HP ALM

Software Version: 12.21

What's New

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Part 1: What's New in HP ALM 12.20

HP Application Lifecycle Management (ALM) empowers organizations to manage the core application lifecycle, from requirements through deployment, granting application teams the crucial visibility and collaboration needed for predictable, repeatable, and adaptable delivery of modern applications.

ALM supports you through all the phases of application lifecycle management. By integrating the tasks involved in application management, ALM enables you to better align with your business needs.

ALM also includes Performance Center functionality, enabling you to manage all aspects of a large-scale performance testing project, including resource allocation and scheduling, from a centralized location accessible through the Web. For details on new features in Performance Center, see "What's New in HP ALM Performance Center" on page 13.

Chapter 1: What's New in HP ALM

Version 12.21

ALM 12.21 introduces the following enhancements:

Integrating External Tests

ALM enhances your testing capabilities by enabling you to synch externally executed test results with ALM. Automation tests executed by Jenkins or other testing frameworks will be integrated into ALM along with the latest test runs, giving quality teams comprehensive quality coverage. When working with Jenkins, this integration enhances the Continuous Testing process.

ALM provides two methods for synchronizing your results with ALM:

Synchronizing results from Jenkins	After configuring Jenkins to synch results with ALM, each time you run a job from Jenkins, the external results are synchronized automatically with ALM.
Synchronizing results by external testing tools	When working with an external testing tool, you synchronize an external result file to ALM by manually importing the file to ALM.

Locking Out Users

The ALM site administrator can lock out a user who invalidly attempts to log in. When a user is locked out, the user's status is set to **Inactive**. You can then activate the user, or set a time period to automatically activate the user and end the lockout.

API References

- **HP ALM REST API Reference.** You can use the REST API to access and work with ALM data. This version supports working with Defects and provides the infrastructure needed to support the work with Defects.

- **HP ALM REST API Technical Preview Reference.** In addition to the HP ALM REST API product, the REST API Technical Preview is still available. The Technical Preview has wider coverage of ALM functionality.

- **HP ALM Custom Test Type Reference.** Provides an online reference to the classes and interfaces a developer uses to integrate a testing tool with ALM and a guide to development

Supported Environments

ALM now supports Microsoft SQL Server 2014.

Version 12.20

ALM 12.20 introduces the following enhancements:

Editions

Two new introductory editions of HP ALM are available:

- **HP Quality Center Express Edition:** Provides core functionality for test management, including manual and automatic tests, and defect management. This license is limited to 20 named or concurrent users.

- **HP Quality Center Community Edition:** Provides core functionality for test management and defect management. This license is free, and is limited to five named users.

Supported Environments

Here are some of the main additions we've made to the supported system environments:

Microsoft Office. 64 bit versions of Microsoft Office are now supported

Operating systems. Red Hat Enterprise and Oracle Linux 7.0 64 Bit

Database servers. Oracle 12.1.0.1

For a complete listing of supported environments, see the *HP ALM Readme*.

Administration Updates

LDAP. You can import and authenticate users based on multiple LDAP servers.

Site parameters. The list of available site parameters can be found with the ALM12.21 manuals on the HP Software Support web site (https://softwaresupport.hp.com).

Usability Improvements

Sort by column header. You can now sort grid and tree items (Requirements) by clicking a column header. When no sort condition is defined, data is sorted in ascending order.

Drag and drop attachments. Upload attachments by dragging and dropping them from your file explorer or email program to the **Attachments** tab .Similarly, you can drag items from the Attachments tab to your desktop to download the attachments.

Email enhancements:

- When sending an entity by email, select to add a comment to the entity, including the recipients of the mail, and any text you type in the **Additional Comments** field of the email.

- Send yourself a copy of an email, by selecting a checkbox in the Send Email dialog box.

Business Models

ALM now supports **BPMN 2.0** models exported to **XPDL 2.2** files.

Lab Management Hosts

You can exclude hosts from being automatically allocated to a timeslot. Limit the host to being selected by name, or limit the host availability to a specific user.

ALM Web Client Updates

Version 12.20

The ALM Web Client offers an alternative user interface for managing the lifecycle of your application, and is part of HP's ongoing commitment to providing innovative products and solutions. The ALM Web Client is user-friendly and easy to navigate, and with its new features and functionality, shortens work processes and provides an improved user experience.

