Helix ALM release notes 2021.2.2 and earlier

For later versions, see the Helix ALM documentation

No Helix ALM-specific new features, enhancements, or bug fixes.

Helix ALM 2021.2.2 contains a newer version of the Helix ALM License Server (version 2021.2.2).

Helix ALM License Server 2021.2.2

Bug Fixes

After upgrading license server 2021.1 or earlier to 2021.2.0 or 2021.2.1, users
configured to authenticate via a SAML or OpenID Connect authentication provider could
not log in because user associations with the provider were lost.

Enhancements - all Helix ALM areas

• Support for Microsoft Visual Studio 2022.

Bug Fixes - all Helix ALM areas

- Dashboard charts that included custom decimal fields displayed 'No data available to chart' when the operating system of the Helix ALM Server computer used a locale with commas as decimal points.
- An entry could be added to the audit trail if a custom dropdown field value list name included a field code and no change was made to the field.

Bug Fixes - requirements management

• Importing a Microsoft Word document failed in Helix ALM 2021.2.0. (Web)

New Features - all Helix ALM areas

- Users can now reset their passwords from the Helix ALM login dialog box.
- They will receive an email with a new temporary password. Only supported for users
 who authenticate using the license server authentication method. Requires configuring
 email sending in the license server Email server options.
- View configuration changes for the following areas in the audit trail after selecting the
 new 'Enable detailed audit trail logging for configuration changes' project option: users,
 customers, security groups, project options, list values, custom fields, field relationships,
 field labels, required fields and default values, workflow, link definitions, requirement
 types, filters, automation rules, item mapping rules, folder types, source control
 providers, and Jira integration.

Enhancements - all Helix ALM areas

- Improved sensitive information encryption.
- Incoming tracked email now includes all To and Cc users.
- Upgraded to OpenSSL 1.1.1k to address potential vulnerabilities (CVE-2021-23840, CVE-2021-23841, CVE-2021-3449, CVE-2021-3450).
- Upgraded handlebars.js to version 4.7.7 to address potential vulnerabilities (CVE-2021-23369). (Web)
- Upgraded the Jira integration for the Helix ALM Server to address potential vulnerabilities (CVE-2020-7764, CVE-2021-23337, CVE-2020-28500, CVE-2021-29491, WS-2018-0148).
- Upgraded libraries to address potential vulnerabilities. (REST API)
- Upgraded Node.js to version 10.24.1 to address potential vulnerabilities (CVE-2021-3450, CVE-2021-3449, CVE-2020-7774, CVE-2020-8265, CVE-2020-8287, CVE-2020-1971, CVE-2021-22883, CVE-2021-22884, CVE-2021-23840). (REST API)
- Upgraded Lodash to version 4.17.21 to address potential vulnerabilities (CVE-2021-23337, CVE-2020-28500). (REST API)
- Upgraded Nodeforge to version 0.10.0 to address potential vulnerabilities (CVE-2020-7720). (REST API)
- Removed Underscore.js to address potential vulnerabilities (CVE-2021-23358). (REST API)

Upgraded swagger-ui to version 3.48.0 to address potential vulnerabilities (CVE-2019-20374, CVE-2020-26870, CVE-2020-8203, CVE-2021-23337, CVE-2020-28500, CVE-2021-27515). (REST API)

Enhancements - issue management

• Issues imported from email include a copy of the source email for the imported issue, including any additional To and Cc users.

Bug Fixes - all Helix ALM areas

- Email with attached .msg (Outlook message) files displayed the filename as Unknown instead of the name with an .eml attachment type.
- The Helix ALM Server reauthenticated every time it connected to Microsoft Exchange
 Online to send and receive email.
- When sending email from the Add, Edit, or View item dialog box, the Subject field in the Send Mail dialog box could contain incorrect characters, such as escaped quotes for replaced field codes.
- The Template field was not displayed in the Send Mail dialog box if the user did not have security permissions to send tracked email. (Desktop)
- The Helix ALM Server could crash when importing folders with long paths from an XML file.
- Archive files and database records for images in multi-line text fields added to matrix reports were not removed when reports were deleted.
- Creating a new project from a template could fail if the source project had duplicated matrix reports with images in multi-line text fields.
- Outlined numbered lists in multi-line text fields had the same numbering across all levels in matrix reports.
- Superscript, subscript, and strikethrough text in multi-line text fields was not always displayed correctly when viewing items. (Web)
- Multiple selection dropdown fields could incorrectly be added as a parent in a field relationship when editing custom fields and replacing an active field with a draft field. (Desktop)
- Cropping an image in the Edit Image dialog box in Safari did not show the cropped image until it was selected. (Web)

- Decimal number custom fields displayed incorrect values in browsers with locales that use commas instead of decimals. (Web)
- Helix ALM could crash when opening an item with an imported multi-line text field value that included an invalid 'lang' property on an HTML attribute. (Desktop)
- Enabling and disabling the isSuspect flag was not added to the history and did not run triggers for the change. (REST API)
- The SOAP CGI could stop working after upgrading using the Linux Perl installer. (SOAP SDK)

Bug Fixes - requirements management

- A requirement could be removed from an open requirement document even if the document was locked. (Desktop)
- Requirement descriptions could be blurry when moving an open requirement document between monitors with different resolutions. (Desktop)

Bug Fixes - test case management

 Test runs exported to Microsoft Word could incorrectly contain duplicate problem statements in the resulting document.

Helix ALM 2021.2.0 also includes other minor bug fixes.

Additional Notes

- The Helix ALM EULA changed, which includes changes in acceptable floating license usage. A maximum of five users can be assigned to one floating license at the same time. A floating license is not available to a user until 30 minutes after another user logs out.
- The Helix ALM Slack Integration add-on was updated to version 1.4.0 with updated libraries to address potential vulnerabilities. To get this upgrade, download the updated Helix ALM Slack Bot from the Perforce web site.
- Support for CentOS 7.5 7.6, Red Hat Enterprise (RHEL) 7.5 7.6, openSUSE 15.1,
 Microsoft Edge 41 44 (EdgeHTML 16 18) was discontinued.
- Support for Oracle databases is deprecated and will be removed in a future release.

Helix ALM 2021.2.0 contains a newer version of the Helix ALM License Server (version 2021.2.0).

Helix ALM License Server 2021.2.0

New Features

- Users can now reset their passwords from Helix ALM, Surround SCM, and Helix ALM
 License Server Admin login dialog boxes. Users will receive an email with a new
 temporary password. Only supported for users who authenticate using the license
 server authentication method. Requires configuring email sending in the license server
 Email server options.
- Administrators can now reset user passwords. Users will receive an email with a new temporary password. Only supported for users who authenticate using the license server authentication method. Requires configuring email sending in the license server Email server options.
- View and manage email sent by the license server in the mail queue.

Enhancements

- Improved sensitive information encryption.
- Warnings can be logged in the server log when email SSL certificates are invalid. Helix
 ALM License Server 2021.2.0 also includes other minor bug fixes.

Additional Notes

- The Helix ALM EULA changed, which includes changes in acceptable floating license usage. A maximum of five users can be assigned to one floating license at the same time. A floating license is not available to a user until 30 minutes after another user logs out.
- For Helix ALM, Surround SCM, and Helix ALM License Server 2020.x and earlier clients, users will need to enter their username in all lowercase characters. This does not affect users who authenticate via LDAP, Active Directory, OpenID Connect, or SAML.
- Support for CentOS 7.5 7.6, Red Hat Enterprise (RHEL) 7.5 7.6, openSUSE 15.1,
 Microsoft Edge 41 44 (EdgeHTML 16 18) was discontinued.
- Support for Oracle databases is deprecated and will be removed in a future release.

Helix ALM License Server 2021.2.0 only supports Helix ALM 2018.1 and later, and Surround SCM 2018.1 and later.

New Features - requirements management

 Import new requirements to Helix ALM from other tools using Requirement Interchange Format (ReqIF) files. Easily map ReqIF data types to Helix ALM fields to ensure data is imported correctly. ReqIF specification version 1.2 is supported.

Enhancements - all Helix ALM areas

- Work with custom fields more easily and without scrolling in workflow event dialog boxes. (Web)
- Click Hide Overview to hide the item Overview tab when displayed. (Web)
- Upgraded the JRE bundled with the installer to Java 11.
- Updated the Jira integration based on upcoming changes to the Jira REST API in Jira
 9.0.

Enhancements - issue management

- Click Add Report to quickly add a new Found by record when viewing an issue. (Web)
- Use the new version of Defect Scribe (2021.1) to automatically capture actions for issue reports and test cases. (Desktop)

Enhancements - requirements management

- When viewing a requirement document, the Workflow menu now shows how many requirements are selected or if the document is selected, which makes it easier to see how many items an event will be added to. (Web)
- The Import From ReqIF File security command was added and is enabled by default for security groups in new projects. If you upgrade Helix ALM and users will be importing from ReqIF files, review their security groups and make sure the command is enabled.

Bug Fixes - all Helix ALM areas

- Clicking Cancel in the dialog box when adding an event to an item did not prompt to save changes. (Web)
- Images in dashboard note widgets were not displayed in Helix ALM 2020.2 and later.
 (Desktop)
- Information could be exported incorrectly from folders when using the Open in Excel action. (Desktop)

 A vulnerability existed that could expose local files to users with specific Administration security permissions.

Bug Fixes - requirements management

• The wrong field codes were displayed in the "Requirement in document linked item fields" section on the Helix ALM Field Codes for Microsoft Word Export Templates page.

Bug Fixes - test case management

- Hyperlink styling for linked item columns could be displayed in the wrong column when a test suite folder was selected. (Desktop)
- The Regenerate Test Runs dialog box had default text in the Comment field. (Desktop)

Helix ALM 2021.1.0 also includes other minor bug fixes.

Additional Notes

- The Helix ALM Slack Integration add-on was updated to version 1.3.0, which replaces
 Slack API calls used with the workflow feature that posts Comment events back to Helix
 ALM items in replies to threads with unfurled Slack posts. When Slack removes these
 API calls, this functionality will no longer work. To fix this issue, download the updated
 Helix ALM Slack Bot from the Perforce web site.
- The macOS installer is now properly notarized and no longer displays an Apple security warning when double-clicking the installer.
- Support for the CVS integration was discontinued.
- Support was discontinued for Windows 7, Windows Server 2008 R2, macOS 10.13, CentOS 6.10, CentOS 7.0 7.4, Fedora 27 29, OpenSUSE Leap 15.0, Red Hat Enterprise (RHEL) 6.10 7.4, Ubuntu 16.04 17.10, Jira 7.10 7.14, Microsoft Outlook 2010, Git 2.13 2.21, Helix Core 2017.x, Subversion 1.9 1.12, Microsoft Team Foundation Server 2012.x, Microsoft IIS 7.5, Mozilla Firefox 68.x 77.x, Google Chrome 75.x 80.x, Microsoft IE 11.0, Safari 12.x, and PostgreSQL 9.3 9.4.
- Support for CentOS 7.5 7.6, Red Hat Enterprise (RHEL) 7.5 7.6, openSUSE 15.1,
 Microsoft Edge 41 44 (EdgeHTML 16 18), and Oracle databases is deprecated and will be removed in a future release.
- Support for TLS 1.0 and 1.1 when connecting to the REST API was removed because of security vulnerabilities.

Helix ALM 2021.1.0 contains a newer version of the Helix ALM License Server (version 2021.1.0).

Helix ALM License Server 2021.1.0

Bug Fixes

• Clicking Cancel on the Server Options dialog box could incorrectly prompt to save changes when no changes were made.

Helix ALM License Server 2021.1.0 also includes other minor bug fixes.

Additional Notes

- A future release of Helix ALM License Server later this year will include password encryption changes. For Helix ALM, Surround SCM, and Helix ALM License Server 2020.x and earlier clients, users will need to enter their username in all lowercase characters. This does not affect users who authenticate via LDAP, Active Directory, OpenID Connect, or SAML. There is no action to take now, but enterprise-level and regulated companies may want to consider any planning needed for upgrades or security purposes.
- Support was discontinued for Windows 7, Windows Server 2008 R2, CentOS 6.10,
 CentOS 7.0 7.4, Fedora 27 29, OpenSUSE Leap 15.0, Red Hat Enterprise (RHEL)
 6.10 7.4, Ubuntu 16.04 17.10, Microsoft IIS 7.5, Mozilla Firefox 68.x 77.x, Google
 Chrome 75.x 80.x, Microsoft Internet Explorer 11.0, Safari 12.x, and PostgreSQL 9.3 9.4.
- Support for CentOS 7.5 7.6, Red Hat Enterprise (RHEL) 7.5 7.6, openSUSE 15.1,
 Microsoft Edge 41 44 (EdgeHTML 16 18), and Oracle databases is deprecated and
 will be removed in a future release.

Helix ALM License Server 2021.1.0 only supports Helix ALM 2018.1 and later, and Surround SCM 2018.1 and later.

Bug Fixes - all Helix ALM areas

- Uploading large files could time out. This bug was introduced in Helix ALM 2020.3.0.
 (Web)
- Moving multiple items from one folder to another did not maintain the rank order from the original folder.

New Features - all Helix ALM areas

- Add baselines, which are an unchangeable collection of items and relationships frozen at a specific time. (Web)
- Duplicate a baseline to quickly add a new baseline based on the same collection of items. (Web)
- View the contents of baselines for detailed information about the state of each item and its relationship to other items. Use interactive display options to quickly see items of interest. (Web)
- View differences between two baselines to see what changed, including specific changes to the items in them. (Web)
- Use the new Baselines tab when working with items to quickly compare an item with a revision in a baseline. (Web)
- Edit baselines to rename them and attach files for future reference, such as reports and exported Microsoft Word documents. (Web)
- Run built-in baseline differences reports for an overview of items that changed between baselines. Summary, contents, and grouped contents reports are available. (Web)
- Delete baselines that are no longer needed. (Web)
- View history and the audit trail to see changes related to baselines. (Desktop)
- Require electronic signatures when adding baselines.
- Limit security groups so only users who are already in the group can add or remove users from that group.

Enhancements - all Helix ALM areas

- The maximum number of items displayed in the Select Items dialog box was increased from 100 to 10,000 items. The Filter tab is displayed by default and the selected filter is saved. The Type field value does not reset when selecting a different tab. (Web)
- The long label for a custom field not found during XML import is now displayed in the error information.
- The Add Baselines, Edit Baselines, View Baselines, and Delete Baselines security commands were added. They are enabled by default only for the Administration security group in new projects and disabled by default for all groups in upgraded projects.
- Upgraded TinyMCE.js to version 5.4.2 to address potential vulnerabilities.
- Upgraded lodash.js to version 4.17.19 to address potential vulnerabilities.

- Upgraded Poco to version 1.10.1 to address potential vulnerabilities.
- Upgraded to OpenSSL 1.1.1g.

Bug Fixes - all Helix ALM areas

- The Helix ALM Server could crash when saving changes to a saved tab.
- Helix ALM could crash when reordering dashboards. (Web)
- Helix ALM could crash when adding a matrix report. (Web)
- The Contains column was empty when adding a matrix report. (Web)
- The shortcut menu for tables in multi-line text fields was not available in Firefox. (Web)
- Pasting an image in a multi-line text field and then undoing it could return a 'The following image could not be uploaded' error when saving the item. (Web)
- An 'An error occurred when preparing the items for serialization' error could be returned when opening an item. (Web)
- Saving items could leave undeleted temporary files on the computer hosting the CGI, which eventually resulted in an 'Unknown request type' error if the maximum number of temp files was reached. (Web)
- Editing a link and changing the parent item could result in a broken link with no parent item. (Web)
- Text exports did not export date/time, multi-line text, or test case step fields in the correct format. (Web)
- Clicking 'Close All Other Tabs' in the dialog box displayed when the tab limit was reached did not log out each session when the tabs were closed. (Web)
- Inserting a stamp in the Signature Required dialog box did not always enable the Validate button. (Web)
- Multi-line text fields incorrectly had a dark background when using dark mode on macOS. (Desktop)
- Helix ALM crashed when using a screen reader, such as ZoomText 11 or Microsoft Narrator. (Desktop)
- Items displayed multiple times in a list when viewing a folder recursively were not all refreshed when the item changed. (Desktop)
- The error returned when the matrix report header field contained too many characters was unclear and included a field code that was not replaced with a value. (Desktop)
- Adding and removing words in the dictionary in the User Options dialog box could result in many duplicate entries. (Desktop)

- Company, Division, or Department field values could be deleted or set to no value when editing a user or customer if two users had the same value in the fields that only differed by case. (Desktop)
- When editing an email template, clearing the 'Send email in HTML format' option and saving the template replaced the message body with the value from the Subject field. (Desktop)
- Audit log data was not always returned correctly from Oracle databases. (Desktop)
- Clicking a file attachment hyperlink in the history changes report did not always open the file.
- Helix ALM could crash when exporting to Microsoft Word if the primary sort column was removed from the list window before starting the export. (Desktop)
- Importing from a text file could save workflow event field data for fields that did not exist.
- Some unsupported fields were incorrectly available for mapping in text imports, such as folders and number of documents.
- The Helix ALM Server could have performance issues if an email template used in automation rules contained an opening style tag without an ending tag.
- Non-breaking spaces were not replaced with spaces in email received when using the Exchange Online protocol for Microsoft Office 365.
- Adding an item from an email when using the Microsoft Outlook add-in did not use a
 case-insensitive search on the user's email address when selecting the sender,
 recipient, and Found by user.
- The getCustomer call in the SOAP SDK could not find a customer if a user with the same name existed.

Bug Fixes - requirements management

- Editing a review note in a requirement document to attach files to it could return an 'Error creating archive file' error. (Desktop)
- Editing requirement types when no other users were logged in locked the project and did not release the lock. (Desktop)
- Changing the filter in a requirement document with multiple pages did not always reset the paging back to the first page. (Web)
- Appending a requirement to a document could fail if the user did not have security permissions to work with folders. (Web)

Bug Fixes - test case management

 Script files attached to test cases were not always saved with the correct order number based on the position of scripts in the list. (Web)

REST API Enhancements - all Helix ALM areas

- REST API access tokens now automatically expire when the API key that the access token was generated for is deleted.
- Upgraded bl (BufferList) to version 4.0.2 to address potential vulnerabilities.
- Upgraded kind-of.js to version 6.0.3 to address potential vulnerabilities.
- Upgraded lodash.js to version 4.17.19 to address potential vulnerabilities.
- Upgraded Node.js to version 10.22.1 to address potential vulnerabilities (CVE-2020-8252).

