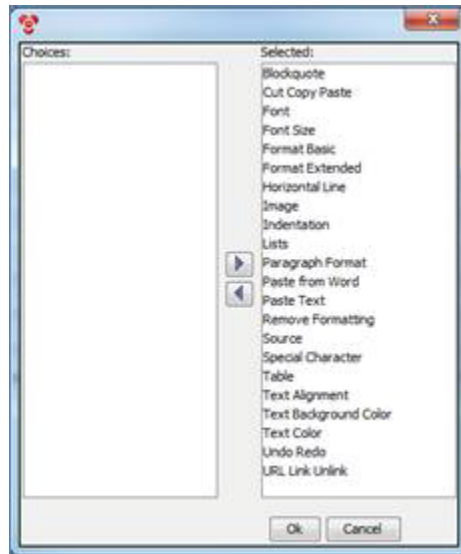


Figure 11: Administrator setup to control HTML content for every Large Text field

Notice that Images are external images not in PLM read using tags. In this release, using images from inside PLM is not supported.

Also note that the text content is stored in the database as CLOB (Character Large Object) data types. When exporting and importing databases with CLOB data, Data Pump will perform much better than the older imp and exp commands.

EC MCAD 3.4 and Design Data Model Improvements

EC MCAD is used to directly integrate 3-D Mechanical CAD tools into Agile PLM. The data is stored in Design objects. EC MCAD 3.4 will be released after Agile PLM 9.3.4.

In 9.3.4 with EC MCAD 3.4, all structure data is moved onto the Structure tab. In previous releases, some recursive data was stored on the Relationships tab. Storing data on the Structure tab improves performance by eliminating the need to pull data from the Relationships tab. A migration tool is provided to alter existing data.

The performance for Save As using EC MCAD 3.4 with 9.3.4 should be dramatically improved in all cases. Several server side changes are made to optimize this type of transaction.

Several additional changes have been made to improve the deployment and use of EC MCAD:

- CheckOut status is now available in the Quick View dialog from within the CAD tool.
- Once a user is logged into EC MCAD, launching to Agile PLM Web Client will not require the user to login again.

- Launching to Agile PLM Web Client will open a new tab in the web browser, rather than opening a new window. Modern web browser security features prevent EC MCAD to target an open Web Client window.
- Installation is simplified and does not require manual folder manipulation.
- A silent client installer option is available.

Continuous Product Improvement

Our theme is Maintaining Agile PLM as a PLM Platform. In that respect, we continue to improve process and data management in every release. Several additional smaller changes have also been made to the product.

AutoVue Design Structure Performance and Pre-Generation of Streaming Files

When viewing Designs with Structure, Agile PLM sends the design structure and files to AutoVue for rendering. This transfer of data has been optimized in 9.3.4 to be more efficient.

AutoVue for Agile PLM uses streaming files to send visual data back to clients. With 9.3.4, streaming files generated upon file checkin will be stored for reuse to accelerate first time views by a user. Streaming file generation can be enabled even if Thumbnails are not being generated by AutoVue.

HTML in Process Extension Messages

Some customers and partners have used HTML when returning messages to users from Process Extensions (PXs) to highlight key information. This capability is now configurable in Admin > Preferences > Allow PXs to Publish HTML. If disabled, the server will remove any HTML markup from messages back to the user. If enabled, the server will allow limited HTML markup in messages back to the user. Disallowed markup will be removed. Review the user manuals for the list of allowable HTML markup.

Display of Revision Effective From and To dates in the Item Header

Change Orders can define Effective and Obsolete dates for Item Revisions. When an Item is displayed, these dates can be used to show the intended Effective period for the Item Revision. Some customers do not leverage this capability. With this release, if the Item Title Block Effectivity Date is not visible, the information about "Effective From" and "Effective To" will not display in the Item header.

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Price Scale in PCM

For money attributes in Product Cost Management, a new administrator preference called Price Scale is available that controls all PCM money attributes. Price Scale can be set between 0 and 9, meaning prices can be tracked at up to 9 decimal places.

Platform Changes

The different platform changes available to select are found listed below:

Web Services Stack Updates

In 9.3.4, the Web Services stack has been changed from AXIS to JAX-WS. Samples and documentation are all updated to reflect this change in the Web Services stack.

With 9.3.3 and earlier, when building samples using AXIS, the classpath required axis.jar, axis-ant.jar, and commons-discovery.jar. The samples included calls that start with org.apache.axis.*.

With 9.3.4, building samples using JAX-WS, the classpath will require com.oracle.webservices.fmw.client_12.1.3 and com.oracle.webservices.wls.jaxws-wls-wss-client.jar. The 9.3.4 sample calls will appear as javax.xml.ws.*.

When upgrading systems with Web Services integrations, carefully review all the available training and documentation on using the new Web Services stack.

In addition to changing to JAX-WS, 9.3.4 also offers the ability to configure Web Services Security using Oracle Web Services Manager (OWSM). This capability enables Web Services connections to be controlled through Policies in OWSM. A configuration tool is provided to enable User Token or SAML authentication with SSL stream encryption. Please note that enabling Web Services Security and using OWSM requires WebLogic Suite License.

Modern File Transfer functionality works with Internet Explorer

Release 9.3.3 added new capability to transfer large files using HTML 5 technology. This new functionality had issues with Internet Explorer, specifically selecting multiple files, progress indicators, and using drag and drop. With 9.3.4, Internet Explorer can fully leverage the modern file transfer capabilities of Agile PLM.

Software Support

Application Server:

- Update to Oracle FMW Infrastructure (Weblogic) 12c (12.1.3) on 64-bit JDK 7

Database:

- Database 12cR1 (12.1.0.1+) and 11gR2 (11.2.0.3+) (RAC and standalone)

Web Browser:

- Firefox (now latest and 21) on Windows
- Safari 7 and 6 on Mac OS
- Internet Explorer 11 and 10 on Windows

Note: The RMW modules are only supported on Internet Explorer.

- Chrome latest and 27 on Windows

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 2012 and 2008 R2
- IBM AIX 7.1 and 6.1 (POWER 64-bit)
- SUSE 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 20.2.3

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 9.3.4 Capacity Planning Guide for the official, detailed platform certification matrix. Any errors in the list above do not override the official intended software support.

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