> **Note:** Currently, the modules supported by ALM Web Client are Requirements and Defects.

HP Application Lifecycle Management 12.20 introduces the following new features and enhancements to the ALM Web Client:

Traceability

- When adding traceability, a preview pane displays the details of the selected entity, making it easier to identify the correct entity.

Customization

Customization enhancements include:

- Define rules that validate fields when an entity is created, deleted, or modified.
- Define rules that set field values by copying the value from another field.
- Select multiple list values within a business rule condition field. The values are connected with an Or indicator. For example, Priority is 2-Medium or 3-High.
- Business rules override predefined values, but are themselves overridden by user defined values.

Additional Usability Enhancements

- **Inline editing.** Fields of grid items can now be edited directly in the grid.
- **Bulk update.** Modify up to three fields simultaneously in multiple entities.

- **Email entities.** Users can now send an entity by email. Recipients can click the link in the mail to navigate directly to the entity.

- **Data export.** You can now export grid data to an Excel file, in addition to the existing formats.

- A new **Report defect** button on the main toolbar simplifies defect reporting. When you report a defect in this way, the defect is automatically linked to the entity from which it was reported.

Business Process Testing Updates

Version 12.21

Business Process Testing 12.21 introduces the following enhancements:

Ability to set up iterations for business components using Microsoft Excel and dynamic configurations

You can now define multiple sheets in an Excel worksheet (data table). The first sheet lists test parameters, as in previous Business Process Testing versions. But now, subsequent sheets can be used to list component parameters, and values for multiple component iterations. For details, see the *HP Application Lifecycle Management User Guide*.

Because dynamic test configurations can access different data tables, this enhancement lets your business process tests run components varying numbers of times. For example, if a test in a flight application has a component for ordering airline tickets, the same test can, using the same component, order one ticket when one of its configurations runs, and then seven sets of tickets to different countries when its next configuration runs.

Recording components, flows, and business process tests

Recording enables you to create component steps, or even a full business process test or flow, in your application without the need to manually create separate components and their associated application areas before starting to create steps. When recording, you perform user actions and create additional components as necessary.

You can record both scripted and keyword automated components.

Also, you can scan keyword components to add controls to the local object repository from within ALM. For details, see **Scan Kwd** in Keyword View Pane.

For details, see How to Record Components into Flows and Business Process Tests and the *Unified Functional Testing User Guide*.

Integration with BPT Packaged Apps Kit

BPT Packaged Apps Kit adds additional functionality to ALM and Business Process Testing that

enables you to test packaged apps, such as SAP GUI and SAP Fiori. This functionality includes features such as learning components and inserting them into flows and business process tests. Also, the change detection feature lets you view if, or how, features in your packaged app have changed since you learned your tests and flows.

BPT Packaged Apps Kit includes the following benefits:

- BPT Packaged Apps Kit can automatically learn the actions you perform on your apps, and then generate a flow or business process test containing components based on the screens and transactions within your apps. You can reuse learned components instead of creating new components. For details, see Learn Process.

- BPT Packaged Apps Kit enables you to run tests and flows on apps in Change Detection mode. This enables you to determine how the apps have changed since the test or flow was built, and resolve the changes. For details, see Change Detection and Resolution.

> **Note:** SAP Fiori is a technical preview. Learning is supported; Change detection will be supported in the future.

For details about the supported packaged apps, see App-specific Information Overview.

For details about enabling BPT Packaged Apps Kit, see the *HP Application Lifecycle Management Administrator Guide*.

Additional information is available in the *Unified Functional Testing User Guide*.

Version 12.20

Business Process Testing 12.20 introduces the following enhancements:

Integration with Sprinter

You can author manual business components in Sprinter.

This feature is supported according to the following matrix:

	ALM 11.52	ALM 12.01	ALM 12.20
Sprinter 11.52 Patch 25	Yes	No	No
Sprinter 12.01	Yes	Yes	No
Sprinter 12.20	Yes	Yes	Yes
Sprinter 12.21	Yes	Yes	Yes

Chapter 2: What's New in HP ALM Performance Center

This What's New guide provides an overview of the features that were introduced or enhanced in HP ALM Performance Center 12.20. For more information on using HP ALM Performance Center, refer to the *HP ALM Performance Center Guide*.