Helix ALM 2020.3.0 also includes other minor bug fixes.

Additional Notes

- Support for TLS 1.0 and 1.1 when connecting to email servers was removed because of security vulnerabilities.
- Support for Microsoft Internet Explorer is deprecated and will be removed in a future release.
- Support for Microsoft Windows 7 and Server 2008 R2 is deprecated and will be removed in a future release.
- Support for the Microsoft Visual Studio add-in for Visual Studio 2010 and earlier was removed.

Helix ALM 2020.3.0 contains a newer version of the Helix ALM License Server (version 2020.2.0).

Helix ALM License Server 2020.2.0

Enhancements

- Upgraded to OpenSSL 1.1.1g.
- Upgraded Poco to version 1.10.1 to address potential vulnerabilities.

Helix ALM License Server 2020.2.0 only supports Helix ALM 2017.1 and later, and Surround SCM 2017.1 and later.

New Features - all Helix ALM areas

- Add, edit, share, and delete trend reports. (Web)
- Use the dark theme to change Helix ALM's appearance. (Web)
- Send and receive email, and import issues from email using the Exchange Online protocol for Microsoft Office 365.

Enhancements - all Helix ALM areas

- Configure matrix reports to prompt to select a folder or requirement document when the report runs.
- Hide columns in matrix reports.
- Export the project name and description from the project options to Microsoft Word using new field codes: PROJECT_OPTIONS_PROJECT_NAME and PROJECT_OPTIONS_PROJECT_DESC.
- Configure a timeout for saving reports as PDF files in the registry utility.
- Improved scaling for screen captures on 4K monitors. (Desktop)
- Improved screen captures when using multiple monitors. (Desktop)
- Improved formatting of reports that use the Folder Item Detail Report stylesheet.
- Updated the Jira integration for the Helix ALM Server based on upcoming changes to the Jira REST API in Jira 9.0.
- jQuery was upgraded to v13.5.1 to address potential vulnerabilities. (Web)
- handlebars.js was upgraded to version 4.0 to address potential vulnerabilities. (Web)

Enhancements - issue management

View details for Found by users and customers from issues. (Web)

Enhancements - requirements management

- Double-click a requirement in a requirement document to edit it in place. (Web)
- Bulk change fields from a requirement document. (Desktop)
- Display requirements in a requirement document in document order and include the outline number in matrix reports.
- Requirement documents created after importing a Microsoft Word document now open automatically.

Enhancements - test case management

Export a list of test run actual result attachment names to Microsoft Word using the new
 TR STEP ACTUAL RESULT ATTACHMENT NAMES field code.

Bug Fixes - all Helix ALM areas

- Dropdown field values could be incorrectly changed when using the mouse scroll wheel when the mouse cursor was over a field. (Desktop)
- Fields common to all item types were not available in the list of columns to add in the Folders list if the field was hidden for any item type.
- Nested numbered lists in multi-line text fields did not always display correctly when exported to Microsoft Word or printed.
- The client could crash when dragging text from an external application to an item detail page when using Internet Explorer. (Web)
- The Last Modified date was not always set when attaching files to items. (Web)
- Long description fields could be truncated in Jira issues created from Helix ALM. (Web)
- The audit trail search did not always return all matching results when searching for changes by specific users. (Desktop)
- An empty error dialog box could be displayed when editing workflow event custom fields and changing a field name to one already in use. (Desktop)
- Email contents were not always updated before sending an email if the Send button was clicked and the text box still had focus. (Desktop)
- Pressing Esc when editing a diagram did not always prompt to save changes before closing. (Desktop)
- A SEGFAULT could occur when running the Helix ALM Slack Bot on Linux. Requires
 downloading an updated Slack Bot from the Helix ALM Add-Ons web page.
- Replies to Helix ALM messages in Slack were not added to workflow events on the related item because of a Slack REST API change. Requires downloading an updated Slack Bot from the Helix ALM Add-Ons web page.

Bug Fixes - issue management

 When sending email, selecting the Send to Found By Users option only added the user from the first Found by record to the recipient list. (Web)

- When attaching source files or changelists to a Helix ALM issue being edited from Surround SCM, clicking the Save and Close button on the Resolve Item Lock dialog box saved the changes, but did not always close the dialog box. (Desktop)
- Importing emails with non-Unicode character encoding in the From header did not always correctly import the user's name.

Bug Fixes - requirements management

• Diagrams could be incorrectly scaled in requirement documents. (Desktop)

Bug Fixes - test case management

 The 'Supports multiple selection' option was incorrectly displayed when editing test variant values. (Desktop)

REST API Enhancements - all Helix ALM areas

 Node.js was upgraded to v10.21.0 to address potential vulnerabilities (CVE-2020-8174, CVE-2020-10531, CVE-2020-11080).

Helix ALM 2020.2.0 also includes other minor bug fixes.

Additional Notes

- Support for TLS 1.0 and 1.1 when connecting to email servers is deprecated because of security vulnerabilities. These options will be removed in the next release.
- Support for Red Hat Enterprise Linux (RHEL) 6.x and CentOS 6.x has been deprecated.
 Plan to upgrade your server to RHEL or CentOS 7.x or 8.x because support for older versions will be discontinued in a future Helix ALM release.
- The macOS application bundle was fully code signed.
- On macOS Catalina, double-clicking the ttmacosxclientinstall application bundle in the ttmacosxclientinstall.zip file displays a warning that the file cannot be opened because Apple cannot check it for malicious software. This is due to Apple's new software notarization requirements. As a workaround, right-click the installer and choose Open to run it, or in System Preferences, choose Security & Privacy, and click Open Anyway next to the ttmacosxclientinstall file information.
- Support for the Microsoft Visual Studio add-in for Visual Studio 2010 and earlier is deprecated and will be removed in the next release.

Helix ALM 2020.2.0 contains a newer version of the Helix ALM License Server (version 2020.1.1).

Helix ALM License Server 2020.1.1

Enhancements

 The license server admin utility is now integrated with Windows Credential Manager if the 'Always log in with this username and password' option is selected in the login dialog box.

Bug Fixes

• The license server did not start on Fedora 32. This may also be an issue with other newer Linux distributions with incompatible Kerberos libraries.

Helix ALM License Server 2020.1.1 only supports Helix ALM 2017.1 and later, and Surround SCM 2017.1 and later.

New Features - all Helix ALM areas

- Send messages to users logged in to a specific project from the Logged In Users dialog box/page.
- Log out and send messages to users logged in to any projects on a Helix ALM Server from the Logged In Users dialog box in the server admin utility. (Desktop)
- Save reports in PDF format.
- Add, edit, and delete matrix reports, which provide information about linked and related items in a configurable table format. (Web)

Enhancements - all Helix ALM areas

- Select 'Show password' on the login page to display the value in the Password field.
 (Web)
- Helix ALM is now integrated with Windows Credential Manager and macOS Keychain Access if the 'Always log in with this username and password' option is selected in the login dialog box. (Desktop)
- Upgraded to OpenSSL 1.1.1d.

Bug Fixes - all Helix ALM areas

- Text in tables in multi-line text fields was not always visible when using a dark mode theme. This fix does not apply to text added to tables in earlier Helix ALM versions.
- Helix ALM could crash when dragging an image in a multi-line text field on top of the image toolbar. (Web)
- Resize handles on images in multi-line text fields were not always available when using Internet Explorer. (Web)
- Images in multi-line text fields could not always be edited when using Internet Explorer.
 (Web)
- An inactivity warning could be displayed when editing a diagram. (Web)
- Deleting one saved tab or view could incorrectly delete all of them. (Web)
- HTTP hyperlinks were not included in the file when opening users in Excel from the Users list window. (Desktop)
- Inline images were not displayed in matrix reports if the HTML sanitizer was enabled for the web client and reports in the registry utility. (Web)

- Time tracking reports could fail to run and return a SAXParseException error if a link definition name included non-escaped HTML characters.
- Grouping list reports did not always have correct column sums if a grouping symbol was not configured in the Windows operating system settings.
- Exported Microsoft Word documents could incorrectly include '__tt_metadata_end__'
 text.
- Exported Microsoft Word export documents could be missing part of a multi-line text field value if an if statement and the multi-line text field code were on the same line in the template.
- The Create menu could display multiple instances of Filter... on macOS. (Desktop)
- The Number field was not imported from XML files.
- An email template Body field with custom HTML could automatically change when editing a template without changing the field. (Desktop)
- Logging out a user from the Logged In Users dialog box/page did not always release the user's license on the Helix ALM License Server.
- Helix ALM could crash when editing custom fields using Firefox. (Web)
- The Helix ALM Server could crash when deleting item mapping rules.
- The server admin utility could time out when clicking the Server Users button if a large number of users were stored on the Helix ALM License Server. (Desktop)
- Rows in the USERSETENT database table were not deleted when a project was deleted.
- Attachments were not always copied when converting databases to a different type if the 'Store file attachments' option was selected.
- The HTML sanitizer removed the table tag when importing email that contained a table with an anchor tag with 'target = "_blank"'.'

Bug Fixes - requirements management

- Multi-line text fields with tables that included a float left or right style tag were not exported correctly when using classic Microsoft Word export. (Desktop)
- Helix ALM could freeze when clicking the Documents tab in a requirement that was in a document hidden by a filter applied in the user's security group. (Desktop)
- Hidden field labels could be displayed in requirement documents. (Web)

Bug Fixes - test case management

- The %TCOPN% field code was incorrectly available to use in email templates for test cases. (Desktop)
- Test runs exported to Microsoft Word used the wrong field code for the Undetermined (step result) field.
- Attempting to view a test case or test run suite folder when not logged in with a test case management license prevented viewing items in other folders until after logging out and logging in again. (Desktop)

REST API Enhancements - all Helix ALM areas

Node.js was upgraded to v10.19.0 to address vulnerabilities (CVE-2019-15605, CVE-2019-15606, CVE-2019-15604).

REST API Bug Fixes - all Helix ALM areas

- Performing a PUT operation on a new folder with the same name as an existing folder was interpreted as an add and returned an error that the folder already exists.
- The REST API server could return a 'key too small' error when running on 64-bit Linux with self-signed certificates.
- An error could be returned when saving changes to items if electronic signatures were enabled.

Helix ALM 2020.1.0 also includes other minor bug fixes.

Additional Notes

- Support was discontinued for 32-bit versions of the Helix ALM Server, REST API, Helix ALM URL Redirector, and ttcgi, ttadmcgi, and ttpubdata CGIs.
- Support was discontinued for macOS 10.12, CentOS 6.9, Debian 8, Fedora 25 and 26, openSUSE Leap 42.2 and 42.3, Red Hat Enterprise (RHEL) 6.9, Ubuntu 14.04 15.10, Microsoft Excel 2010 and 2011, Jira 7.4 7.9, QA Wizard Pro, Git 2.9 2.12, Helix Core 2016.x, Microsoft Visual SourceSafe 2005, Microsoft Visual Studio 2008, Microsoft Edge 40 (EdgeHTML 15), Google Chrome 67 74, Mozilla Firefox 59 67, Safari 11, and PostgreSQL 9.1 and 9.2.
- The Helix ALM Matrix Report Publisher was updated. Make sure to use the latest version of the utility, which is available for download at https://www.perforce.com/helixalm-add-ons.

- The ability to print directly to a printer from the Helix ALM Windows desktop client was removed due to unpredictability of the Microsoft Internet Explorer DLL.
- Windows standard binary protection was enabled on all Helix ALM libraries and executables.
- On macOS Catalina, double-clicking the ttclientinstall application bundle in the
 ttmacclientinstall.dmg file displays a warning that the file cannot be opened because
 Apple cannot check it for malicious software. This is due to Apple's new software
 notarization requirements. As a workaround, right-click the installer and choose Open to
 run it, or in System Preferences, choose Security & Privacy, and click Open Anyway next
 to the ttclientinstall file information.
- Support for SSL3 when connecting to email servers was removed due to security
 vulnerabilities. A warning is written to the server log if this encryption is selected and the
 setting must be changed.

Helix ALM 2020.1.0 contains a newer version of the Helix ALM License Server (version 2020.1.0).

Helix ALM License Server 2020.1.0

Enhancements

- Improved performance when starting the license server, configuring licenses and license pools, and saving changes to users.
- Improved performance when sending user modification information between the license server and Helix ALM Server.
- Upgraded to OpenSSL 1.1.1d.

Bug Fixes

- The license server admin utility could crash when adding a user, setting the authentication method to an authentication provider, and then changing the external authentication option.
- Readding a deleted user failed when performing an advanced add using the web admin utility.

Helix ALM License Server 2020.1.0 also includes other minor bug fixes.

Additional Notes

- Support was discontinued for all 32-bit license server applications except for the 32-bit license server API, which is now installed in the lib32 directory.
- Support was discontinued for CentOS 6.9, Debian 8, Fedora 25 and 26, openSUSE
 Leap 42.2 and 42.3, Red Hat Enterprise (RHEL) 6.9, Ubuntu 14.04 15.10, Microsoft
 Edge 40 (EdgeHTML 15), Google Chrome 67 74, Mozilla Firefox 59 67, Safari 10 and
 11, and PostgreSQL 9.1 and 9.2.
- License server API examples are no longer installed with the API. They are available for download at http://ftp.perforce.com/alm/extras/lsapiexamples/.

Helix ALM License Server 2020.1.0 only supports Helix ALM 2017.1 and later, and Surround SCM 2017.1 and later.

New Features - all Helix ALM areas

- Add and edit diagrams directly in multi-line text fields, such as flow charts or UML diagrams.
- Use the Overview tab to quickly review an item's activity, including workflow events and email. Click More >> to view additional details that are not displayed. (Web)
- Add, edit, and delete detail, release planning, release status, time tracking, and traceability reports. (Web)

Enhancements - all Helix ALM areas

- Duplicate existing email templates to add new templates with similar information.
 (Desktop)
- Export the current status of items without the currently assigned users list to Microsoft
 Word using the following field codes in templates: FD_FI_CURRENT_STATUS,
 IS_CURRENT_STATUS, RD_CURRENT_STATUS, RD_RQ_CURRENT_STATUS,
 RQ_CURRENT_STATUS, TC_CURRENT_STATUS, and TR_CURRENT_STATUS. The
 user option that controls the assignment information displayed in status fields is not
 applied.
- The default font size was increased to 12 pt in the Message box field in the Add and Edit Email Template dialog box. (Desktop)
- The Add to Folder dialog box remembers the previously expanded folders in the tree the next time the dialog box opens. (Web)
- The Edit, Save, Apply and Cancel buttons were moved to the upper left corner of the Add, Edit, and View User and Customer pages for consistency with other pages in the application. (Web)
- The Manage button on the Edit User and Edit Customer pages was changed to a Manage API Keys link. (Web)
- The selected row is now highlighted on the Transitions tab in the Add, Edit, and View Workflow dialog boxes. (Desktop)
- When evaluating workflow state changes for multi-user assignment rules, states no longer in the valid list of resulting states are now interpreted as lowest priority instead of highest priority.
- 64-bit versions of all Helix ALM CGIs, except for the SOAP SDK CGI, are now available.
- A 64-bit version of the Helix ALM URL Redirector is now available.

Enhancements - requirements management

- Select and copy requirement description and review note text from requirement documents. (Web)
- Clicking a requirement document link in the watched items list or linked items column on item lists now opens the document instead of the Edit or View Requirement Document page. (Web)

Enhancements - test case management

- Generate test run suites from test case suites. Maintain the same structure and order set in the source test case suite. (Desktop)
- Go directly to a test case suite from the generated test run suite by clicking the Open Test Case Suite button. (Desktop)
- Improved performance when generating test runs from a large number of test cases.
 (Desktop)

Bug Fixes - all Helix ALM areas

- Some characters, such as quotes, were incorrectly escaped in the Subject field in the Send Mail (desktop client) and Send Email (web client) dialog boxes.
- Dragging an inserted image to a multi-line text field duplicated the image instead of moving it. (Web)
- Clicking a file attachment hyperlink in a history change report did not open the file.
 (Desktop)
- A database error could occur when saving changes to dashboard widgets. (Desktop)
- Importing items via XML could automatically add the current user to the list of currently assigned users if items had <current user> set as the default for assignment fields.
- The Resulting State field in the Add and Edit Event dialog boxes did not display states in the order specified on the States tab in the Add and Edit Workflow dialog boxes.
 (Desktop)
- The Notes field in the Add, Edit, and View Security Group dialog boxes did not display any content and changes to the field were not saved. (Desktop)
- Forward slashes (/) in URLs configured for external source control providers were incorrectly escaped and URLs did not work. (Desktop)

When using macOS 10.15, double-clicking the installers in the ttmacclientinstall.dmg
and ttmacosurlredirectorinstall.dmg files downloaded from the Perforce web site did not
run without a workaround because the installers were not notarized.

Bug Fixes - requirements management

 Requirement description text could be truncated when initially viewing a requirement document. (Desktop)

Bug Fixes - issue management

• Images in multi-line text fields were counted as attachments for the value displayed in the Has Attachments item list column.

REST API New Features - all Helix ALM areas

- Get, create, update, and delete folders.
- Add and remove issues, requirement documents, requirements, test cases, and test runs in folders.

REST API Enhancements - all Helix ALM areas

Upgraded Node.js to 10.16.3 to address vulnerabilities (CVE-2019-9511, CVE-2019-9512, CVE-2019-9513, CVE-2019-9514, CVE-2019-9515, CVE-2019-9516, CVE-2019-9517, and CVE-2019-9518).

Helix ALM 2019.5.0 also includes other minor bug fixes.

Additional Notes

 Support for the 32-bit Helix ALM Server has been deprecated. Support will be discontinued in a future release.

Helix ALM 2019.5.0 contains a newer version of the Helix ALM License Server (version 2019.2.1).

Helix ALM License Server 2019.2.1

Bug Fixes

• When passwords are configured to expire, OpenID Connect and SAML users could be incorrectly prompted to change their password when logging in.

Helix ALM License Server 2019.2.1 also includes other minor bug fixes.