You can also view video demonstrations of HP ALM Performance Center features by choosing **Help > Movies** in the ALM main window.

Updates to Performance Center

Performance Center 12.20 introduces the following new features and enhancements:

Support for Microsoft Azure Cloud

Ability to provision cloud hosts for performance testing from Microsoft Azure Cloud. For details on cloud hosts, see the *HP ALM Lab Management Guide* and the *HP ALM Performance Center Guide.*

Continuous Testing

Performance Center now enables you to transform NUnit, JUnit, or Selenium tests into VuGen scripts. You can then upload the VuGen scripts to Performance Center. For details, see the *HP ALM Performance Center Guide.*

Protocol Granularity Report

This newly added usage report enables you to view the Vuser script's protocol usage. For details, see the *HP ALM Lab Management Guide*.

Test Runs Trend

This newly added trend graph shows the test runs of a selected test over time. For details, see the *HP ALM Performance Center Guide*.

User Experience

- **New Look and Feel.** There is a brand new look and feel to this version of Performance Center. For

details, see the *HP ALM Performance Center Guide*.

- **Topology Module.** This module is now available from Performance Center. To access, on the My Performance Center navigation bar, select **Resources > Topologies**. For details, see the *HP ALM Performance Center Guide*.

- **Timeslots Module.** This module is now available from Performance Center. To access, on the My Performance Center navigation bar, select **Resources > Timeslots**. For details, see the *HP ALM Performance Center Guide*.

- **Runtime Settings.** A newly designed runtime settings view with simplified layout. For details, see the *HP ALM Performance Center Guide*.

Miscellaneous

- Significant performance and stability improvements in uploading scripts.

- In addition to Microsoft Internet Explorer, Performance Center now supports Google Chrome and Apple Safari browsers.

- **Allows choosing a system user during installation.** While installing a Performance Center server, you can now choose to create a new system user or use the IUSR_METRO system user. For details, see the *Installing and Configuring Performance Center Servers and Hosts* section in the *HP ALM Performance Center Installation Guide*.

Virtual User Generator Enhancements

Usability improvements for LoadRunner's Virtual User Generator (VuGen). For more details, see the What's New section in the *HP LoadRunner 12.02 Readme*, available from HP Live Network (HPLN).

Protocol Enhancements

Enhancements to several Virtual User Generator protocols and support for latest versions of their technologies. For more details, see the What's New section in the *HP LoadRunner 12.02 Readme,* available from HP Live Network (HPLN).

Part 2: What's New in HP ALM 12.01

Chapter 3: What's New in HP ALM

This What's New guide provides an overview of the features that were introduced or enhanced in HP Application Lifecycle Management (ALM) 12.01. For more information on using ALM, refer to the *HP Application Lifecycle Management User Guide*.

You can also view video demonstrations of HP Application Lifecycle Management features by choosing **Help > Movies** in the ALM main window.

HP Application Lifecycle Management 12.01

HP Application Lifecycle Management (ALM) empowers organizations to manage the core application lifecycle, from requirements through deployment, granting application teams the crucial visibility and collaboration needed for predictable, repeatable, and adaptable delivery of modern applications.

ALM supports you through all the phases of application lifecycle management. By integrating the tasks involved in application management, ALM enables you to better align with your business needs.

ALM also includes Performance Center functionality, enabling you to manage all aspects of a large-scale performance testing project, including resource allocation and scheduling, from a centralized location accessible through the Web. For details on new features in Performance Center, see "What's New in HP ALM Performance Center" on page 23.

Updates to the ALM Web Client

The ALM Web Client offers a new alternative user interface for managing the lifecycle of your application, and is part of HP's ongoing commitment to providing innovative products and solutions. ALM Web Client is user-friendly and easy to navigate, and with its new features and functionality, shortens work processes and provides an improved user experience.

> **Note:** Currently, the modules supported by ALM Web Client are Requirements and Defects.

HP Application Lifecycle Management 12.01 introduces the following new features and enhancements to the ALM Web Client:

Author mode

Improved functionality when authoring multiple requirements as part of a single document now lets you:

- Add or delete requirements from within the document view.
- Choose between using the ALM Desktop Client **Rich Text** tab or the **Description** field as the body of each requirement in the document.
- Now includes the ability to export requirements to HTML, PDF and Word formats.

Defects module

Grid data can now be exported to HTML, PDF and Word formats.

Traceability

New features provide more comprehensive traceability capabilities:

- Grid views are available for drilling-down to specific traceability links. In these views you can filter items and select the fields to be displayed.

- When viewing traceability for requirements, you can choose to include child requirements. You can also include both direct and indirect links when viewing defects linked to a requirement.

- You can now search requirements by description name and then link them, rather than just linking them by ID.

Customization

Forms

Improvements to the form designer and to form rendering make it easier to create forms:

- Drag and drop fields to reorder them while designing a form.

- A read-only system default form is now available. You can duplicate this form to create your own forms. You can also always revert to the system default form if necessary.

- The ALM Web Client can now optimize space by determining how many fields fit on one line in a form.

Business Rules

Additional functionality provides the administrator with more capabilities for enforcing organization policies and for dictating workflow. Key new business rules features include:

- Filtering the list of rules in the grid by entering text. Only rules whose action, condition, or remark match the text are listed.

- Creating rules without a condition, which will be evaluated unconditionally.

- You can base your rule condition on the values of fields that refer to other modules, such as a **Target Release** or **Target Cycle** from the Releases module.

- Defining rules that:

  - Select different lookup lists for both user-defined and system fields.

  - Limit field lookup list values to a subset of those values.

  - Send emails when an entity is created, deleted, or modified.

  - Set field values when an entity is created or a field is modified.

General

General enhancements added to customization include:

- A new **Edit & Lock** feature that enables one administrator to have exclusive access to customization, while others can view existing settings.

- **Staging and production.** You can now define your business rules and forms in a project set up for staging, and when ready, export the business rules to the project in production.

Additional functionality and useability enhancements

New features and useability improvements provide an enhanced user experience:

- A preview pane is now available for more convenient viewing and editing of entity details in grid views.

- You can define and load preset value templates for automatic completion of field values, saving time when adding entities.

- When using filters and categorization, the new **Hierarchy with children** view displays the parent-child path leading to the matching requirements, as well as the children of the matching requirements. This gives you a better overall perspective of your requirements.

- You can modify the location of a requirement in the hierarchy by changing its associated parent requirement.

- Requirements can now be added in **Flat** view when the hierarchy is not displayed, by assigning a parent requirement.

- Attachments can now be added when adding a new entity, without having to first save the entity.

- You can now cut, copy, paste, and delete requirements in the **Details** view.

- Improvements to memo fields let you paste images directly into memo fields, and make use of native browser spell-check functionality.

For details on each of these features, see the *ALM Web Client User Guide*.

> **Tip:** The ALM demo project, **ALM_Demo**, contains data and entities that can be used for learning ALM Web Client. For details on importing projects, see the *HP Application Lifecycle Management Administrator Guide*.

Administration Updates

This section describes administration enhancements in HP Application Lifecycle Management 12.01.

Site Configuration

In the Site Configuration tab, the following parameters were added:

- ALLOW_HTTP_METHOD_OVERRIDE

- ALLOW_WEBUI_HTTP_METHOD_OVERRIDE

- REQUIREMENT_AUTHOR_USE_RICHTEXT

For details on the new parameters, refer to the *HP Application Lifecycle Management Administrator Guide*.

ALM Help

The ALM Installation and Upgrade Guide has been split into two new guides, one for Windows users and one for Linux users. By customizing these guides, we present users with the information that is relevant to their environment. The new guides can be found under Installation Guides on the ALM Help page.

Chapter 4: What's New in HP ALM Performance Center

This What's New guide provides an overview of the features that were introduced or enhanced in HP ALM Performance Center 12.01. For more information on using HP ALM, refer to the *HP ALM Performance Center Guide*.

You can also view video demonstrations of HP ALMPerformance Center features by choosing **Help > Movies** in the ALM main window.

Updates to Performance Center

Performance Center 12.01 introduces the following new features and enhancements:

Support for HP Public Cloud

Ability to provision cloud hosts for performance testing from HP Public Cloud. For more information on cloud hosts, see the *HP ALM Lab Management Guide* and the *HP ALM Performance Center Guide.*

Using VUsers and VUDs during a Test Run

Performance Center now enables you to mix VUsers and VUDs in the same test while reserving timeslots and running performance tests.