Bug Fixes - all Helix ALM areas

• Deleting one saved tab or view could incorrectly delete all of them. (Web)

New Features - all Helix ALM areas

- Limit assignment dropdown fields in workflow event dialog boxes to include only specific users and users in selected security groups.
- Set the default value for assignment dropdown fields to <currently assigned users>,
 which makes it easier to add or remove users in the list of users an item is assigned to.
- Download matrix, distribution, list, and trend reports to a Microsoft Excel file for further analysis.
- Change multiple fields in multiple items at the same time by bulk changing fields. (Web)
- Capture and edit screenshots from multi-line text fields and the Attachments tab in items. (Web)
- Export items to a text or XML file, which can be imported into other Helix ALM projects, used by other applications, or used in automated processes. Export selected items or entire filtered lists from item lists, the Folders list, or an open requirement document.
 (Web)
- Export all items from a Helix ALM project to an XML file from the Administration area.
 Select multiple item types to include in the export. (Web)
- Organizations that use an identity provider that supports SAML or OpenID Connect
 authentication methods, such as Okta, can use it to log in to Helix ALM clients. Requires
 installing the Helix Authentication Service. Authentication is valid for electronic
 signatures if the identity provider supports forcing reauthentication.

New Features - requirements management

 Import Microsoft Word documents to add requirement documents and requirements to Helix ALM projects. (Web)

Enhancements - all Helix ALM areas

- View the number of selected items in item lists. (Web)
- The Recent Items list now displays the status of each item and more of the item name.
 The list is also now available across multiple browser tabs. (Web)
- Quickly find items to link by pasting an item URL in the Search field in the Add Link dialog box. (Web)
- Field security is now enforced when bulk changing fields.

- Unfurling of ttstudio links in Slack initially collapses longer text blocks with an option to expand for more details. Requires downloading an updated Slack bot from the Helix ALM Add-Ons web page.
- Upgraded the Slack integration to address vulnerabilities (CVE-2018-16487, CVE-2018-16492, CVE-2019-5737, CVE-2019-1559). Requires downloading an updated Slack bot from the Helix ALM Add-Ons web page.

Enhancements - requirements management

- Change multiple requirements at the same time from an open requirement document by bulk changing fields. (Web)
- The Viewing Requirement Document page now has an Add Requirements button if the document does not have any requirements to help new users know what to do next.
 (Web)

Enhancements - test case management

 Pie charts in dashboards and live charts now show passed test runs in green and failed test runs in red.

Bug Fixes - all Helix ALM areas

- Tracked emails could have extra paragraph breaks.
- The report time in history change reports was always UTC.
- Release status, release planning, traceability, and time tracking reports that did not have the Recursive option for folders selected did not always include all linked items.
- Dates could be limited to a two-digit year when exporting to Microsoft Word.
- Dates before epoch (1/1/1970) were not imported correctly from XML files.
- The selected code page was not used when importing from text files. (Web)
- Importing a UTF-8 text file could import malformed text when a UTF-8 multi-byte character contained a 0xA0 byte.
- Sessions were no longer automatically logged off when users closed tabs in some browsers. (Web)
- Logging in using some browsers could fail if session storage was disabled. (Web)
- Pressing Tab to go to a text area did not always show a focus rectangle when using Safari 11.1 and 12.1. (Web)

- Inactive workflow events could be displayed in the workflow bar in item lists and the Folders list. (Web)
- Sent tracked email or notifications that only contained a period on a line by itself only included part of the email and got stuck in the mail queue.
- Remaining hours were not displayed correctly in task boards when pressing the down arrow to select an event.
- The Email tab could be incorrectly hidden on Add, Edit, and View item windows.
 (Desktop)
- Double clicking when using a Wacom tablet on macOS did not always register as a double-click event. (Desktop)
- Project options could not be saved when no email templates were configured for an item type. (Desktop)
- Some workflow event fields could not be set to <empty> when bulk changing fields.
 (Desktop)
- Helix ALM could crash when deleting a new workflow event added to an item. (Desktop)
- Helix ALM could crash when attempting to view more than 100,000 items in the Folders list window. (Desktop)
- When using multiple monitors, modal dialog boxes could be displayed on a different monitor than Helix ALM, which made the application seem unresponsive. (Desktop)
- Help did not always open from Helix ALM when using Chrome on Linux. (Desktop)
- The Helix ALM Server could crash when a session that was downloading a large file attachment is forced to log out.
- The Available update field value in the Update Check category in the Options dialog box in the server admin utility was not cleared when checking for updates and no new updates were available.
- An 'installer user interface mode not supported' error could be displayed when running the installer on Windows Server 2019.

Bug Fixes - requirements management

- Importing a Microsoft Word document could fail and return an 'infinite loop detected' error if the document included text box shapes or had non-breaking spaces.
- Importing a Microsoft Word .docx document could fail and return a 'process crashed' error. (Desktop)

• Inline images were not always displayed in open requirement documents when the temporary directory was automatically cleared by the operating system. (Desktop)

Bug Fixes - test case management

 Exporting test run steps to Microsoft Word always compressed the actual result attachment files.

Bug Fixes - issue management

• Importing issues via email added a new customer record every time an issue was created if the user's first or last name was more than 32 characters.

REST API New Features - all Helix ALM areas

 Configure HTTP response headers in the config.json file. The following headers are added by default: content-security-policy, strict-transport-security, X-Frame-Options, X-XSS-Protection, X-Content-Type-Options.

REST API Enhancements - all Helix ALM areas

 Upgraded Node.js to 10.15.3 to address vulnerabilities (CVE-2019-5737, CVE-2019-1559).

REST API - Bug Fixes - all Helix ALM areas

- The REST API may not be installed correctly on Linux when only installing the API.
- The installer incorrectly installed SSL certificates with the REST API server.
- A REST API user could mark items as suspect without the required security permissions.

Helix ALM 2019.4.0 also includes other minor bug fixes.

Additional Notes

- Support for the REST API for 32-bit Linux has been discontinued.
- Support for the Jira integration for 32-bit Linux has been discontinued.
- Support was discontinued for Safari 10.x and earlier.
- The JRE bundled in the installer was changed to the OpenJDK version.
- Support for the 32-bit Helix ALM Server has been deprecated. Support will be discontinued in a future release.

Helix ALM 2019.4.0 contains a newer version of the Helix ALM License Server (version 2019.2.0).

Helix ALM License Server 2019.2.0

New Features

 Organizations that use an identity provider that supports SAML or OpenID Connect authentication methods, such as Okta, can use it to log in to clients. Requires installing the Helix Authentication Service.

Enhancements

- Improved speed when adding licenses using a .lic file.
- Upgraded to OpenSSL 1.0.2q.

Bug Fixes

- When adding licenses using a .lic file, expired license messages were displayed even if the file included valid maintenance extension licenses.
- An Active Directory or LDAP server that users were associated with could be deleted.
- Editing a user could add a duplicate entry to the list of old passwords, which could result in performance issues when the list grows very large.
- The Notes field in the Bulk User Changes dialog box could display text in a small font.
- Pressing Alt+L did not open the Licenses in Use dialog box from the Licenses dialog box.
- Some dialog boxes did not have keyboard shortcuts for OK, Cancel, or Close buttons.

Helix ALM License Server 2019.2.0 also includes other minor bug fixes.

Additional Notes

- Support was discontinued for Microsoft Edge 39.x and earlier.
- Support for the 32-bit license server has been deprecated. Support will be discontinued
 in a future release.

Helix ALM License Server 2019.2.0 only supports Helix ALM 2017.1 and later, TestTrack 2016.1, and Surround SCM 2016.1 and later.

REST API - Bug Fixes - all Helix ALM areas

• The REST API could return a statusCode of 500 when submitting changes to items if electronic signatures were enabled for the item type.

Bug Fixes - all Helix ALM areas

 Users in security groups with the Edit Security Group Setting command enabled and the Edit Security Groups command disabled could not change the security group when editing a user.

New Features - all Helix ALM areas

- Configure folder types to differentiate folder purpose and functionality. (Web)
- Rename field labels to use a team's terminology. (Web)
- Modify system fields, which are available by default in every Helix ALM project. (Web)
- Export item list contents to Microsoft Excel. (Web)

New Features - requirements management

- Configure the types of requirements a team uses. (Web)
- Override required settings and default values for system and custom fields for each requirement type. (Web)
- Activate and inactivate requirement types while other users are logged in. (Web)

New Features - test case management

- Capture and edit screenshots to add to test case or test run steps without leaving Helix ALM. (Web)
- View the Requirement Test Coverage Summary report to quickly get an overview of test coverage and testing status of requirements.

Enhancements - all Helix ALM areas

- Add workflow events to selected items using the workflow bar on item lists. (Web)
- Pressing the browser Back button on a page opened when working with folders or task boards now returns to the folder or task board that the page was opened from. (Web)
- Remove multiple file attachments from items at once. (Desktop)
- The maximum length for default values in multi-line formatted fields was increased to 327,675 characters.

Enhancements - test case management

- Drag and drop files to test case and test run steps to attach them. (Web)
- Paste screenshots to attach them to test case and test run steps. (Web)

Bug Fixes - all Helix ALM areas

 Users in security groups without the View/Extract Attachments command enabled for workflow events could see attachments when viewing differences in a report from the Helix ALM release notes: 2019.3.0 item History tab.

- Users in security groups with the View Own Filters command disabled could see their private filters.
- Users in security groups with all of the Configure Workflow Rules commands disabled could still configure or view the workflow from the Administration menu. (Desktop)
- Viewing a workflow diagram from the item Workflow tab when using macOS could return a warning that "dot" is not optimized and needs to be updated. (Desktop)
- The Description field on the Configure Email Templates dialog box incorrectly enlarged when the dialog box was made larger. (Desktop)
- Some hyperlinks in reports no longer worked. (Web)
- Changes to the displayed item types in the Folders list were only saved if a Test Case
 Suite or Test Run Suite folder was selected before leaving the page. (Web)
- Right-clicking items to drag and drop them between folders no longer provided the option to share items and always moved them instead. (Desktop)
- The macOS window tab bar was no longer available in Helix ALM 2019.2. (Desktop)
- An invalid parameters error was returned when editing and saving a user with both the "User must change password at next login" and "User cannot change password" options selected.

Bug Fixes - requirements management

 Importing requirements from Microsoft Word after opening a multi-line text field in the Specification Document window could cause all imported requirements to have the same description. (Desktop)

Bug Fixes - issue management

Issue priority information was missing in the Workbook. (Desktop)

REST API New Features - all Helix ALM areas

- Get and update field labels.
- Get and update system fields.
- Get, create, update, reorder, and delete folder types.

REST API New Features - requirements management

• Get, create, update, reorder, and delete requirement types.

• Get, create, and delete field overrides for requirement types.

REST API - Bug Fixes - all Helix ALM areas

Custom fields with only spaces in the name could be added.

Helix ALM 2019.3.0 also includes other minor bug fixes.

Additional Notes

- Support for the Helix ALM Eclipse integration was discontinued.
- Support for Microsoft Edge 39.x and earlier was discontinued.
- Support for Jira 7.0 7.3 was discontinued.
- Support for the 32-bit Helix ALM Server has been deprecated. Support will be discontinued in a future release.
- Support for the REST API has been deprecated for 32-bit Linux. Support will be discontinued in a future release.
- Support for the Jira integration has been deprecated for 32-bit Linux. Support will be discontinued in a future release.

Helix ALM 2019.3.0 contains a newer version of the Helix ALM License Server (version 2019.1.2).

Helix ALM License Server 2019.1.2

Enhancements

 Improved performance when passing user modification information between the license server and Helix ALM Server.

Additional Notes

- License server 2019.1.2 must be installed to use Helix ALM 2019.3.0.
- Helix ALM License Server 2019.1.2 only supports Helix ALM 2017.1 and later, TestTrack 2016.1, and Surround SCM 2016.1 and later.

Bug Fixes - all Helix ALM areas

• The Helix ALM Server could crash while loading data for filters shared with security groups.

New Features - all Helix ALM areas

- Configure the most commonly used types of Helix ALM custom fields to capture information about items and use your team's terminology. (Web)
- Configure test variants to use when describing test cases and generating test runs.
 (Web)
- Configure field relationships to manage dependencies between dropdown fields. (Web)
- Import text files to add new items to a project. (Web)
- Import XML files to add new items to a project. (Web)
- Automatically assign items to users in security groups by configuring 'Enter event' rule actions for triggers and escalation rules.

Enhancements - all Helix ALM areas

- Click the Helix ALM logo to quickly go to the home page. (Web)
- The title bar now automatically refreshes when a project is locked or unlocked.
 (Desktop)
- Improved macOS dark mode theme support. (Desktop)
- Improved help with a more modern style, new home page, and simplified URLs.
- Protect against potential cross-site scripting vulnerabilities by configuring automatic sanitizing of HTML when items are added to a project using the following methods: email import, XML and Microsoft Word imports, REST API, and SOAP SDK. HTML in multi-line text fields can be automatically sanitized when viewing items in Helix ALM Web, detail reports, and matrix reports.
- Upgraded OpenSSL to 1.0.2q.

Enhancements - requirements management

- Include the snapshot number associated with requirement document workflow events in Microsoft Word exports.
- Include the requirement version number associated with requirement workflow events in Microsoft Word exports.

Bug Fixes - all Helix ALM areas

 History change reports were not always available on the History tab after adding a new folder to a parent folder or moving a folder to a different parent folder.

- Inline images in default multi-line text field values were not displayed after restarting the Helix ALM Server.
- Helix ALM could crash when copying underlined text when editing a multi-line text field.
- Item mapping rules that mapped the Folders field to a multi-line text field did not add the folders list to the field when new items were added.
- The Linux systemd service file for Helix ALM 2019.1.0 had a typo.
- Helix ALM Web could crash when opening an item list. (Web)
- Clicking a field to edit it in the Configure List Values dialog box did not work when using Safari 12. (Web)
- Helix ALM Web could crash when clicking a hyperlink for a linked item if the user did not have a license for the item type. (Web)
- Exporting and then importing items with file attachments could import the incorrect last modified date for the attachments. (Desktop)
- Logging in to Helix ALM using a user inactivated for all projects could return two different errors. (Desktop)
- Users without access to see the Workflow tab could not open files attached to events from the Overview tab. (Desktop)
- Workflow events could disappear when switching between the Group by Folder and Group by Relationship options in a task board. (Desktop)
- Inserting a stamp that included the date in a multi-line text field could display the next day's date instead of the current date depending on the user's time zone setting.
 (Desktop)
- Helix ALM did not always open when Surround SCM was open and the 'Allow multiple instances of this application' local option was cleared. (Desktop)

Bug Fixes - requirements management

- History change reports were not always available on the History tab after adding requirements to documents.
- Bulleted text was always added as a new requirement when importing a Microsoft Word document even if the 'Treat bulleted text as a separate requirement' option was cleared. (Desktop)

Bug Fixes - test case management

 Choosing Pass All Steps on the Edit or View Test Run window passed all steps in all open test run windows open for editing. (Desktop)

REST API New Features - all Helix ALM areas

- Get, update, and reorder the most commonly used types of custom fields.
- Get and update field relationships.
- Get REST API version information.

REST API New Features - test case management

Get, update, and reorder test variants.

REST API Bug Fixes - All Helix ALM areas

 The REST API could return an internal 500 error when the 64-bit Helix ALM Server was installed and the 32-bit Helix ALM REST API server was installed.

REST API Bug Fixes - requirements management

 An error was returned when using the search parameter to find requirement documents in a specific workflow state.

Helix ALM 2019.2.0 also includes other minor bug fixes.

Additional Notes

- Support was discontinued for Mac OS X 10.11. The desktop Helix ALM Client and Server Admin Utility will not work on Mac OS X 10.11 due to incompatibility with newer Apple APIs.
- To load Oracle databases, Helix ALM 2019.2 requires Oracle 12 client libraries. If you
 use Oracle databases, you must install the libraries from the updated Helix ALM Oracle
 OCI installer, which is available on the Perforce web site.

Helix ALM 2019.2.0 contains a newer version of the Helix ALM License Server (version 2019.1.1).

Helix ALM License Server 2019.1.1

Bug Fixes

- Changes to a user could not be saved if a 'User cannot reuse passwords' server option was selected.
- A valid license could not be assigned to a user if their assigned license was in an '<unknown>' state.

Helix ALM License Server 2019.1.1 only supports Helix ALM 2017.1 and later, TestTrack 2016.1, and Surround SCM 2016.1 and later.

New Features - all Helix ALM areas

- Use the new Administration home page for easy access to configure Helix ALM projects.
 (Web)
- Configure dropdown field values. (Web)
- Configure values for a dropdown field directly from the field. (Web)
- View and manage logged in users. (Web)
- Lock a project to prevent other users from logging in. (Web)
- Add new issues, requirements, requirement documents, and test cases from the Add Item menu, which is always available at the top of the page. (Web)

Enhancements - all Helix ALM areas

- Opening links in new tabs is now faster. (Web)
- Use maximize and restore buttons in the expanded editor in multi-line text fields.
 (Desktop)
- Include attachments and inline images when sending email. (Desktop)
- View the last date and time an API key was used to log in on the Manage API Keys dialog box.

Bug Fixes - all Helix ALM areas

- The table toolbar was displayed on top of a table if it was the first element in a custom field. (Web)
- Addressed a cross-site scripting vulnerability when displaying field value styles in item lists. (Web)
- The Add button on the Folder list window could disappear if there were more than 25 configured folder types. (Desktop)
- The Edit Custom Field dialog box could have wasted space and was not always resized correctly. (Desktop)
- Columns were not always added correctly from the Available columns list to the Selected columns list in the Add Saved Tab dialog box after adding a new tab from the Saved Tabs dialog box. (Web)
- Images were not included when pasting from a Microsoft Word document into a multiline text field. (Desktop)

- Addressed a vulnerability for use of a named pipe, which could allow a denial of service attack. (Desktop)
- List reports based on users always included customers instead.
- The Folders list had two scroll bars in Google Chrome 72. (Web)
- Charts were not displayed when viewing the following reports in Google Chrome 72: list reports using the GroupingListReport or ListReportWithChart stylesheets, release planning reports, release status by user reports, and release status reports. (Desktop)
- Line breaks were not included in test case steps and workflow event multi-line fields included in emails and matrix reports when field codes were used for them in email templates and matrix report configurations.
- Error messages could contain the full server path if an archive file on the server could not be created when attaching files.

Bug Fixes - issue management

 Only the first user in the notification list on the issue Email tab was added to the list of users watching an item after upgrading to Helix ALM 2018.1 or later.