For more information, see *HP Application Lifecycle Management User Guide* and the *HP ALM Performance Center Guide.*

Performance Center Community License Bundle

Performance Center now delivered with a free perpetual community license bundle. The bundle includes: 1 Controller allowing 1 concurrent run, 1 PC Lifecycle user, and 50 perpetual VUsers. The VUsers are valid for all protocols except for GUI (UFT), COM/DCOM, and template protocols. The community license bundle does not include support.

For more information on how to install community license bundle, see the *HP ALM Lab Management Guide.*

Log Collator Tool

This application enables you to collate logs from ALM, Performance Center servers, and host

machines to a ZIP file.

This tool is available from the Performance Center Server. Select **Start > All Programs > HP Software > HP Performance Center Server > Tools > Log Collator**.

Mobile License Bundle

A custom license bundle for testing mobile applications, including the Mobile Application - HTTP/HTML, TruClient Ajax - Mobile, and SMP protocols. This bundle includes Performance Center Mobile VUsers and an equivalent number of Network Virtualization for PC VUsers licenses.

For more details, see the What's New section in the *HP LoadRunner 12.01 Readme.* The *HP LoadRunner 12.01 Readme* is available from HP Live Network (HPLN).

Virtual User Generator Enhancements

Usability, stability, and performance improvements for LoadRunner's Virtual User Generator (VuGen). For more details, see the What's New section in the *HP LoadRunner 12.01 Readme.*

The *HP LoadRunner 12.01 Readme* is available from HP Live Network (HPLN).

Protocol Enhancements

Enhancements to several Virtual User Generator protocols and support for latest versions of their technologies. For more details, see the What's New section in the *HP LoadRunner 12.01 Readme.*

The *HP LoadRunner 12.01 Readme* is available from HP Live Network (HPLN).

Part 3: What's New in HP ALM 12.00

Chapter 5: What's New in HP ALM

This What's New guide provides an overview of the features that were introduced or enhanced in HP Application Lifecycle Management (ALM) 12.00. For more information on using ALM, refer to the *HP Application Lifecycle Management User Guide*.

You can also view video demonstrations of HP Application Lifecycle Management features by choosing **Help > Movies** in the ALM main window.

HP Application Lifecycle Management 12.00

HP Application Lifecycle Management (ALM) empowers organizations to manage the core application lifecycle, from requirements through deployment, granting application teams the crucial visibility and collaboration needed for predictable, repeatable, and adaptable delivery of modern applications.

ALM supports you through all the phases of application lifecycle management. By integrating the tasks involved in application management, ALM enables you to better align with your business needs.

ALM also includes Performance Center functionality, enabling you to manage all aspects of a large-scale performance testing project, including resource allocation and scheduling, from a centralized location accessible through the Web. For details on new features in Performance Center, see "What's New in HP ALM Performance Center" on page 37.

External Authentication

HP ALM supports external authentication systems, such as Smart Card Authentication and Single Sign-on.

- **Smart Card Authentication**: Smart cards are physical devices used to identify users in secure systems. These cards can be used to store certificates both verifying the user's identity and allowing access to secure environments. Currently, ALM supports one type of smart card authentication, CAC (Common Access Card). ALMis JITC certified. For details, see http://jitc.fhu.disa.mil/pki/pke_lab/app_testing/application_status.html.

- **Single Sign-on**: Single sign-on (SSO) is a session/user authentication process that permits a user to enter one name and password to access multiple applications. Currently, ALM supports one type of single sign-on authentication, SiteMinder.

HP ALM can be configured to use these external authentication systems in place of the standard model of each user manually entering a user name and password. External authentication users log in to ALM without entering a user name and password.

New Look and Feel

There is a brand new look and feel to this version of ALM. For details, see *How to Start* and *Common Areas* in the *HP Application Lifecycle Management User Guide*.

In keeping with the design changes, two significant changes have been made in the ALM main window, as follows:

- The Tools menu, previously in the masthead, has been removed. Most of the items that were in the menu are now accessible from ⚙ in the masthead.
- The Help menu, also in the masthead in previous versions, is now at the bottom of the sidebar.

The following table shows specific changes.