Bug Fixes - test case management

- Problem statements could not be added to a closed test run without reopening it via workflow first. (Web)
- The View Mode field was not hidden when field security was set to hide it. (Desktop)

REST API New Features - all Helix ALM areas

- Get and update information about dropdown fields (menus).
- Get, update, reorder, and delete values in dropdown fields.
- Get a list of field value styles.
- Get a list of logged in users and log out users from the project.

REST API Enhancements - all Helix ALM areas

- Configure the rate limit from 30 to 240 requests. The limit of 15 requests per second is still applied.
- Upgraded Node.js to 8.14.0 to address vulnerabilities (CVE-2018-12121, CVE-2018-12122, CVE-2018-12123, CVE-2018-12116, CVE-2018-0734, CVE-2018-5407).

REST API Bug Fixes - All Helix ALM areas

• The REST API server returned a 'generic user not recognized' error if the user was required to change their password at next login.

Helix ALM 2019.1.0 also includes other minor bug fixes.

Additional Notes

- Support was discontinued for Mac OS X 10.10, CentOS 6.8, Fedora 23 and 24, openSUSE Leap 42.1, Red Hat Enterprise (RHEL) 6.8, Eclipse 4.5, Microsoft TFS 2010, Git 2.4 2.8, Helix Core 2015.x, Apache 2.2, IIS 7.0, Google Chrome 59 66, Mozilla Firefox 52 58, Safari 9, Oracle 10g, Microsoft SQL Server 2008, and PostgreSQL 8.3 9.0.
- Support for Mac OS X 10.11 has been deprecated. Support will be discontinued in a future Helix ALM release.

Helix ALM 2019.1.0 contains a newer version of the Helix ALM License Server (version 2019.1.0).

Helix ALM License Server 2019.1.0

Enhancements

- View the last date and time an API key was used to log in on the Manage API Keys dialog box. (Desktop)
- Increased the maximum number of licenses that can be added using a .lic file to 50.

Additional Notes

Support was discontinued for CentOS 6.8, Fedora 23 and 24, openSUSE Leap 42.1,
 Red Hat Enterprise (RHEL) 6.8, Google Chrome 59 - 66, Mozilla Firefox 52 - 58, Oracle 10g, Microsoft SQL Server 2008, PostgreSQL 8.3 - 9.0, Apache 2.2, and Microsoft IIS 7.0. Helix ALM License Server 2019.1.0 only supports Helix ALM 2017.1 and later,
 TestTrack 2016.1, and Surround SCM 2016.1 and later.

Bug Fixes - all Helix ALM areas

 Helix ALM no longer prevented deleting an event used in items from a workflow configuration. This was introduced in Helix ALM 2018.3.

New Features - all Helix ALM areas

- View and manage a list of all items you are watching and go to the items from the watched items pane. (Web)
- Manage REST API keys in Helix ALM Web. (Web)

New Features - test case management

View an overview of completion status for test runs in test run suites in the Folders list.
 Drill down to see test runs with a specific completion status. (Web)

Enhancements - all Helix ALM areas

- Prevent security groups from working with specific item types. Give users access to a specific security command without affecting item-level permissions in other security groups they are in.
- The Task Board tab in the Folders list now automatically updates every 15 minutes.
 (Web)
- Select items to watch from the Folders list. (Web)
- See a summary of options selected in the Display Options pane at the top of the Folders list and a link to reset them. (Web)
- Click Select All to select all item types or mouse over a selected type and click the filter icon to only select that type in the Display Options pane in the Folders list. (Web)
- Click Clear to clear the selected folder in the Display Options pane in the Folders list.
 (Web)
- Shift+click check boxes to extend the item selection on item pages. (Web)
- Disable alternate background row colors and display column headers on each printed page in matrix reports.
- Matrix reports no longer break text in cells across pages in most cases.
- Added new field codes to use in email templates to include the current user's full name, first name, last name, email address, and phone numbers:
 %CURRENT_USER_FULLNAME%, %CURRENT_USER_FIRSTNAME%,
 - %CURRENT_USER_LASTNAME%, %CURRENT_USER_EMAIL%, %CURRENT_USER_EMAIL%, %CURRENT_USER_EMAIL%, %CURRENT_USER_PHONE2%.
- Added the %FOLDER_PATHS% field code to use in email templates and matrix reports to include a list of the full folder paths items are in.

- Include the project name when exporting items to Microsoft Word.
- Support for Outlook 2019 in the Microsoft Outlook add-in.

Enhancements - issue management

- Added field codes to use in email templates and matrix reports to include the first name,
 email address, and phone number for either the first or last
- Found by user: %FNDBY_FIRST_NAME%, %FNDBY_FIRST_NAME_LAST%,
 %FNDBY_EMAIL%, %FNDBY_EMAIL_LAST%, %FNDBY_PHONE1%,
 %FNDBY_PHONE1_LAST%, %FNDBY_PHONE2%, and %FNDBY_PHONE2_LAST%.
- Added field codes to use in email templates and matrix reports to include the last or all Found by field values, including the description: %DESC_ALL%, %DESC_LAST%, %FNDB_ALL%, %FNDB_LAST%, %RBYC_ALL%, %RBYC_LAST%, %RBDE_ALL%, %RBDE_LAST%, %RBDI_LAST%, %FNDG_ALL%, %FNDG_LAST%, %FNDD_ALL%, %FNDD_LAST%, %FNDV_ALL%, and %FNDV_LAST%.
- Include the Company, Department, and Division fields from Found by records when exporting issues to Microsoft Word.

Enhancements - requirements management

- The Select Requirement Type dialog box does not open if there is only one requirement type available.
- Added a field code to use in email templates and matrix reports to include ttstudio or http hyperlinks that open requirement documents: %RDSPEC_TTSTUDIOURL% and %RDSPEC_HTTPURL%.
- The requirement document snapshot differences report now includes the snapshot label with the snapshot number.
- The Edit and View Requirement pages now show the tag number instead of only the requirement number. (Web)

Enhancements - test case management

 Include the list of step row attachment filenames when exporting test cases and test runs to Microsoft Word.

Bug Fixes - all Helix ALM areas

- Numbered lists in multi-line fields were not maintained when generating reports or exporting to Microsoft Word.
- JSON filter queries returned an error when specifying the Modified By field.
- Bar and column ordering in dashboard charts and live charts did not match the order in the chart configuration.
- Images and tables in multi-line fields could not be selected when using Microsoft Edge
 17. (Web)
- The Folders list did not display decimal values for time tracking fields. (Web)
- The Configure Workflow dialog box could not be resized to fit the screen when working with large workflows. (Desktop)
- Helix ALM did not prompt users to change their password the next time they logged in if the 'User must change password on next login' option was selected in their user record. (Desktop)
- Saving project options could fail and return a 'You must select a valid SoloBug acknowledgement email template' error. (Desktop)
- Opening a shared tab did not apply the filter set for the tab if column filtering was applied on the current tab. (Desktop)

Bug Fixes - requirements management

• Helix ALM on Mac could crash when opening requirement documents. (Desktop)

REST API New Features - all Helix ALM areas

 Get, update, and create links for issues, test cases, test runs, requirements, and requirement documents.

Helix ALM 2018.4.0 also includes other minor bug fixes.

Additional Notes

- Support for Safari 9 has been deprecated.

New Features - all Helix ALM areas

- Add users to multiple security groups for more control and flexibility when managing security for large teams and multiple roles. If any group a user is in gives permission to perform an action through command security or work with fields through field security, then the user has permission.
- Lock folders to prevent adding and removing items and subfolders, and editing folder details.
- Set permissions on a folder to specify who can work with it. Share access to folders
 without the risk of others making undesired changes. Provide different permissions to
 individual users and security groups: allow all permissions, permission only to add,
 remove and rank items in a folder, permission to only add items to a folder, or no
 permissions.

New Features - test case management

- Group related tests in test suites. Test case and test run suites are new types of folders
 that help simplify test planning and execution. Test case suites can only contain test
 cases and allow ordering to ensure test run suites are generated in the same order. Test
 run suites can only contain test runs.
- Generate test run suites from test case suites. Maintain the same structure and order set in the source test case suite. (Web)

Enhancements - all Helix ALM areas

- Add and edit folder names and types directly in the folders tree. (Web)
- Pin a folder to only show it and its subfolders in the folders tree. (Web)
- See expanded and highlighted matches in the folders tree when searching. (Web)
- When viewing folder contents, easily navigate to the list of items, task board, and details. (Web)
- See the number of selected items in a folder. (Web)
- Use the new Display Options pane to control what is displayed and how when viewing the list of items in a folder. (Web)
- Use the Workflow tab to enter events on selected items when viewing the list of items in a folder. (Web)
- Search for items on the current page when viewing the list of items in a folder. (Web)

- Add a new folder without leaving the dialog box when adding and moving items to folders. (Web)
- Show a specific folder type or pin a folder to only show it and its subfolders to more easily find the correct destination when adding or moving items to folders. (Web)
- Add ordered and non-ordered lists in the same multi-line text field.
- Support for Jira API tokens when configuring integration with Jira Cloud.
- Use the TrustSVNCert client registry option to enable trusting of Subversion self-signed SSL certificates. (Desktop)
- The Manage All Folders Regardless of Folder Permissions security command was added and is disabled by default for new projects. It is only enabled by default in upgraded projects if the See All Public Folders command is enabled.

Bug Fixes - all Helix ALM areas

- Ordered and non-ordered lists in multi-line text fields had the same number or bullet styles at each level.
- Numbered lists copied from a multi-line text field were converted to bulleted lists on the clipboard.
- Resizing a table column in a multi-line text field could decrease the table width.
- Multi-line text fields could not be edited immediately after restoring the minimized Helix ALM window. (Desktop)
- Workflow event multi-line text fields could lose line feeds in the text when exported to Microsoft Word.
- The following folder field codes in templates did not work when exporting to Microsoft Word: <<[FD_TC_STEP_ROW_ATTACHMENTS]>>,
 <<[FD_TC_STEP_ROW_HAS_ATTACHMENTS]>>,
 <<[FD_TR_STEP_ROW_ATTACHMENTS]>>, and
 <<[FD_TR_STEP_ROW_HAS_ATTACHMENTS]>>.
- The workflow event Hours field did not allow entering values starting with a decimal point. (Web)
- Including a field code for a field with field value formatting styles applied in the email
 Subject field of an email template displayed HTML tags in the sent email.
- Validating a query in the Edit JSON Query dialog box returned an error if the query contained users and the 'Add additional information to names in user selection lists' user field project option was selected. (Desktop).

- The filter name was cleared when closing the Edit JSON Query dialog box when adding a new filter. (Desktop)
- The Run Now option selection on the Escalations tab in the Configure Automation Rules dialog box was not saved when selecting a different item type. (Desktop)
- An 'Invalid parameters were specified' error was returned when adding a new item from the Folders list window when the Public or Private root folder was selected. (Desktop)
- The Notes field in the Add and Edit User dialog boxes for local users was not enabled if the user making the change did not have permission to edit license server data.
 (Desktop)
- Clicking a ttstudio hyperlink in a matrix report opened a new empty browser tab before opening in Helix ALM. (Desktop)
- Previewing a folder report while viewing a task board displayed an empty report.
 (Desktop)
- An unknown error could occur when logging in using Internet Explorer 11 when Helix ALM was hosted in IIS. (Web)
- Helix ALM could crash when attaching a file from Microsoft Visual SourceSafe.
 (Desktop)
- SOAP SDK users could not be logged out from the Show Logged In Users dialog box.
 (Desktop)
- Addressed a jQuery vulnerability (https://bugs.jquery.com/ticket/11290). (Web)

REST API New Features - requirements management

- Get and update the order and hierarchy of requirements in requirement documents.
- Get and add requirement document snapshots and snapshot details.
- Get and add workflow events on requirement document snapshots.
- Get historical versions of requirements.
- Get and add workflow events on historical versions of requirements.

REST API Enhancements - all Helix ALM areas

- Added bindAddresses to the configuration file to allow configuration of network and port addresses being listened on.
- Field names in search parameters and in the PUT and POST fields array for updating and creating items are now case insensitive. Update any existing scripts or applications that may be affected.

- Changed the Found by Groups field to a menultemArray type from a menultem type to support users in multiple security groups. Update any existing scripts or applications that use menultemArray.
- Added CORS support which specifies how the Access-Control-Allow-Origin header is returned on responses. Includes support for the OPTIONS method.
- Upgraded Node.js to 8.12 to address vulnerabilities (CVE-2018-7167, CVE-2018-12115, CVE-2018-0732).

REST API Bug Fixes - all Helix ALM areas

• The search query equals operator performed a contains comparison on string fields.

Helix ALM 2018.3.0 also includes other minor bug fixes.

Additional Notes

- Support was discontinued for Subversion 1.8.
- In the Helix ALM SOAP-based SDK, the usergroupname field in the CUser type was replaced with the usergroupnamelist field to support users belonging to multiple security groups. If you have scripts or applications that use usergroupname, note the following changes. If usergroupname is used in get or edit operations and the user is in multiple groups, only one group name is returned. If used in save operations and the user is in multiple groups, the user is removed from all groups except the specified group. If both usergroupname and usergroupnamelist are used, usergroupnamelist is used instead of usergroupname.

Bug Fixes - all Helix ALM areas

• The Project Options dialog box did not always display the appropriate categories when logged in without all license types. (Desktop)

- Calculated custom fields were not always updated before applying automation rules when adding workflow events to items.
- The Change Report hyperlink was not available on the folder History tab after saving a folder.
- The Repository URL field in the Source Control Providers dialog box did not accept spaces when configuring the Subversion integration. (Desktop)

New Features - all Helix ALM areas

- Integration with Slack. View details about a Helix ALM issue, requirement, requirement
 document, test case, or test run when pasting a ttstudio://, https://, or http:// link for it in a
 Slack post. Replies to a post are automatically added as informational workflow events
 in the Helix ALM item. Requires installing the Helix ALM Slack application from the App
 Directory in Slack.
- Duplicate the structure of a folder to use it again without manually creating the folder and all subfolders. (Web)
- Generate and manage API keys to use for more secure user authentication to the REST API. Eliminates the need to store usernames and passwords when using the REST API. (Desktop)

Enhancements - all Helix ALM areas

- Improved the SoloSubmit interface to make it responsive and more modern. (Web)
- Export Helix ALM items to Microsoft Word .docm files, which support macros.
- Support for Microsoft Team Foundation Server (TFS) 2018 Update 2 (Desktop)

Bug Fixes - all Helix ALM areas

- Importing email sent from the Windows 10 Mail application into Helix ALM did not always correctly convert Unicode characters.
- Installing the Helix ALM Server as a service did not quote the Windows service path.
 This fix addresses a security vulnerability (CWE-428).
- A warning was incorrectly added to the server log when saving live charts, advanced find results (tab filters), and list window tabs even if no items were actually being saved.
- Images included in emails automatically sent when an item changed could be low quality.
- Pressing Ctrl+Z in a multi-line text field after navigating to a different item could replace the content of the field from the previous item instead. (Desktop)
- Detail and list report content did not wrap correctly if column values in the item list included non-breaking spaces.
- The live chart selection field only included charts for the item type selected in the Report Contains field in the Reports list window. (Desktop)

- Searching on text fields did not find all matching items if the text searched on included non-breaking spaces.
- Files and changelists attached from the Helix Visual Client (P4V) using a Windows code page did not display Unicode characters correctly in Helix ALM.

REST API New Features - all Helix ALM areas

- View interactive help for the REST API. Help is installed locally with the REST API server and can be accessed from https://<YourAPIServer>:8443.
- Log in using a REST API key instead of a username and password for more secure authentication.
- Attach files to items.
- Attach files to workflow events.
- Work with inline images in multi-line text fields.

REST API New Features - issue management

Attach files to issue Found by records.

REST API New Features - requirements management

- Get, add, and update requirements.
- Get, add, and update requirement document details.
- Search for requirements and documents.

REST API New Features - test case management

- Attach files to test case steps.
- Attach files to actual results in test run steps.

REST API Enhancements - all Helix ALM areas

- Attachment objects now include a content link to download the attachment.
- Attachment objects now include an encodedFileID, which can be used to download the attachment from the /{projectID}/files endpoint.
- Removed the archiveFilename property from the attachment JSON object. Update any
 existing scripts or applications that use archiveFilename.

Upgraded Node.js to 6.14.0 to address vulnerabilities (CVE-2018-7160, CVE-2018-7158, CVE-2018-7159).

REST API Bug Fixes - All Helix ALM areas

• The REST API server was not installed correctly when installing on a secondary drive.

REST API Bug Fixes - test case management

 Generating test runs failed when electronic signatures and enhanced compliance options were enabled for the project.

Helix ALM 2018.2.0 also includes other minor bug fixes.

Additional Notes

We strongly recommend configuring HTTPS for Helix ALM Web installations. Starting
with this release, support for multiple browser tabs will not be available unless HTTPS is
configured on the web server.

Helix ALM 2018.2.0 contains a newer version of the Helix ALM License Server (version 2018.2.0).

Helix ALM License Server 2018.2.0

Enhancements

 Generate and manage API keys to use for more secure user authentication to the Helix ALM REST API. Eliminates the need to store usernames and passwords when using the REST API. (Desktop)

Bug Fixes

 Installing the license server as a service did not quote the Windows service path. This fix addresses a security vulnerability (CWE-428).

Helix ALM License Server 2018.2.0 also includes other minor bug fixes.

Helix ALM License Server 2018.2.0 only supports Helix ALM 2017.1 and later, TestTrack 2015.1 - 2016.1, and Surround SCM 2015.1 and later.

New Features - all Helix ALM areas

- Open Helix ALM pages in multiple browser tabs and windows without logging in again or using additional licenses. Most navigation links are now true browser hyperlinks, which makes it easier to copy and paste them. (Web)
- Include inline images and attachments when sending email. (Web)
- Click Watch when working with issues, requirement documents, requirements, test
 cases, and test runs to receive notifications when they change. Manage the list of
 watchers for an item depending on security permissions. (Web)
- Add new Helix ALM items from Jira when using the Helix ALM for Jira add-on.

Enhancements - all Helix ALM areas

- Add, edit, and reorder custom fields while other users are logged in. (Desktop)
- Reorganized item pages for more convenient access to menus and actions. Click an event on the workflow button bar to quickly add workflow events to items. (Web)
- Improved window titles for easier identification when using multiple browser windows and tabs or reviewing browser history. (Web)
- Emails sent via system notification rules can include images from multi-line text fields.
- Improved support for exporting high resolution images to Microsoft Word. Set server options in the registry utility to control the behavior of exported images.
- The Show Logged in Users dialog box now has a Refresh button. (Desktop)
- The history table in detail reports now includes a Who column.
- Added same origin header checks to improve prevention of cross-site scripting vulnerabilities in Helix ALM Web. Configure support for cross-origin requests in the registry utility.
- Support for PostgreSQL 10 databases.
- Upgraded OpenSSL to 1.0.2n.
- Support for Jira 7.7 and Jira 7.8 for the Helix ALM for Jira add-on.
- The Manage Users Watching Items security command was added and is enabled by default for new projects. It is only disabled by default in upgraded projects if the Remove Notify Users command is disabled.

Enhancements - issue management

 Click Watch in issues to receive email notifications when they change. Manage the list of watchers for an issue depending on security permissions. (Desktop)

Enhancements - test case management

- Press Tab at the end of a row to add a new row below it on the Steps tab on the Add and Edit Test Case pages. (Web)
- The Steps tab on the Add and Edit Test Case pages now has an Add Step button if the test case does not have any steps to help new users know what to do next. (Web)
- Automatically open a test case after it is generated if a single requirement was selected.

REST API New Features - issue management

- Get and add workflow events for an issue.
- Get details about issue attachments.
- Get found by records for an issue.

REST API New Features - test case management

- Get, add, and update test cases.
- Generate test runs.
- Get and update test runs.
- Get and add workflow events for a test case or test run.
- Get and update test variants for a test case or test run.
- Get and update steps for a test case or test run.
- Get details about test case or test run attachments.
- Get details about scripts attached to a test case or test run.
- Search for test cases or test runs.

REST API Enhancements - all Helix ALM areas

 Upgraded Node.js to 6.12.2 to address vulnerabilities (CVE-2017-15896, CVE-2017-3738).

REST API Enhancements - issue management

• Changed the fieldID property for issue fields array objects to id for consistency with all Helix ALM areas. Update any existing scripts or applications that use this property.

- Changed the names of identifiers used in expandable sections of issues for clarity and consistency. For example, issues/events/events is now issues/events/eventData. This convention is now used in all Helix ALM areas.
- Errors when doing a PUT or POST on issues now return a standard errorElementPath instead of itemIndex to provide a detailed path to the element that caused the error.
 Update any existing scripts or applications that use itemIndex.
- Removed the self property from objects in attachmentsData, eventsData, and foundByRecordsData arrays. For example, events no longer have self tags in issues/events/eventsData. Update any existing scripts or applications that use this property.

Bug Fixes - all Helix ALM areas

- Security groups in a new project created from a template had different command security than the groups in the source project.
- Creating a project from a template in an RDBMS database could hang if attachments were stored in the database and the source and destination databases were in the same physical database.
- Arrow buttons were not displayed in the Folders list window when using Helix ALM on Linux with a non-GNOME desktop, such as KDE. (Desktop)
- Hyperlinks in the item History tab did not work. (Web)
- The item History tab did not display all events as hyperlinks if changes were made by automation rules.
- Importing saved tabs did not import the correct settings for interactive filters.
- Helix ALM on macOS could crash when clicking the Close button with a shortcut menu open on the folder tree in the Folders list window. (Desktop)
- Helix ALM on macOS could crash when opening a requirement. (Desktop)
- Field codes were incorrectly displayed in the warning about logging changes in the audit trail in the Compliance project options. (Desktop)
- Merging table cells in multi-line fields could add additional cells on the right in the same row.
- Text copied from the Overview or Workflow tab and pasted in a multi-line field could contain 'p, li { white-space: pre-wrap;}'. (Desktop)
- Pasting content into a multi-line field could incorrectly convert spaces to non-breaking spaces. (Desktop)

- Sending email with multiple items selected in an item list only included the first item in the Send Email dialog box. (Web)
- The &, <, and > characters were escaped in the body text in tracked email.
- Link definition names displayed in list window columns were not updated after the definition name was changed.
- Running a report that included user fields could fail with a SAXParseException error if the User Selection Lists project option was set to add the email address and the user email address field contained HTML-reserved characters.
- The wrong user could be selected when using type ahead to search in the Assign To field in workflow event dialog boxes if the mouse cursor was in the list. (Desktop)
- Multi-line fields containing tables with text under them could display the text on the right side of the table when exported to Microsoft Word.
- Multi-line fields containing tables could have extra indentation in cells when exported to
 Microsoft Word using a template with indentation in the requirement document hierarchy.
- Large images in multi-line fields could be larger than the image as resized in Helix ALM when exported to Microsoft Word.
- Opening a list window in Microsoft Excel could return an 'unknown exception occurred' error if the list window contained a date with a <not set> value. (Desktop)
- Clicking the Open in Jira link could fail and return an error that the URL is not valid if the integration requires user credentials and the user did not enter them yet.

Bug Fixes - issue management

- The import mail password was not encrypted in the database.
- Issues created from Defect Scribe could have a placeholder for images instead of actual images. (Desktop)

Bug Fixes - test case management

- Test variant values were incorrectly truncated in the Change Test Variant Values dialog box. (Desktop)
- The %TRSTS% field code was not always replaced with the test run status name in matrix reports.

Helix ALM 2018.1.0 also includes other minor bug fixes.

Additional Notes

- Support was discontinued for Mac OS X 10.9, CentOS 6.6 and 6.7, Debian 7, Fedora 21 and 22, openSUSE 13.1 and 13.2, Red Hat Enterprise (RHEL) 6.6 and 6.7, Ubuntu 12.04 13.10, Eclipse 3.8 4.4, Microsoft Excel 2007 and 2008, QA Wizard 2014 and 2015, Microsoft Visual Studio 2005, Git 1.8 2.3, Perforce Helix Core 2014, Microsoft SourceSafe 6, Subversion 1.6 and 1.7, Microsoft Internet Explorer 10, Google Chrome 55 58, Mozilla Firefox 45 51, Apple Safari 8, and Microsoft IIS 6.0.
- SoloBug has been discontinued.
- Defect Scribe recording against Firefox and Chrome browsers has been discontinued due to architectural changes in those browsers.
- Support for PostgreSQL 8.3 9.0 has been deprecated. Support will be discontinued in a future Helix ALM release.

Helix ALM License Server 2018.1.0

Enhancements

- The license server logo was updated.
- Support for PostgreSQL 10 databases.
- Upgraded to OpenSSL 1.0.2n.

Bug Fixes

- When setting the XML import file location using the web server admin utility in Internet Explorer, the entire path was displayed, which was inconsistent with other browsers.
- The license server did not send an accurate list of users to older versions of TestTrack, which prevented users from logging in to the TestTrack Server Admin Utility. If a user logged in using the Local Helix ALM admin password, they could not add new server admin users.

Helix ALM License Server 2018.1.0 also includes other minor bug fixes.

Additional Notes

Support was discontinued for Microsoft Windows Vista, CentOS 6.6 and 6.7, Debian 7, Fedora 21 and 22, openSUSE 13.1 and 13.2, Red Hat Enterprise (RHEL) 6.6 and 6.7, Ubuntu 12.04 - 13.10, Apple Open Directory, Microsoft Active Directory 2003, OpenLDAP 2.3, Microsoft Internet Explorer 10, Google Chrome 55 - 58, Mozilla Firefox 45 - 51, Apple Safari 8, and Microsoft IIS 6.0.

• Support for PostgreSQL 8.3 - 9.0 has been deprecated. Support will be discontinued in a future license server release.

Helix ALM License Server 2018.1.0 only supports Helix ALM 2017.1 and later, TestTrack 2015.1 - 2016.1, and Surround SCM 2015.1 and later.

New Features - test case management

Insert test variant field codes in test case fields and steps using the Insert Variant Field
 Code menu.

Enhancements - all Helix ALM areas

Updated JIRA to Jira to comply with branding changes.

Enhancements - REST API (technical preview)

- Use POST with the issues resource to add issues.
- Use PUT with the issues resource to update issues.
- Configure the session token timeout in the Helix ALM Registry Utility.
- Use a search query to search user fields.
- Upgraded to Node.js 6.12.0 to address a vulnerability (Node.js CVE-2017-14919).

Bug Fixes - all Helix ALM areas

- Read-only multi-line text fields could be fuzzy on 4K monitors in multi-monitor configurations. (Desktop)
- The dashboard More menu included all available dashboards, not just ones that did not fit on the screen.
- Default saved tabs set for security groups were not always displayed correctly in the Edit and View Security Group windows.
- New server installations using the Perl installer did not create the TTServDB directory if the sample projects were not being installed.
- The Filters list window was empty and returned an error when the list was sorted by security group. Users had to log in again if the Helix ALM Server was running on Linux. (Desktop)
- ttstudio hyperlinks in matrix reports did not work correctly.
- After deleting a private folder, some other private folders were no longer displayed for the user until the server was restarted. This bug was introduced in Helix ALM 2017.2.

Bug Fixes - test case management

• Field codes were not replaced in Test Run Result Status trend report headers.

• Importing test cases from an XML file returned a warning that test variants did not exist even if they did. (Desktop)

Bug Fixes - REST API (technical preview)

- Responses did not include paging headers or paging links in the body.
- The response JSON for GET /{projectID}/issues was fields: {fields: []} instead of fields:[].
- The GET /{projectID}/issues request did not return any issues if the user only had one product license type assigned.

Helix ALM 2017.3.0 also includes other minor bug fixes.

Technical Preview - Helix ALM REST API

The REST API makes it easier to extend Helix ALM functionality for use with other applications and offers better performance and scalability than the Helix ALM SOAP SDK. Developers can currently use the REST API to work with issues. See the REST API help for more information. Additional functionality will be available in upcoming Helix ALM releases. If you have feedback about the API, contact Perforce Support.

Helix ALM 2017.3.0 contains a newer version of the Helix ALM License Server (version 2017.3.0).

Helix ALM License Server 2017.3.0

Bug Fixes

 Helix ALM 2016.0.0 and 2016.0.1 could not connect to the most recent version of the license server if there were any users in the license server database.

Helix ALM License Server 2017.3.0 also includes other minor bug fixes.

Helix ALM License Server 2017.3.0 only supports Helix ALM 2017.1 and later, TestTrack 2014.1 - 2016.1, and Surround SCM 2014.1 and later.

New Features - all Helix ALM areas

- Manage users and customers in Helix ALM Web from the new Administration area. Add
 users and customers to the project. View, edit, and delete existing users and customers.
 Retrieve global users and customers from the license server. Promote local users and
 customers to global. Run reports based on users and customers. (Web)
- Share saved list window tabs and requirement document views with specific users, customers, and security groups. Set the default tabs or view to display the first time new users in a security group log in to help with onboarding new team members. Export tabs and views and import them for use in other projects.
- Retrieve information about issues using the new REST API, which is now available for technical preview.

Enhancements - all Helix ALM areas

- List window views are now named saved tabs.
- Click the X on the current tab to close it.
- Access the Documents, Requirements, Test Cases, and Test Runs lists in one click from the left navigation area. (Web)
- Access the new Administration area from the left navigation area. (Web)
- The Log out link is now grouped with other actions available when clicking a user's name in the top navigation area. (Web)
- Set the default font size for multi-line text fields in local options. (Desktop)
- The 'Encrypt communication between clients and the server' security option in the server admin utility is now selected by default the first time the Helix ALM Server is installed.
- The support file generated from the server admin utility now includes the license server IP address and network hops, which can help diagnose license server performance issues.
- Intermediate Jira certificates can now be saved in the Helix ALM Server external integration service to prevent integration from failing when the Jira certificate does not include all certificates in the chain.
- Added Jira 7.4 and 7.5 support.
- The Can See Workbook security command was added and is enabled by default for new projects. Disable the command to hide the Workbook from users in security groups who do not need access to it.

- The Share Saved Tabs and Views security command was added and is enabled by default for new projects. It is only enabled by default in upgraded projects if the Mark Own Filters As Shared command is enabled.
- The Manage Other Users' Saved Tabs and Views security command was added and is disabled by default for new projects. It is only enabled by default in upgraded projects if the Delete Shared Filters command is enabled.
- The Set Default Tabs and Views for Security Groups security command was added and
 is disabled by default for new projects. It is only enabled by default in upgraded projects
 if the Edit Security Groups command is enabled.

Enhancements - Helix IM

Add a new user or customer to the project when selecting who reported an issue. (Web)

Enhancements - Helix RM

• Apply views from the new Views menu on the requirement document toolbar.

Enhancements - Helix TCM

- Click the Generate Test Runs button on the Test Cases list to quickly generate test runs for selected test cases. (Web)
- Generate test runs for multiple test cases in one call using the new generateBatchTestRuns operation in the SOAP SDK.

Bug Fixes - all Helix ALM areas

- The content type for image files was incorrectly stated, which could be a security concern. (Web)
- Live charts, distribution reports, and trend reports generated from the server could crash in the chartdir50.dll.
- Opening a list window in Microsoft Excel did not always display dates correctly in some locales. (Desktop)
- Delivery of email sent from Helix ALM could fail with an error that the message contains bare line feed characters.
- Tracked email could include escaped characters when the email client only sent the HTML portion of the email.
- Selecting User in the Group by field on a task board incorrectly reset the value to Folder.

- Multiple history events that occurred on the same date could be grouped as one event when deleting historical information using a date range.
- Projects could fail to load while reading from the USERSET table.

Bug Fixes - Helix IM

 The Found by field was not always populated correctly when creating an issue using the Microsoft Outlook add-in.

Helix ALM 2017.2.0 also includes other minor bug fixes.

Technical Preview - Helix ALM REST API

A technical preview of the new Helix ALM REST API is now available. The REST API makes it easier to extend Helix ALM functionality for use with other applications and offers better performance and scalability than the Helix ALM SOAP SDK. Developers can currently use the REST API to retrieve information about issues. See the REST API help for more information. Additional functionality will be available in upcoming Helix ALM releases. If you have feedback about the REST API, contact Perforce Support.

Additional Notes

- Support for Microsoft Windows Server 2003, Server 2008 R1, Vista, and Google Chrome 51-54 has been discontinued.
- Support for 32-bit Helix ALM applications has been deprecated. Support will be discontinued in a future Helix ALM release.
- Support for Microsoft Internet Explorer 10 has been deprecated. Support will be discontinued in a future Helix ALM release.
- SoloBug has been deprecated. Support will be discontinued in a future Helix ALM release.
- Sample projects were renamed. The Sample Project is named Traditional Template and the Scrum Sample Project is named Scrum Template.

Helix ALM 2017.2.0 contains a newer version of the Helix ALM License Server (version 2017.2.0).

Helix ALM License Server 2017.2.0

New Features

Change the LDAP or Active Directory server association for multiple users at the same time from the Global Users window.

Enhancements

- Improved password encryption in transaction handling.
- Reduced database connection updates from the Helix ALM Server.
- Passwords are now always encrypted when exporting user information to XML files for improved security.

Bug Fixes

- Security settings for external authentication were not saved in the database.
- A password in a user record updated from Surround SCM multiple times during a short period was saved incorrectly on the license server.
- Unneeded license server source control files were included in the Helix ALM and Surround SCM installers.
- Database connection fields were not displayed on the Change Database and Convert Database pages in the web admin utility.
- The Java API reported time values one hour later than the actual value.

Helix ALM License Server 2017.2.0 also includes other minor bug fixes.

Additional Notes

- Support for Microsoft Windows Server 2003 and Google Chrome 51-54 has been discontinued.
- Support for 32-bit license server applications has been deprecated. Support will be discontinued in a future license server release.
- Microsoft Vista, Server 2008R, and Internet Explorer 10 has been deprecated. Support will be discontinued in a future license server release.

Helix ALM License Server 2017.2.0 only supports Helix ALM 2017.1 and later, TestTrack 2014.1 - 2016.1, and Surround SCM 2014.1 and later.

Enhancements - all Helix ALM areas

Helix ALM installers now use and install Java 1.8.

Bug Fixes - all Helix ALM areas

- Helix ALM could crash when idle and a dashboard had focus. (Desktop)
- Helix ALM could crash when clicking a count dashboard widget. (Desktop)
- Pasting text that included non-breaking spaces in a field could display 'A0' instead of the space.
- Helix ALM could crash when selecting an image and aligning it in a field. (Web)
- A JavaScript error could be returned when scrolling in a requirement document. (Web)
- The wrong Surround SCM repository could be displayed in the Attach Files dialog box if multiple branches had the same name. (Desktop)
- Source control filenames were not escaped in XML exports.
- XML import error messages could include server path information.
- A permissions error could be returned when logging in, adding a workflow event, or clicking Find if the filter previously applied was hidden. (Desktop)
- Field names listed in the Fields in project area in the Text Import dialog box were cut off.
 (Desktop)
- Deleting item historical info by date could result in combining the remaining entries into one entry on the item History tab. (Desktop)
- The 'Encrypt communication between clients and the server' option was not applied to installer file transfers for automatic client upgrades. (Desktop)
- Some credential information not required for functionality was unnecessarily sent to the client. (Desktop)
- CPU usage could spike when a file transfer was canceled.
- Some user passwords were stored insecurely in server memory.
- SoloSubmit child fields could have an invalid value selected after an error was returned.
 (Web)

Additional Notes

 A communication change was added, which requires upgrading the client, server, and CGI applications. Helix 2017.1.0 clients cannot connect to Helix ALM 2017.1.1 Servers and vice versa without upgrading.

• The Native Database Utility was updated to rename TestTrack to Helix ALM. Make sure you are using the latest version of the utility, which is available for download at http://www.seapine.com/testtrack/add-ons#dbbackup.

Helix ALM 2017.1.1 also includes other minor bug fixes.

Helix ALM 2017.1.1 contains a newer version of the Helix ALM License Server (version 2017.1.1).

Helix ALM License Server 2017.1.1

Bug Fixes

- The Resync LDAP Users button on the Global Users window was enabled even if no LDAP or Active Directory servers were configured.
- A 'Finished transfer of license usage log' message was not displayed in the database conversion status notes.
- Server log records did not have correct Windows end-of-line characters, which caused the log file to display incorrectly in some editors.
- Clicking the Delete All button in the View Server Log dialog box displayed an error message if there were no log messages.
- The 'Allow user to log in using single sign-on' option was not displayed when clicking arrows to navigate in the Edit or View User dialog box if the first user displayed was a non-LDAP user.
- The web admin utility created an empty server log file if no log entries existed.
- Helix ALM suite columns were missing on the Global Users page in the web admin utility.
- The 'User cannot reuse password' option was not enforced after restarting the server.
- Some user passwords were stored insecurely in server memory.
- Some credential information not required for functionality was unnecessarily sent to the client.