Previous versions	ALM 12.00
Tools > Change Project	<Domain, Project>
Tools > Customize	⚙ > Customize
Tools > New Defect	⚙ > New Defect
Tools > Spelling and Grammar	⚙ > Spelling and Grammar
Tools > Clear History	⚙ > Clear History
Tools > Task Manager	⚙ > Task Manager
Tools > Download Standalone Applications (PC only)	⚙ > Download Standalone Applications (PC only)
Tools > Event Log (PC and ALM Edition)	⚙ > Event Log (PC only)
Tools > Lab Settings (PC and ALM Edition only)	⚙ > Lab Settings (PC and ALM Edition only)
Tools > Performance Center Controller Options (PC only)	⚙ > Performance Center Controller Options (PC only)
Tools > My Performance Center (PC only)	⚙ > My Performance Center (PC only)
Help > Help on this page	❓
Help > Documentation Library	Help > ALM Help
Help > HP Software Support	Help > Software Support Online
Help > HP Software Website	Help > HP Software Quality Center Website
Help > ALM Website	Help > HP Software Application Lifecycle Management Website
Help > ALM Community Forum	Help > ALM Community
Help > About HP Application Lifecycle Management Software	Help. The versions of ALM components that are currently running are listed on the right side of the window.

The following menu items have been removed :

- Tools > Document Generator
- Help > Welcome Page

New ALM Web Client

The ALM Web Client offers a new alternative user interface for managing the lifecycle of your application, and is part of HP's ongoing commitment to providing innovative products and solutions. ALM Web Client is user-friendly and easy to navigate, and with its new features and functionality, shortens work processes and provides an improved user experience.

Note: Currently, the modules supported by ALM Web Client are Requirements and Defects.

Because the ALM Web Client does not download client components on to your computer, you no longer need administrative privileges to use ALM. The ALM Web Client is not browser-dependent and works on various operating systems. See the *ALM Release Notes* for supported browsers and operating systems.

The ALM Web Client has features not available in the ALM Desktop Client, such as:

- **Author mode**. A document-centric viewing mode that enables you to see a list of requirements in a single document view, and allows for quick editing of descriptions. This helps you to better understand the big picture.
- **Category Views**. A dynamic hierarchical structure based on virtual folders allows for flexibility in manipulating the requirements view. Views can be updated on-the-fly by selecting new category fields. This flexibility lets you determine the way in which requirements are organized.

For details on each of these features, see the *ALM Web Client User Guide*.

Tip: The ALM demo project , ALM_Demo, contains data and entities that can be used for learning ALM Web Client. For details on importing projects, see the *HP Application Lifecycle Management Administrator Guide*.

General Updates

HP Application Lifecycle Management 12.00 contains the following usability enhancements:

Quick Access to Attachments

Clicking the attachment icon for an entity now lets you view the list of attachments. You can open the attached files directly from the list.

Pinned Items

You can now pin requirements, test plans, or defects. For details, see the *HP Application Lifecycle Management User Guide*.

Zoom In and Zoom Out for Memo Fields

Zoom In and Zoom Out buttons have been added to the toolbar for rich content memo fields.

Cross Project Business View Excel Reports

Business View Excel reports can now be created with data from multiple projects. The data will be shown and sorted per project.

Changes in Feature Availability

The following features are no longer fully available from HP Application Lifecycle Management 12.00:

- Excel Reports

Administration Updates

This section describes administration enhancements in HP Application Lifecycle Management 12.00.

Site Configuration

In the Site Configuration tab, the following parameters were added:

- Customization:
    - DISABLE_ASYNC_CUSTOMIZATION_LOAD
- External Authentication:
    - EXTERNAL_AUTH_CERTIFICATE_CRL_CHECK
    - EXTERNAL_AUTH_CERTIFICATE_CRL_FOLDER
    - EXTERNAL_AUTH_CERTIFICATE_DELTA_CRL_CHECK
    - EXTERNAL_AUTH_CERTIFICATE_LOCAL_CRL_CHECK
    - EXTERNAL_AUTH_CERTIFICATE_OCSP_CHECK
    - EXTERNAL_AUTH_CERTIFICATE_OCSP_REQUIRED
    - EXTERNAL_AUTH_CERTIFICATE_POLICY_CHECK
    - EXTERNAL_AUTH_CERTIFICATE_VALID_POLICY
    - EXTERNAL_AUTH_CERTIFICATES_FILE
    - EXTERNAL_AUTH_DEBUG_LEVEL
    - EXTERNAL_AUTH_EXECUTION_MODE_HEADER_NAME