Helix ALM License Server 2017.1.1 also includes other minor bug fixes.

Helix ALM License Server 2017.1.1 only supports Helix ALM 2017.1 and later, TestTrack 2014.1 - 2016.1, and Surround SCM 2014.1 and later.

TestTrack was renamed to Helix ALM.

New Features - all Helix ALM areas

- View information about Helix ALM items attached to issues in Jira using the new add-on.
 Requires installing the add-on from the Atlassian Marketplace.
- Attach Helix Versioning Engine changelists to items. (Desktop)
- Attach changelists to items using Helix Versioning Engine triggers.
- View changelists and files attached to items in Helix Swarm.
- Copy issue, requirement, requirement document, test case, and test run numbers to the clipboard.

Enhancements - all Helix ALM areas

- Improved Helix Versioning Engine support. Configure Helix Versioning Engine as a source control provider. (Desktop)
- Improved source control provider configuration. Configure local source control integration options per project. Multiple users can now configure integrations at the same time. (Desktop)
- Select the branch to use when attaching source control files to items. (Desktop)
- Detail reports now include versions of source control files in changelists.
- Improved load time for projects stored in PostgreSQL databases on 64-bit operating systems.
- Improved touch support. (Web)
- Added support for Microsoft Team Foundation Server (TFS) 2016 Update 3 and 2017.
 (Desktop)
- Added support for Visual Studio 2017. (Desktop)
- Upgraded OpenSSL to 1.0.2j.

Bug Fixes - all Helix ALM areas

- Multi-line text fields could be blurry on high DPI monitors. (Desktop)
- Formatting could be lost when copying and pasting in multi-line text fields.
- Images copied from multi-line text fields could not be pasted into other applications.
 (Desktop)

- HTML text copied from other applications could not always be pasted as text and formatting could be removed when pressing the Backspace key.
- Empty rows at the end of tables in multi-line text fields were not always displayed correctly in detail reports.
- An 'images could not be uploaded' error could be returned when saving changes to items with base64-encoded images in multi-line text fields. (Desktop)
- Pressing Tab to navigate between fields in a window stopped working when reaching a multi-line text field. (Desktop)
- An error about not uploading images when saving could be returned when deleting an image in a multi-line text field and undoing the deletion after applying the changes.
 (Desktop)
- Some user interface elements did not scale correctly on high DPI monitors. (Desktop)
- Viewing .rtf files always opened the built-in viewer instead of the associated application.
 (Desktop)
- The Find Results list was not updated after clicking Find to search for items to add to a link in the Select Items to Add dialog box. (Desktop)
- Pressing Ctrl+C to copy a problem word in the Check Spelling dialog box did not work.
 (Desktop)
- A 'record not locked' error could be returned when closing the Rank Items dialog box if the folder was being edited in another dialog box. (Desktop)
- Panes in the Folders list window were automatically resized and the splitter position was not saved after opening and closing an Edit window in MDI mode. (Desktop)
- Changes to the folder Details field when using macOS were not always saved if the field had focus when closing the window. (Desktop)
- Duplicated task boards that display multiple item types could not be saved when logged in with only one license type. (Desktop)
- Creating live charts based on the Estimated Run Time column did not work. (Desktop)
- The order of segments in stacked Column charts was different between live charts and dashboard widgets. (Desktop)
- Tooltips displayed when hovering over pie chart sections in live charts included '25%' after the value. (Desktop)
- Burn up chart dashboard widgets were not displayed if workflow events in Item history had an invalid state ID.

- Saving dashboard changes could fail if widgets were no longer valid. The returned error did not list invalid widgets. (Desktop)
- Stacked Column dashboard widgets were not always displayed if one column was empty.
- Saving dashboard widget changes could fail and return a database error. (Desktop)
- The Username field in the Edit User dialog box was not disabled when the 'Enable renaming of usernames' option was cleared in the license server admin utility. (Desktop)
- Clicking a window on macOS when using MDI user interface mode could activate the window behind it. (Desktop)
- Editing list window tabs could incorrectly add the Apply View option to the View menu.
 (Desktop).
- The assert message returned when exporting a custom field with the same name as a deleted custom field did not include the record ID of the deleted field.
- Description fields in linked items in Microsoft Word templates were not exported to Word documents.
- Saving a new calculated custom field could fail if the previously added field was deleted.
 (Desktop)
- Items duplicated after changing the initial workflow state for an item type are in the old initial state when the option to duplicate the workflow is not selected.
- Changes to items were not always saved if the only changes were to custom fields and the field definition no longer existed in the database.
- Creating a project from a template in a SQL Server database could stop responding and display 'Not Responding' in the status dialog box.
- Warnings about bounced tracked system notification emails were not written to the server log. A warning is now logged for every 1000 tracked emails related to an item.
- The Helix ALM Server could crash in some scenarios when XML exports took longer than 10 minutes.
- The Helix ALM Server could crash when generating a support file in the server admin utility.
- Attached files without extensions could not be extracted. (Desktop)
- Helix ALM could crash when opening a file attachment without a file type. (Desktop)
- Installing the Helix ALM Server sometimes ignored the entered server port and reset the port to the default value.

- Decimal custom fields set using the SDK were limited to six digits of precision. The limit is now 10 digits.
- Images added to multi-line text fields using the SDK could be rendered incorrectly or not displayed when editing if the HTML did not include image size tags.
- The server installation location could be determined when downloading over an unencrypted connection. (Desktop)
- Network packet analysis of the encrypted login sequence could potentially reveal information about the nature of failed login attempts.
- An internally-reported security issue in the web server admin utility was resolved. (Web)
- Help did not always open in the default browser. (Desktop)
- A warning was not displayed when clicking the Test button in the Configure Jira
 Integration dialog box and an unsupported Jira version was specified. (Desktop)
- Helix ALM on Linux could crash when configuring the Subversion integration if the client was opened from the Subversion working directory. (Desktop)
- An 'OPENSSL_Applink' error could be returned when integrating with Subversion.
 (Desktop)

Bug Fixes - issue management

- Importing issues from email with large attachments could time out.
- Importing email with HTML-encoded entity characters did not replace the characters with the UTF-8 value.
- History differences reports did not include changes to the Date Found, Found By, or Version Found fields.

Bug Fixes - requirements management

- Exporting documents to Microsoft Word using classic export could fail if requirement fields included control characters. (Desktop)
- Requirements in a locked document could be duplicated and added to the document.

Bug Fixes - test case management

- Test variant field codes were not replaced with the variant value in regenerated test runs.
- Test run problem statements were only exported to Microsoft Word if they were in the first row of the step.

- Helix ALM could lock up if the server connection was dropped when generating test runs. (Desktop)
- Test runs were not added to the selected folder when generated if the folder was selected last time test runs were generated. (Web)

Additional Notes

- The first major release of the year now uses .1 instead of .0 (e.g., 2017.1.0).
- Support for Mac OS X 10.8, Fedora 19-20, openSUSE 12.2-12.3, Apple Safari 6-7,
 Google Chrome 45-50, Microsoft Internet Explorer 9, and Mozilla Firefox 38-44 has been discontinued.
- Support for Microsoft Windows Server 2003 has been deprecated. Support will be discontinued in a future Helix ALM release.
- Support for CVS and Microsoft Visual SourceSafe has been deprecated. Support will be discontinued in a future Helix ALM release.
- SoloBug has been deprecated. Support will be discontinued in a future Helix ALM release.
- Support for the Microsoft SQL Server Reporting Services (SSRS) data model has been discontinued and is no longer available.
- SSL 3.0 and TLS 1.0 support for connecting to email servers have been deprecated.
 Support will be discontinued in a future Helix ALM release.

Helix ALM 2017.1.0 also includes other minor bug fixes.

Helix ALM 2017.1.0 contains a newer version of the Helix ALM License Server (version 2017.1.0).

Helix ALM License Server 2017.1.0

Bug Fixes

- The desktop admin utility crashed if a user repeatedly pressed Tab on the Global Users dialog box.
- The desktop admin utility crashed when copying data into field in the Edit Attribute dialog box when configuring an LDAP server.
- The license server stopped responding if the Active Directory server it was connected to did not respond.

Additional Notes

- Seapine License Server was renamed to Helix ALM License Server.
- Support for Fedora 19-20, openSUSE 12.2-12.3, Apple Safari 6-7, Google Chrome 45-50, Microsoft Internet Explorer 9, and Mozilla Firefox 38-44 has been discontinued.
- Support for Microsoft Windows Server 2003 has been deprecated. Support will be discontinued in a future license server release.

Helix ALM License Server 2017.1.0 also includes other minor bug fixes.

Helix ALM License Server 2017.1.0 only supports Helix ALM 2017.1.0, TestTrack 2014.1 - 2016.1, and Surround SCM 2014.1 and later.

New Features - all TestTrack areas

 Integration with Atlassian Jira. Attach Jira issues to TestTrack items and open attached issues from TestTrack. Create new Jira items from TestTrack and automatically attach them to TestTrack items.

- Multiple users can now have the same first and last names. Additional information, such as email addresses, can be displayed in user selection fields to differentiate users.
- Refreshed TestTrack Web user interface that provides a more modern look and feel.
 (Web)

Enhancements - all TestTrack areas

- Improved rich text editing in multi-line text fields. Print individual fields, paste as text
 from the clipboard, drag images and tables to resize them, edit and resize existing
 images, clear text and background colors, and drag and drop selected content from
 Microsoft Word into fields. Improved control when working with tables and lists. Use a
 more organized shortcut menu that includes relevant actions when right-clicking an
 element in a field.
- Toolbars in multi-line text fields are now the same in the desktop and web clients.
- Select item number as the field to search in the Find dialog box. (Desktop)
- Usernames and passwords can now have a maximum of 128 characters.
- Report names can now have a maximum 128 characters and titles can have a maximum of 1000 characters.
- Reduced cache lock occurrences when reading and writing data on the TestTrack Server.
- Reduced cache lock occurrences when printing distribution reports.
- Replaced 'TestTrack' with 'COOKIE' for more generic labeling of cookie tags in tracked emails.
- Improved performance when deleting items included in links with many items.
- The support file generated from the TestTrack Server Admin Utility now includes recommendations for performance improvements. Recommendations are based on server hard drive size, number of items in projects, and other criteria that commonly affect performance.
- Upgraded OpenSSL to 1.0.1t.

• The following security commands were added and are disabled in new projects by default: Configure Jira Integration, Perform Jira Actions, and See Jira Issues Tab.

Enhancements - requirements management

• Improved performance when opening requirement documents. (Desktop)

Enhancements - test case management

The Generate Test Runs dialog box now remembers the previously selected folder.
 (Desktop)

Bug Fixes - all TestTrack areas

- Rows selected to delete were not always deleted from tables in multi-line text fields.
 (Desktop)
- Bulleted list formatting could be lost when copying and pasting. (Desktop)
- The TestTrack Client could crash when pasting content over default text in multi-line text fields. (Desktop)
- Special characters in single-line text fields were not escaped in XML files exported from the audit trail. (Desktop)
- TestTrack Server performance slowed because threads remained open for connection requests that never sent data.
- Item tags could be truncated in the list of items displayed when clicking linked items in list window columns. (Desktop)
- Matrix reports did not include linked item columns.
- Release planning reports did not correctly calculate man hours in locales using commas as decimal separators.
- Replying to tracked emails from email applications that break text after 78 characters could make email tracking cookies unusable.
- The TestTrack port number could reset to 0 when set to a number over 32767 in the server admin utility or registry utility.
- Event names were truncated in the Workflow menu and tooltips with the entire name were not displayed. (Web)
- Scrolling was not available when viewing folder details with large amounts of text.
 (Desktop)
- Deleting projects in RDBMS databases could fail because of constraint conflicts.

- The TestTrack Client could crash when adding a new user. (Desktop)
- RSS feeds did not work.
- Changes to source control file attachments were not written to the audit trail.

Bug Fixes - requirements management

- Dragging and dropping requirements in Document View in the Specification Document window collapsed the requirements tree. (Desktop)
- Clicking a link in snapshot differences reports could open a new browser tab instead of navigating to the item in the link. (Web)
- Hyperlinks to requirements in snapshot differences reports were not always correct.
 (Web)

Bug Fixes - test case management

- Test run result status by distribution reports could display an invalid % Passed value when the Total Runs column value was 0.
- Steps were not always displayed when switching from Grid View to Text View on the Edit
 Test Case page if the test case had more than 100 steps. (Web)

Additional Notes

- Support for Firefox 31-37 and Chrome 38-44 has been discontinued. TestTrack Web will likely still work with these older browser versions, but they are not officially supported.
- Support for Internet Explorer 9 has been deprecated. Support will be discontinued in a future TestTrack release.

TestTrack 2016.1.0 also includes other minor bug fixes.

TestTrack 2016.1.0 contains a newer version of the Seapine License Server (version 2016.1.1). This version also contains new features, enhancements, and bug fixes from Seapine License Server 2016.1.0.

Seapine License Server 2016.1.1

Enhancements

• The cursor is now in the Username field by default on the web admin utility login page.

Bug Fixes

- The Assign Requirements Management License dialog box indicated that a user did not have a license even if one was assigned.
- Floating licenses used by a user with a username that was changed while logged in to TestTrack were not released.
- An incorrect message was written to the server log if a user with a floating license logged in to Surround SCM and no floating licenses were available.
- Licenses were added twice after pressing CTRL+A in the Available licenses list and then clicking Add in the Add License Pool dialog box in the desktop admin utility.
- The jpegPhoto field retrieved from LDAP was not displayed in user photo information in the web admin utility.
- The Username field overlapped the Active check box on the Add, Edit, and View User pages in the web admin utility.
- Clicking Validate XML File removed the XML filename on the XML Import/Export page in the web admin utility.
- Clicking Add on the Options LDAP page did not always display the list of options in the web admin utility.
- Requirements Management and Requirements Reviewer named licenses were displayed as available even when no licenses were available in the web admin utility.
- The Test button in the License Server Database Configuration dialog box stopped working after clicking it once in the web admin utility.
- A memory leak occurred when starting the license server or adding a new user.

Seapine License Server 2016.1.1 also includes other minor bug fixes.

Seapine License Server 2016.1.1 only supports TestTrack 2012.0 and later and Surround SCM 2012.0 and later.

Seapine License Server 2016.1.0

New Features

• Multiple users can now have the same first and last name.

Enhancements

- Usernames and passwords can now have up to 128 characters.
- Improved error messages for some scenarios when login failed due to licensing issues.

Bug Fixes

- The desktop admin utility was displayed in the wrong location when using multiple monitors.
- License counts in license pools were not refreshed in the web admin utility after making changes.
- User photos were lost if Update was clicked before saving changes in the web admin utility.
- An invalid parameters error was returned when clicking Add before all data was retrieved when using advanced add to add an Active Directory user in the web admin utility.
- Several images were not displayed when viewing the web admin utility on highresolution monitors, which made buttons and some links unavailable.
- Adding LDAP and Active Directory users in the web admin utility did not always work if the LDAP or Active Directory server had more users than it could return in one query.
- If bulk changes were made to the Single sign-on field for non-LDAP users, users were prompted to save changes the next time a user record was edited even if no changes were made.
- Two named licenses were displayed as used by the same user in the Licenses in Use list.

Additional Notes

• Support for Internet Explorer 9 has been deprecated. Support will be discontinued in a future Seapine License Server release.

Seapine License Server 2016.1.0 also includes other minor bug fixes.

Seapine License Server 2016.1.0 only supports TestTrack 2012.0 and later and Surround SCM 2012.0 and later.

Enhancements

• Improved performance when retrieving a list of items in folders recursively.

Bug Fixes

- TestTrack performance was slow when changes were made to multiple items. (Desktop)
- A 'Cannot retrieve dashboard data' message could be displayed if IP address security check options were selected in the registry utility. (Desktop)
- 'Insufficient security' messages could be displayed if IP address security check options were selected in the registry utility. (Web)
- Automatic log out did not work for the TestTrack Client on Mac OS X. (Desktop)

TestTrack Server security options to perform IP address checks were removed from the TestTrack Registry Utility. If these options were selected, TestTrack clients running on computers with multiple network cards could not always connect to the server while data was updating in the background. We recommend using RSA key exchange for enhanced security. For more information, see the TestTrack Security Best Practices: http://help.seapine.com/help.php? product=testtrack&type=ttclient&topic= TTSecurityBestPractices.

TestTrack 2016.0.2 contains a newer version of the Seapine License Server (version 2016.0.2).

Seapine License Server 2016.0.2

Bug Fixes

 The date selection control was missing from Delete by Date dialog box that opens from the View Server Log dialog box in the license server admin utility.

Seapine License Server 2016.0.2 only supports TestTrack 2012.0 and later and Surround SCM 2012.0 and later.

Enhancements

- The Word export field code reference page now displays the project name it was generated from.
- Reduced occurrences of cache locks when reading and writing data on the TestTrack Server.

Bug Fixes

- TestTrack on Mac OS X could crash if other applications using the Accessibility API were installed. (Desktop)
- Creating a requirement from an issue did not always copy the source control files.
 (Desktop)
- List window line spacing could randomly change if icons were used in field value styles.
 (Desktop)
- Task boards and dashboards did not always scroll correctly when pressing Tab.
- Bullets in formatted text fields could not always be deleted by pressing Backspace.
 (Desktop)
- Filters with Closed Date restrictions greater than a specific value could return open items.
- The Word export field code reference page included an invalid TC TCSTP TEXT field.
- Uploading a Word export template with Unicode characters in the file path could fail on Linux.
- Only the first 100 selected items were added to links. (Web)
- Mouse wheel scrolling actions were reversed when using Microsoft Edge on Windows
 10. (Web)

TestTrack 2016.0.1 also includes other minor bug fixes.

TestTrack 2016.0.1 contains a newer version of the Seapine License Server (version 2016.0.1).

Seapine License Server 2016.0.1

Enhancements

 The Browse button on the Add License dialog box now remembers the last selected directory.

Bug Fixes

- The License Server CGI Configuration Utility wrote empty ApplicationDirectory values to the configuration file.
- The Edit User dialog box did not prompt to save changes when the license was changed and the user clicked Cancel.
- The server log Delete By Date dialog box did not work correctly when using German regional settings.
- The Add button on the Photo tab in the Add and Edit User dialog boxes was not enabled after updating another user's photo.
- A version mismatch error could be returned when submitting multiple requests using the API.