- EXTERNAL_AUTH_EXTENDED_HARDWARE_KEYS

- EXTERNAL_AUTH_HARDWARE_CARD_IS_REQUIRED

- EXTERNAL_AUTH_HEADER_NAME

- EXTERNAL_AUTH_IS_POLICY_REQUIRED

- EXTERNAL_AUTH_MODE

- EXTERNAL_AUTH_USER_FIELD_PATTERN

- EXTERNAL_AUTH_USER_FIELD_TYPE

- EXTERNAL_AUTH_VALIDATE_USER_IN_LDAP

- Input Validation:

  - INPUT_VALIDATION_LOGPATH

  - INPUT_VALIDATION_MODE

- Project Planning and Tracking:

  - PPT_KPI_FAILURES_PERCENTAGE_PER_RELEASE_FUSE

  - PPT_RECENTLY_USED_PROJECTS_THRESHOLD_MINUTES

- REST API:

  - DOWNLOAD_REST_ATTACHMENTS

  - REST_API_HTTP_CACHE_ENABLED

  - REST_API_MAX_BULK_SIZE

  - REST_API_MAX_ENTITY_TREE_SIZE

- Security:

  - ENABLE_JMX_CONSOLE

  - ENABLE_OUTPUT_SANITIZATION

  - ENABLE_XSRF_VALIDATION

  - OUTPUT_SANITIZATION_BY_CLIENT_TYPE

  - TEXT_ENCODING_BY_CLIENT_TYPE

- Web UI:

  - ALLOW_WEBUI_ACCESS

For details on the new parameters, refer to the *HP Application Lifecycle Management Administrator Guide*.

For details on the External Authentication parameters, refer to the *HP Application Lifecycle Management External Authentication Configuration Guide*.

Docs on Tap: New Mobile Access to References for Administrators

Certain reference information can now be accessed on mobile devices. This provides quick access to administrators "on the go."

This set of information is called **Docs on Tap** and includes:

- Information about editions

- System requirements

- Site parameters

- Workflow references

- Database references

- Installation and upgrade troubleshooting

- Other helpful links

Docs on Tap can be accessed using one of the following methods:

- **PDF download using HPLN**. Click **Docs on Tap** and download the PDF.

- **PDF download using SSO**. Click **Product manuals** and download **HP ALM Docs on Tap**.

Business Process Testing

New HP Application Lifecycle Management 12.00 features are also supported for Business Process Testing entities. In addition, the Business Process Testing features described below have been introduced or enhanced in ALM 12.00.

For more information on these features, refer to the *HP Business Process Testing User Guide*.

- "Manual Runner Improvements" on the next page

- "Testing Manual Business Process Tests from a Printout" on the next page

- "Site Administration and Customization" on the next page

- "Integration with Sprinter" on the next page

- "Integration with UFT" on page 35

Manual Runner Improvements

In addition to user interface and performance improvements to the manual runner for business process tests, you can now view business component snapshots during the manual run. For details, see the information about running business process tests manually in the *HP Business Process Testing User Guide*.

Testing Manual Business Process Tests from a Printout

Two new reports enable you to run business process tests manually by performing the test steps from a printout. The reports print out the corresponding parameter values for flows, iterations, groups, components, and manual steps in the business process test. For details on the available project reports, see the *HP Application Lifecycle Management User Guide*.

The reports are available from the Test Plan module > Analysis menu > Project Reports option:

- Business Process Tests with Component Steps
- Business Process Tests with Component Steps and Component Details

   The details report provides additional information about each component in the test and snapshots.

> **Tip:** You can also run these reports for auditing purposes.

Site Administration and Customization

In site administration, you can set permissions for customizing Business Process Testing by group. For example, site administrators can now allow members of the Viewers group to customize Business Process Testing. For details, see the **Customize Business Process Test** permission level in the Administration tab.

Integration with Sprinter

You can author manual business components in Sprinter.