Seapine License Server 2016.0.1 only supports TestTrack 2012.0 and later and Surround SCM 2012.0 and later.

New Features

- Add columns to list windows to view information about and navigate to linked items.
- Export all TestTrack item types to Microsoft Word. Use Word templates that contain tags
 and field codes to control the formatting and data exported to the resulting document.
 Templates for exporting requirement documents from earlier TestTrack releases (classic
 templates) are still supported. Items can also be exported to Word using the TestTrack
 SDK.
- Use note widgets on dashboards to display formatted text, images, and hyperlinks to TestTrack or external resources.

Enhancements

- Improved task board performance.
- Improved performance when displaying dashboard widgets that use a filter with folder restrictions.
- Use Ctrl+Mouse Wheel to zoom in multi-line text fields in workflow event dialog boxes.
 (Desktop)
- Add the following actions to list window shortcut menus: Microsoft Word Export, Text File Export, and XML Export.
- Configure the minimum disk space threshold on the TestTrack Server before warnings and severe errors are added to the server log.
- Generate a .zip file that contains information about the TestTrack installation and recent server log entries from the server admin utility to send to Seapine Support for troubleshooting help.
- Improved performance when selecting folders with large amounts of history data.
- Removed the Locked By column from the Source Code tab to improve performance by over 60% when using Surround SCM. (Desktop)
- ttstudio and http URLs entered in multi-line text fields are now automatically converted to hyperlinks.
- Clicking a ttstudio or http hyperlink in a multi-line text field now always opens the item in the client the user is already logged in to.
- Removing all child items in a parent/child link now indicates the link is broken.
- The Configure Document Export Templates security command was added and is enabled by default for new projects. It is only enabled by default in upgraded projects if

the Configure Email Templates or Configure Dashboards security command is enabled.

Bug Fixes

- Changing fonts in a multi-line text field with tables and images could replace all images with the first image in the field and return an error about images not uploading. (Desktop)
- An invalid parameters error could be returned when logging in or selecting a list window, which prevented the list window from opening. (Desktop)
- A 'There is a problem with the short date configuration' error could be displayed when starting TestTrack. (Desktop)
- Spell Check was disabled in menus when restoring a minimized Add/Edit/View window in MDI user interface mode. (Desktop)
- The Project field in the Switch Project dialog box did not always automatically select the last project logged in to. (Desktop)
- The non-breaking space (A0) character was not imported correctly from text files.
 (Desktop)
- Exporting task boards required logging in to all TestTrack areas. (Desktop)
- An 'Image type is not supported' error could be returned when pasting JPEG images.
 (Desktop)
- Test configurations were only available if a user logged in with a Test Case Management license. (Desktop)
- The attach date/time was not populated when attaching a changelist to a TestTrack item from Surround SCM.
- Editing a filter could clear the Created by filter restriction. (Web)
- The through date for trend reports could be off by one day if the date was not specified
 in the report settings and 'Use server computer's time zone' was selected in the Reports
 project options.
- TestTrack could crash when editing field security in a security group. (Desktop)
- Some German words, such as Terminalfenster, could be reported as spelled incorrectly.
 (Desktop)
- Uploaded file attachments could include the path with the file name when using Internet Explorer or Chrome. (Web)
- Custom hyperlink fields with values that linked to files on drives did not work. (Web)

- The prevent message for automation rules preventing changes when entering events from list windows also included a message that an error occurred.
- Burn down dashboard widgets did not display correctly if issues or requirements that did
 not have a Date Entered value were included.
 Burn down dashboard widgets did not display starting story points correctly if an item
 with story points was closed on the first day in the period.
- The Connect to TestTrack settings could be lost when using the Outlook add-in.

Bug Fixes - requirements management

- Document exports to Microsoft Word failed and returned a 'WordExport XML tag
 >Description> is invalid' error if the Description field was hidden in the specification document. (Desktop)
- Issues could not be created from requirements if the Edit Public Folder security command was disabled for the security group. (Desktop)
- Appending multiple requirements to a document did not always retain the order and hierarchy from the source document.

Bug Fixes - test case management

- Generating a test case from a requirement could set the test case Creation Method to 'Add window'.
- An empty error dialog box could be display when editing a closed test run from the Test Runs list window. (Desktop)

Additional Notes

- TestTrack Server support on Mac OS X has been discontinued. The native TestTrack Client and Server Admin Utility are still available.
- Support for Red Hat Enterprise Linux (RHEL) 6.5 and earlier and CentOS 6.5 and earlier has been discontinued.
- The TestTrack Native Database Utility was updated. Make sure you are using the latest version of the utility, which is available for download at https://www.perforce.com/helixalm-add-ons. See the backup utility release notes for details.
- TestTrack 2011.1 and earlier databases must be upgraded to TestTrack 2015.1 before upgrading to TestTrack 2016. Contact Seapine Support for help.

 The following Mac keyboard shortcuts changed: Command+Comma (,) now opens the User Options dialog box and Command+Shift+Comma now opens the Go To Location dialog box.

• The Qt libraries used to build TestTrack 2016 were upgraded to Qt 5.5.1. This Qt version includes a scripting engine that uses floating point number approximations. These approximations cause less precise rounding of calculated custom field values that use the parseFloat function. Calculated values for these fields may be different than in earlier TestTrack versions. We recommend updating the formulas for these custom fields to also use the toFixed or toPrecision function for more precise calculations.

TestTrack 2016.0.0 also includes other minor bug fixes.

TestTrack 2016.0.0 contains a newer version of the Seapine License Server (version 2016.0.0).

Seapine License Server 2016.0.0

New Features

 Add user photos to non-LDAP users. Photos are displayed in Seapine products that support them.

Enhancements

- Add term licenses, even if expired, to be able to add maintenance extender keys.
- Named licenses with all serial numbers assigned are no longer displayed in the Assign License dialog box.
- The number of LDAP users returned when searching is now limited to 100 by default in the web admin utility.
- Resyncing LDAP users now returns an error if a user record cannot be updated because
 of a name conflict.
- Deleting a named license assigned to a user now displays a warning and prompts for confirmation before deleting.
- Closing the Server Options dialog box after making changes now prompts to save the changes.

Bug Fixes

- Users with Requirements Reviewer licenses were displayed with 'No license' in the Global Users list in the web admin utility.
- Users with Requirements Management licenses were displayed with 'No license' in the Global Users list.
- Users with assigned named licenses were displayed with 'No license' in the Global Users list if no more named licenses were available.
- A JavaScript error was returned when selecting multiple users and clicking the arrow buttons to navigate through them in the web admin utility.
- A JavaScript error could be returned when saving a license pool in the web admin utility.
- User photos were not imported from the LDAP server when associating a user with an LDAP account.
- Closing the error dialog box after entering password requirements exceeding the username 32 character limit also closed the Server Options dialog box.
- License columns could not be removed from the Global Users list if the user removing the column was not assigned that license type.
- The admin utility status bar was not updated with the correct username when logging out and logging back in with a different user.
- Inactive LDAP users were not synced with the LDAP server.
- An incorrect error message was returned when unsuccessfully logging in to the admin utility.
- An incorrect error message was returned when adding an expired Requirements Reviewer license.
- Disabling encrypted communications did not disable RSA encryption.
- Users could make themselves inactive in the web admin utility.
- The web admin utility crashed when opening the Associate Users page if any users had been deleted from the license server.
- The Bottom button on the Print User List dialog box moved the user under the selected user down one instead of moving the selected user to the bottom of the list.
- The Java API wrapper returned incorrect date values for the SerialNumber class.
- The Java API wrapper returned the incorrect user creation date.

Seapine License Server 2016.0.0 also includes other minor bug fixes.

Seapine License Server 2016.0.0 only supports TestTrack 2012.0 and later and Surround SCM 2012.0 and later.

New Features - all TestTrack areas

 Attach files and changesets to TestTrack items from Microsoft Team Foundation Server (TFS) at check in.

Enhancements - all TestTrack areas

- The TestTrack Mac OS X client installers now install libraries in /usr/local and include libraries in the application bundle based on System Integrity Protection (SIP) changes in Mac OS X 10.11 (El Capitan).
- The TestTrack Outlook add-in now supports Outlook 2016.

Enhancements - requirements management

• Fields hidden for requirement types are now displayed in live charts and dashboard chart widgets if they are not hidden for one or more types.

Bug Fixes - all TestTrack areas

- Local users or customers were not available in the Found by field if saved using the TestTrack SDK without setting the isactive global flag.
- Integer custom fields used in item mapping rules were rounded incorrectly when negative values were copied from the source item to the new item.
- Item sorting in list windows was not used when creating report files from templates.
 (Client)
- A security error could be returned when adding issues if the Add Links security command was not enabled for the user's security group. (Client)
- Ampersands were not escaped in values from multiple selection fields in detail reports.
- Items were not always displayed in the Unassigned Items column in task boards grouped by user.

Bug Fixes - test case management

 Changes to test case and test run steps could be lost when adding a workflow event before saving the item. (Client)

Additional Notes

- Support for the TestTrack Server and CGIs on Mac OS X will be discontinued in the next
 TestTrack release. The native TestTrack Client and Server Admin Utility will still be
 available. Please plan to move your server installation to Windows or Linux. See the
 Seapine knowledgebase for supported versions
 (www.seapine.com/knowledgebase/index.php?View=entry&EntryID=356).
- Support for Red Hat Enterprise Linux (RHEL) 5.x and CentOS 5.x has been deprecated.
 Please plan to upgrade your server to RHEL/CentOS 6.x or 7.x because support for older versions will be discontinued in a future TestTrack release.
- Dashboards are now available in TestTrack, so Seapine ALM Data Warehouse dashboards have been deprecated and will be removed in a future release. Reporting across products and projects will still be available in ALM Data Warehouse.

Additional Notes - Seapine License Server

- Seapine License Server support on Mac OS X will be discontinued in the next license server release. Use the web admin utility to access license server information on Mac OS X. Please plan to move your license server installation to Windows or Linux. See the Seapine knowledgebase for supported versions (http://www.seapine.com/knowledgebase/index.php?View=entry&EntryID=283).
- Support for Red Hat Enterprise Linux (RHEL) 5.x and CentOS 5.x has been deprecated.
 Please plan to upgrade your server to RHEL/CentOS 6.x or 7.x because support for older versions will be discontinued in a future Seapine License Server release.

TestTrack 2015.1.2 also includes other minor bug fixes.

Enhancements - issue management

Integration with Visual Studio 2015.

Bug Fixes - all TestTrack areas

- The TestTrack Client could freeze or crash if an Add, Edit, or View item dialog box was closed before images in multi-line text fields loaded. (Client)
- The TestTrack Client could freeze or crash if the Dashboards window was closed before all dashboards loaded. (Client)
- Switching dashboards before they all loaded could cause the dashboard to only display a legend.
- Resizing dashboards could cause the TestTrack Client to briefly stop responding.
 (Client)
- Extracting a file attachment without an extension could return an error. (Client)
- A user's password could not be changed when editing their information using the TestTrack SDK.Running a detail report on an item with a calculated timespan custom field based on <current time> could fail with a SAXParseException error.
- A global user added to the Seapine License Server could not be immediately edited from TestTrack. (Client)
- Emails could not be attached to TestTrack items from 64-bit Microsoft Outlook when using the Outlook add-in.
- Multiple emails could not be attached to the same TestTrack item from Microsoft Outlook.
- Task board swimlanes grouped by document showed 99% complete instead of 100% if fractional hours were entered in the item's workflow events.
- Exporting test cases from list windows to Microsoft Excel did not include the http hyperlinks column. (Client)
- Test variants in test cases could not be edited. (Web)
- The calendar control did not always select the correct date based on the time zone
 TestTrack Web was used in. (Web)
- Changing the month in the calendar control did not always update the days displayed in the calendar. (Web)
- A 502 Bad Gateway error is returned when logging out another admin user in the TestTrack Web Server Admin Utility hosted on IIS.

TestTrack 2015.1.1 also includes other minor bug fixes.

New Features - all TestTrack areas

- Use dashboards to quickly see project status and progress, assigned items, and recent project activity. Previously named the Home page, dashboards have many enhancements and new widget types. Chart widgets show various project metrics and statistics in a chart format. Burn up and burn down widgets show the work left to do or done in an iteration, sprint, release, or project segment. Create multiple dashboards for different purposes. Customize the layout and widgets for each dashboard.
- Customize the available actions and organization of list window shortcut menus. (Client)
- Use the Recent Items menu to quickly go to recently viewed or edited issues, requirements, requirement documents, test cases, and test runs.
- Lock issues, test cases, and test runs to prevent editing based on workflow state.
- Install 64-bit versions of the TestTrack Client, TestTrack Server Admin Utility, and specific integration components. Reduced the number of installers to two: client only and complete (client and server).
- Use the TestTrack SDK getRecordListForTableWithQuery operation to retrieve a list of records based on a JSON query and dynamically filter the returned results. Enable a local option in the TestTrack Client to easily create and validate JSON query strings in the Add and Edit Filter and Advanced Find dialog boxes.

Enhancements - all TestTrack areas

- Change passwords in TestTrack Web at any time. (Web)
- Workflow events are now available in the new Workflow menu instead of the Activities menu. (Client)
- The Go to Number command is now available in the File menu instead of the Edit menu to group all Go To commands together. (Client)
- Zoom in, out, and to a specific percentage when viewing task boards. (Client)
- Extract multiple file attachments from an item at the same time. (Client)
- Burn up and burn down chart reports now display the actual date instead of the day number.
- Burn up and burn down chart reports for items shared between folders with different release planning information now only include the work entered beginning with the start date configured for the folder. This allows items not completed in a sprint to be shared in the folder for the next sprint.

- Sort the list in the Currently Assigned to Me widget on dashboards.
- Improved performance for moving folders by 60%.
- The TestTrack Server Admin Utility now shows the logged in administrative user and allows logging them off so another user can log in.
- Enable or disable logging of SSL certificate warnings when sending and importing email.
- Added support for TLS 1.1 and 1.2 when sending and importing mail.
- The following security commands were added and are disabled by default: Edit Locked Issues, Edit Locked Test Cases, and Edit Locked Test Runs. The Configure Dashboards command was added, which is disabled for new installations and has the same setting as the Configure Dashboard Widgets command for upgrade installations. The Configure Home command was renamed to Configure Dashboard Widgets. The View Home command was renamed to View Dashboards.

Enhancements - requirements management

Import requirements from Microsoft Word documents that contain OLE objects.
 Supported object types include OLE Objects, charts, text boxes, smart art, equations, clip art, word art, and drawing canvases. Objects are inline thumbnail images in the resulting requirement description and the associated file is attached to the requirement.
 (Client)

Bug Fixes - all TestTrack areas

- Copying and pasting nested lists in multi-line text fields did not work correctly. (Client)
- Pasting OLE Object images from Microsoft Outlook or Word to attach to an item could truncate the image. (Client)
- Attaching Wireshark files to items caused errors written to the server log about not loading file attachments during thumbnail generation.
- Workflow event dialog boxes for assigning items could have default focus on the Notes field instead of the Assign To field if the 'Allow multiple user assignments' option was enabled for the event. (Client)
- Clicking a requirement document hyperlink in a task board opened all documents instead of only the document specified in the link. (Client)
- Task board cards did not always show the Enter Hours link.
- An 'Error retrieving list window records' error could be returned when logging in or opening the Folders list window. (Client)

- The position of the splitter in the Folders window changed when folder names were long.
 (Client)
- Selecting <not set> in a required Assign To field on a workflow event did not always prevent saving the event. (Client)
- Home page widgets based on requirement or documents using a filter with a <current
 user> restriction did not always display the correct value.
- A JavaScript error could occur when using a bookmark to the Home page to log in.
 (Web)
- Running trend reports based on workflow state was slower after upgrading to TestTrack 2015.0.
- TestTrack could crash when running reports from folders. (Client)
- Security group comparison reports did not include an events section for each item type if an item type was renamed to 'events'.
- Custom decimal fields that included commas were not displayed in item lists. (Web)
- Adding a custom decimal or number field and then changing it to a pop-up menu before saving it resulted in item lists not displaying the field values. (Web)
- Custom integer field values could be set to more than 10 characters when editing the field settings. (Client)
- Renamed field labels using umlauts or accents were not always displayed correctly in Add and Edit item dialog boxes. (Client)
- Automation rules set to run scripts did not work correctly if the TestTrack data contained UTF-8 non-breaking spaces.
- Emails sent using templates with field codes for custom date/time fields always used GMT instead of the server local time.
- After upgrading, server options in the TestTrack Server Admin Utility could not be saved
 if the option description exceeded 32 characters.
- The TestTrack Server could crash when passing an invalid custom field record ID to saveItemToTrack in the TestTrack SDK.
- The installer did not recognize that Apache 2.4 was installed if it was running as a service.

Bug Fixes - requirements management

 Requirement documents with a colon in the name could not be exported to Microsoft Word. (Client)

- Multi-line custom field labels were not included in requirements exported to Microsoft Word. (Client)
- Tables were resized to the page width instead of maintaining the size specified in TestTrack in requirements exported to Microsoft Word. (Client)
- Extra white space could be displayed between rows in table cells in requirements exported to Microsoft Word. (Client)
- Embedded images in imported Microsoft Word documents could be pixelated in the resulting requirements. (Client)
- The Save As button was enabled in the Microsoft Word Import Warnings and Errors dialog box if the import completed successfully. (Client)
- Column totals in the Specification Document window were not correct for fields included multiple times in the window. (Client)
- Changing a requirement's type did not always update the type in the items the requirement was linked to.

Bug Fixes - test case management

- List reports that included the Estimated Run Time field only displayed :: when some locale settings were applied.
- Test variant values were not displayed on the Edit and View Test Run pages. (Web)
- The estimated run time field value was incorrectly used as the estimated time for test runs in list windows, distribution reports, and other areas.

Additional Notes

- The gSOAP toolkit used with the TestTrack SDK was upgraded. The TestTrack SDK now complies with the SOAP 1.2 standard. SOAP operations may yield a 10-50% performance improvement depending on the call and amount of data returned. The new gSOAP version has stronger restrictions on data types than previous versions. Errors may occur if your existing SOAP application does not follow data type standards. We recommend testing your SOAP applications in a test environment before using TestTrack 2015.1 in production.
- If workflow events were grouped in a sub-menu, you must re-enable this user option after upgrading.