This feature is supported according to the following matrix:

	ALM 11.00 with Service Pack 3 and later	ALM 11.50	ALM 11.51	ALM 11.52	ALM 12.00
Sprinter 11.00	Yes	No	No	No	No
Sprinter 11.50	No	Yes	Yes	No	No
Sprinter 11.50 with patch 14 or patch 18	Yes	Yes	Yes	No	No

	ALM 11.00 with Service Pack 3 and later	ALM 11.50	ALM 11.51	ALM 11.52	ALM 12.00
Sprinter 11.52	Yes	No	No	Yes	No
Sprinter 12.00	Yes	No	No	Yes	Yes

Integration with UFT

The following improvements have been made for integrating with UFT:

- **API testing.** When running a business process test that contains a component with API automation, you can view the resulting report using the HP Run Results Viewer. Previously, this was only supported for GUI test automation.

- **New test runtime mechanism**. Business process tests and flows do not use the BPT wrapper test mechanism when running with UFT. Instead, a new test runtime mechanism is provided.

- **Business process tests are available for edit and running directly from within UFT**. Business process tests and flows now behave as native tests within the UFT IDE, providing enhanced test editing, smoother debugging of business process tests, and better performance for business process test authoring from within the UFT IDE. For details, see the *HP Unified Functional Testing User Guide*.

Lab Management

This section describes Lab Management enhancements in HP Application Lifecycle Management 12.00.

Configure Proxy Server Settings for the Lab Service

The Lab Service Settings page now includes a tab to configure proxy server settings. Proxy server settings support authentication using a username and password.

Automatically Extend Functional Timeslots

When the new Auto-Extend functionality is enabled, a functional test set or build verification suite that reaches the end of its timeslot before all tests complete, will have its timeslot automatically extended so that the tests can finish.

ALM Help

An interactive glossary was added to the HP ALM Help. Terms that are included in the glossary are displayed in blue and have a glossary icon next to them. Click on the term to view its definition in a

pop-up window.

Chapter 6: What's New in HP ALM Performance Center

This What's New guide provides an overview of the features that were introduced or enhanced in HP ALM Performance Center 12.00. For more information on using HP ALM, refer to the *HP ALM Performance Center Guide*.

You can also view video demonstrations of HP ALM Performance Center features by choosing **Help > Movies** in the ALM main window.

Provision Cloud Hosts for Performance Testing

You can now provision hosts for performance testing in the cloud. The new cloud host functionality enables you to:

- Define cloud accounts for your projects.
- Provision hosts using standard host templates or create your own templates.
- Manage cloud host usage by assigning credits to projects.
- View cloud host usage reports and receive cloud host notifications.

For more information about cloud hosts, see the *HP ALM Lab Management Guide* and the *HP ALM Performance Center Guide.*

My Performance Center Updates

My Performance Center now enables you to:

- Create test plan trees and test sets, and fully manage your tests from within Performance Center.
- Provision and manage your cloud testing hosts.
- View cloud host usage reports.
- Easily create tests using the Test Express Designer.
- View and manage your tests and resources using newly created System Perspectives.

For more information on My Performance Center, see the *HP ALM Performance Center Guide.*

Analysis Templates

After creating a custom designed template for displaying test results in the HP LoadRunner Analysis, you can upload the template to the ALM Test Resources module and apply it to other performance tests of your choice. For details, see the *HP ALM Performance Center Guide.*

PAL Enhancements

Performance Application Lifecycle (PAL) now enables you to create production data sets using Google Analytics and IIS W3C Extended Log File Format. After you create the data sets using the PAL Data Set Creator wizard, you upload the data sets from My Performance Center and use them in your PAL reports. For details, see the *HP ALM Performance Center Guide.*

Performance Center REST API Reference

A newly created online reference for the Performance Center REST-based API. You can use the REST API to execute actions to support automation and continuous integration.

Protocol Enhancements

Enhancements to several Virtual User Generator protocols and support for latest versions of their technologies. For more details, see the What's New section in the *HP LoadRunner 12.00 Readme.*

The *HP LoadRunner 12.00 Readme* is available from the following locations:

• HP Software Manuals Web site

• HP Live Network (HPLN)

Virtual User Generator Enhancements

Usability, stability, and performance improvements for LoadRunner's Virtual User Generator (VuGen). For more details, see the What's New section in the *HP LoadRunner 12.00 Readme.*

The *HP LoadRunner 12.00 Readme* is available from the following locations:

• HP Software Manuals Web site

• HP Live Network (HPLN)

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Can we make this What's New better?

Tell us how: SW-Doc@hp.com