TestTrack 2015.1.0 also includes other minor bug fixes.

TestTrack 2015.1.0 contains a newer version of the Seapine License Server (version 2015.1.0).

Seapine License Server 2015.1

New Features

 Import user photos from Active Directory servers. Photos are displayed in Seapine products that support them.

Enhancements

 Improved error messages for when no licenses are available or an existing license is expired.

Bug Fixes

- The User column in the server log was not moved to the target database during database conversion.
- An empty message was written to LSStartup.log when the license server started or stopped.
- A timeout error was returned when editing an LDAP server connection on Linux.
- The license server API crashed when converting serial numbers to a string.
- Adding a user with a MAPI email address using the API caused all new email to be the Internet type instead of MAPI.

Seapine License Server 2015.1.0 also includes other minor bug fixes.

Seapine License Server 2015.1.0 only supports TestTrack 2011.0 and later and Surround SCM 2011.0 and later.

Bug Fixes - all TestTrack areas

An existing workflow event may not be saved correctly when editing it and then opening
it from the item Overview tab without making any changes before saving the item.
(Client)

Enhancements - all TestTrack areas

- Hide and more easily identify inactive workflow states on the Columns tab in the Add and Edit Task Board dialog boxes. An Inactive label is displayed o cards for inactive states and inactive state cards are displayed after active states. (Client)
- Pressing and holding the CTRL key and using the mouse wheel now zooms defaultsized text in multi-line text fields when editing items. (Client)
- Support for PostgreSQL 9.4.

Bug Fixes - requirements management

 An extra line could be displayed at the beginning of requirement description fields after importing a Microsoft Word document. (Client)

Bug Fixes - all TestTrack areas

- The TestTrack Server could stop responding and sent email could get stuck in an infinite loop if a recipient's user record had MAPI set as the email type.
- Automatic server reconnection from the client did not work when encryption was turned off on the TestTrack Server. (Client)
- Copying text from inside a bulleted list item and pasting it in another location always pasted the bullet character. (Client)
- Copying text from a bulleted or numbered list and pasting it in another list inserted an empty line. (Client)
- Pasting as plain text did not always preserve line feeds. (Client)
- Pasting images in the web client could cause a buffer overrun and log out users. (Web)
- Changing the font size of selected text with other attributes, such as color, could change all selected text to use those attributes, not just the size. (Client)
- Dropdown list scrollbars could be displayed off screen when close to the edge of the screen. (Client)
- When using multiple monitors, the screen used and positioning was not saved when closing and reopening the client. (Client)
- The Home page did not automatically update to reflect changes to state attributes in workflow configurations.
- Custom colors in Home page widgets were not saved if only change was the color when editing a widget. (Client)

- Task boards grouped by user did not re-sort after changing the 'Display names as' user option.
- TestTrack crashed when printing a detail report from a task board. (Client)
- Task board swimlanes displayed 0% complete if all items in the swimlane were 100% complete.
- Adding a filter restriction based on a folder could automatically add an additional folder to the restriction. (Client)
- Custom fields created immediately after deleting a custom field could have the same permissions as the deleted field.
- The Is Locked column for requirements in the Folders list window did not automatically update when the requirement's document was locked or unlocked. (Client)
- The Working Hours in Period value displayed in a Folder list column was incorrect.
- No users were displayed when filtering columns based on user custom fields in the Test
 Case and Test Run lists. (Web)
- Installing only the Seapine License Server Web Admin Utility did not install all of the required client libraries.
- The installer did not provide options to change the application directory when only installing the TestTrack Server Admin Utility.
- The Linux installer could return errors that some symlinks could not be created.
- Linked items were not included when previewing traceability reports from list windows.
 (Client)
- Live charts could display twice the number of actual test runs. (Client)
- The Release Status report could display a variance of .01 from the actual value.
- Test run estimated run time was not used when calculating estimated time in Burn Down and Burn Up Chart reports.
- Reports could display AM instead of PM for the generated time if it was 12 PM.
- Only one security group could be selected when 'Shared with security groups' access was selected for a folder. (Client)
- A 'No items pass the current search' message could be displayed after logging in.
 (Client)
- The Remove button on the Folders list window was disabled if the Remove Items from Folder security command was enabled and the Delete items command was disabled for the security group. (Client)

• Controls on the Display Settings tab in the Add and Edit User or Customer dialog boxes were always disabled. (Client)

TestTrack 2015.0.0 also includes other minor bug fixes.

TestTrack 2015.0.1 contains a newer version of the Seapine License Server (version 2015.0.1).

Seapine License Server 2015.0.1

Enhancements

 Server log messages are now added when the TestTrack or Surround SCM Servers do not synchronize correctly with the license server.

Seapine License Server 2015.0.1 only supports TestTrack 2010.1 and later and Surround SCM 2010.1 and later.

New Features - all TestTrack areas

- Configure and use interactive task boards based on folders to communicate and
 measure progress during a sprint, release, or other milestone. Drag items between
 columns to change the workflow state. Group items in swimlanes based on folder, user,
 relationship, or requirement document.
- Change user and customer password options in the TestTrack Client. Changes are also updated in the Seapine License Server and vice versa. (Client)

Enhancements - all TestTrack areas

- View lists of source file attachments for items in matrix reports. Use the %SRCFILE% field code to include the source file list in email templates and requirement documents.
 Use the %SRCFILECON% code for a condensed list that excludes the list of individual files in changelists.
- Paste images and text from the clipboard, Microsoft Word, and TestTrack native and web client fields to multi-line text fields in TestTrack Web. Drag and drop images from the desktop and other TestTrack Web fields to multi-line text fields. Some supported browsers do not support all paste and drag and drop actions. (Web)
- Burn Down Chart, Burn Up Chart, Cumulative Flow Chart, and Velocity Chart reports
 now display remaining hours for items as zero if a closed item had remaining time or if a
 workflow event with zero actual and zero remaining hours was entered for the item.
- Use CTRL+H on Windows and Linux as a keyboard shortcut to insert hyperlinks in multiline text fields. (Client)
- The Configure Task Boards security command was added. This command is disabled for all existing security groups in upgraded projects and enabled for the Administration group in new projects.
- Improved look and usability of help. Includes better search capabilities, quick access to PDF versions of guides, and links to other Seapine resources.
- Support for Mac OS X 10.10 (Yosemite). (Client)
- Upgraded to OpenSSL 1.0.1i.

Enhancements - test case management

Change the estimated run time for test cases and test runs using bulk field changes.
 (Client)

Bug Fixes - all TestTrack areas

- Closing an Add or Edit item dialog box prompted to save changes even if no changes were made if the item was last updated by a Modify trigger. (Client)
- Switching projects reset the 'Always log in with this username and password' option.
 (Client)
- Pasting as plain text in multi-line text fields could remove all line feeds. (Client)
- Upgrading projects failed if the LINKHISTRY. HistInfo column included more than 255 characters.
- The Microsoft Outlook add-in could be disabled after upgrading to TestTrack 2014.1.2.
 (Client)
- SOAP applications that marked linked items as suspect did not work after upgrading to TestTrack 2014.0.
- No field values were displayed for a child field in a relationship if all values were valid for the parent value. (Web)
- Downloading file attachments from workflow events could fail with an insufficient security error. (Web)
- Orphaned emails could display an incorrect sender. (Client)
- TestTrack crashed when closing an assignment notification dialog box when the MDI window was minimized. (Client)
- The Perl installers added trailing slashes in the ttstudio.conf file, which could cause issues connecting to databases.

Bug Fixes - issue management

• Importing issues via email failed if a user was created from a previously imported email and the email address exceeded the maximum length for the first name field.

Bug Fixes - requirements management

- The wrong version of the requirement document Description value was used when exporting a document snapshot to Microsoft Word. (Client)
- Editing a requirement inline in a document could keep the requirement locked if the Esc key was pressed on the save dialog box. (Client)
- Requirement pop-up custom fields supporting single selection that shared the issues Version value list did not display field formatting in the Requirements list window. (Client)

• TestTrack could crash when creating a related requirement from another requirement, adding it to a document, and closing the Add Requirement dialog box. (Client)

Bug Fixes - test case management

- The list of available test variants was incorrect when adding variants to a test case.
 (Web)
- TestTrack could crash when viewing test cases. (Client)

TestTrack 2015.0.0 also includes other minor bug fixes.

Additional Notes

The TestTrack Native Database Utility was updated in April 2014. Make sure you are
using the latest version of the utility, which is available for download
at http://www.seapine.com/ttresources.html. See the backup utility release notes for
details.

TestTrack 2015.0.0 contains a newer version of the Seapine License Server (version 2015.0.0).

Seapine License Server 2015.0.0

New Features

• Support for Term licenses for TestTrack and Surround SCM.

Enhancements

- Improved look and usability of help. Includes better search capabilities, quick access to PDF versions of guides, and links to other Seapine resources.
- Upgraded to OpenSSL 1.0.1i.

Bug Fixes

- The Name field in the Add and Edit License Pool dialog boxes was not sized correctly on Mac OS X.
- Email addresses added to users from the API were not saved correctly.
- Empty error messages were displayed in the LSStartup.log file when the server started.

- Saving Active Directory connections with invalid addresses caused a timeout in the client admin utility.
- Total License Counts were displayed differently in the client and web admin utilities.

Seapine License Server 2015.0.0 also includes other minor bug fixes.

Seapine License Server 2015.0.0 only supports TestTrack 2010.1 and later and Surround SCM 2010.1 and later.

Bug Fixes - all TestTrack areas

Project metadata could be missing from databases after upgrading to TestTrack
 2014.1.1 in some scenarios.

TestTrack 2014.1.2 contains a newer version of the Seapine License Server (version 2014.2.0).

Seapine License Server 2014.2.0

Enhancements

- User records are automatically resynced during the initial connection between the license server and Seapine product server after a restart.
- Users who cannot log in because the assigned license in the Seapine product does not match the assigned license in the license server are updated with the correct license when the product server periodically pings the license server.
- Additional information is written the server log when a floating license is not available for a user during login.
- Improved usability in several areas of the Java API.
- The user record creation date is now available in the API.
- Upgraded to OpenSSL 1.0.1h.

Bug Fixes

- The API did not correctly report TestTrack SDK licenses.
- Users were prompted to save changes even if no changes were made in the Edit User dialog box and when converting or changing the license server database.
- A JavaScript error occurred in the web server admin utility when pop-up windows were blocked in the browser and external authentication was configured.
- The Password never expires option in user records was not saved to the database correctly and did not work when logging in to TestTrack.

Seapine License Server 2014.2.0 also includes other minor bug fixes.

Seapine License Server 2014.2.0 only supports TestTrack 2010.1 and later and Surround SCM 2010.1 and later.

Enhancements - all TestTrack areas

- Configure the number of minutes of inactivity before TestTrack Web users using floating licenses are automatically logged out. A warning dialog box is displayed for 60 seconds before log out to let users choose to stay logged in. (Web)
- Upgraded to OpenSSL 1.0.1h.

Bug Fixes - all TestTrack areas

- All HTML formatting was removed when spell checking email. (Client)
- When starting TestTrack, maximized list windows were displayed in normal size and then maximized. (Client)
- Defect Scribe did not always run correctly after upgrading to TestTrack 2014.1.0. (Client)

Bug Fixes - issue management

- Images in multi-line text fields were not always displayed correctly in issues imported from email.
- The Linux Perl installer did not always install SoloBug. (Client)

Bug Fixes - requirements management

 A table's column span was not always set correctly if the span between rows was different in requirement documents imported from Microsoft Word. (Client)

Bug Fixes - test case management

 The Estimated run time field was not displayed correctly when opening a test run in Microsoft Excel. (Client)

TestTrack 2014.1.1 also includes other minor bug fixes.

New Features - all TestTrack areas

- View assigned items, recent activity, and other configured widgets on the Home page.
 Widgets display the number of items that pass a specific filter and open a filtered item list when clicked.
- Configure and apply text styles and icons to list values and workflow states to more easily identify them in item lists and matrix reports.
- Attach source files and commits to items from Git, GitHub, and other source control providers.
- Export a configuration report to Microsoft Word that contains details about project settings.
- Create trend reports that show the total number of items in each workflow state at the end of a specified period.

New Features - requirements management

• Configure item mapping rules to create new requirements from existing requirements and require adding new requirements to a document.

Enhancements - all TestTrack areas

- Access Surround SCM files and changelists from hyperlinks in items they are attached to. Requires configuring Surround SCM as an external source control provider.
- Improved existing encryption options and added support for RSA key exchange for stronger security between the TestTrack Server and clients.
- Changing passwords now requires entering the current password.
- Change passwords when promoting users to the Seapine License Server. (Client)
- Use enhanced matrix reports to create risk mitigation and other uniquely formatted list reports. Add columns that contain the same contents as another column, add an extra header row and merge header cells to group related columns, and display text using styles configured for field values. (Client)
- Relative ranking is now maintained when moving and copying multiple items between folders.
- Add items in existing folders to other folders in the Folders list. (Web)
- Click the X in an item list column to quickly remove it. (Web)
- View row and column totals in trend reports based on actual vs. estimated hours.

- View the sum of column totals in distribution reports.
- Use the ChartsOnlyReport.xslt and HeaderAndCharts.xslt stylesheets to only display charts in trend and distribution reports.
- The Links tab now displays requirement tags. (Client)
- Use parent/child relationships to link items when item mapping rules are used.
- The TestTrack Client now automatically reconnects to the server if the IP address changes. (Client)
- Added Arial, Arial Black, and Tahoma to the Font list in multi-line text fields. (Client)
- Active Directory users required to use single sign-on can now use their password for electronic signatures. The Electronic Signature Password field was removed from the Edit User dialog box.
- Enable the Configure List Values security command to allow users to configure list items without full security to manage project fields provided by the Setup Project Fields command.
- The following security commands were added. The following new commands are
 disabled by default: Configure Field Value Styles, Configure Home Widgets,
 Configure Source Control Providers, and Export Project Configuration Report. The new
 View Home command is enabled by default. The new Configure List Values command is
 disabled by default, but is enabled after upgrades if the Setup Project Fields command
 is enabled for the security group.
- Upgraded to OpenSSL 1.0.1g.

Enhancements - requirements management

- Expand and collapse all requirements in the tree in the Specification Document window.
 (Client)
- View the Folders list when using a requirements reviewer license. (Web)
- Bug Fixes all TestTrack areas
- Only the first item was added when adding multiple new items to a folder. (Client)
- Alt+Del was incorrectly used as the keyboard shortcut to remove items from folders.
- The Font field in multi-line text fields did not display a value if multiple fonts were selected in the text field. (Client)
- Fonts applied in multi-line text fields in the native client were not always applied in the web client and vice versa.

- Clicking a column header to sort item lists did not always immediately change the sort order. (Web)
- The TestTrack Server Admin Utility did not start on Mac OS X 10.8.
- The attached date and time were not set when attaching Surround SCM changelists or files. (Client)
- Some file attachment types, such as JPEG, could not be displayed in the internal viewer
 if the user did not add the file extension to the View File local options. (Client)
- Online help was not always displayed for the TestTrack version it was viewed from.
- The TestTrack Server could stop responding if a network issue occurred when performing DNS lookups while logging messages in the startup log.
- · Automation rules that added new test runs to folders did not always add all the test runs.
- Clicking Cancel when ranking items in folders did not prompt to save changes. (Web)
- An error could occur when using Go To to find an item that was already open. (Client)
- An error could occur when viewing a diagram from the Workflow tab if a state or event name included a newline character. (Client)
- XML exports with .zip files over 2.2 GB were corrupt. (Client)
- XML imports from large XML files could fail. (Client)
- Source file names were not correctly escaped in detail reports.
- Distribution reports did not include correct information from the Version field.
- A 'The password cannot be larger than 64 characters' error could be returned when logging in to the native TestTrack Server Admin Utility.
- Usernames were not correctly escaped on the item History tab.
- Perforce did not correctly handle newline characters in submit comments. (Client)
- The Switch Project list did not include scrollbars if the list was long. (Web)
- Inline images in multi-line text fields could be lost after selecting all text in the field and changing the font. (Client)
- Emails that included an empty comment (<!--->) were not correctly imported.
- The Save As dialog box opened when extracting file attachments did not display the extracted filename on Mac OS X. (Client)
- Using the previous and next buttons to view or edit items in folders did not maintain the sort order from the Folders list window when navigating between items. (Client)

Bug Fixes - requirements management

- Requirement document impact reports did not work after upgrading toTestTrack 2014.0.0.
- Audit trail reports did not include source control changelists attached to requirements.
 (Client)
- Source control files were not imported from requirements or documents when importing from XML. (Client)
- A Java runtime error could occur when importing documents from or exporting documents to Microsoft Word. (Client)
- Pressing Shift+Tab did not move items in lists out one level when editing a multi-line text field in the Specification Document window. (Client)
- Bug Fixes test case management
- · Script results selected for deletion were still deleted even when clicking
- Cancel in the Edit Test Run dialog box. (Client)
- Shared steps could not be inserted in the first line in text view. (Web)
- Audit trail reports did not include source control changelists attached to test cases.
 (Client)

Additional Notes

- MySQL databases are no longer supported. Support was deprecated in TestTrack 2011.1. If you use MySQL, you must convert your server and project databases before upgrading to TestTrack 2014.1. If you are under maintenance, Seapine Support can guide you through the process of converting your databases.
- The TestTrack Native Database Utility was updated in April 2014. Make sure you are
 using the latest version of the utility, which is available for download
 at http://www.seapine.com/ttaddons.html#dbbackup. See the backup utility release
 notes for details.

TestTrack 2014.1.0 also includes other minor bug fixes.

TestTrack 2014.1.0 contains a newer version of the Seapine License Server (version 2014.1.0).

Seapine License Server 2014.1.0

Enhancements

- Improved existing encryption options and added support for RSA key exchange for stronger security between the Seapine License Server and server admin clients.
- Active Directory users required to use single sign-on can now use their password for TestTrack electronic signatures.
- The next versions of the Seapine License Server and Seapine ALM Reporting Platform will be backward compatible, which eliminates the need to install the same versions.
- Upgraded to OpenSSL 1.0.1g.

Bug Fixes

- Users were not prompted to save changes before canceling when adding or editing a
 user.
- The API did not return correct information about Seapine Suite licenses.

Seapine License Server 2014.1.0 also includes other minor bug fixes.

Seapine License Server 2014.1.0 only supports TestTrack 2010.1 and later and Surround SCM 2010.1 and later.