



CSM 9.3.0 Release Notes

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The Cherwell Software product suite includes:

- Cherwell Service Management
- Cherwell Asset Management

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Contents

Release Notes	4
◦ Enhancements	5
◦ CSM 9.3.0 Enhancements List	6
◦ CSM 9.2.0 Enhancements List	9
◦ CSM 9.1.0 Enhancements List	12
◦ Fixes	13
◦ CSM 9.3.2 Fixes List	14
◦ CSM 9.3.1 Fixes List	15
◦ CSM 9.3.0 Fixes List	17
◦ CSM 9.2.1 Fixes List	21
◦ CSM 9.2.0 Fixes List	22
◦ CSM 9.1.1 Fixes List	23
◦ CSM 9.1.0 Fixes List	24
◦ System Requirements	26
◦ Revision History	29
◦ CSM Documentation Archive	31

Release Notes

View CSM enhancements and fixes, organized by version.



Note: Due to changes in internal processes, development requests are tracked differently starting with CSM 9.2.0. You may see differing numbering schemes for enhancements and fixes.

Enhancements

A list of enhancements to CSM, organized by version.

CSM 9.3.0 Enhancements List

- CSM-12092 Portal: Updated the user interface of the Change Request form.
- CSM-12784 Portal: Updated the user interface of the Service form.
- CSM-12794 Portal: Updated the user interface of the Specifics - Employee Departure, Specifics - Employee New, Specifics - Employee Update, Specifics - File Share Request, and Specifics - Generic forms.
- CSM-12797 Portal: Updated the user interface of the Specifics - Wireless Access Request form, Specifics - Wiring Relocation form, and Specifics - Wiring Request form.
- CSM-12892 Portal: Updated the user interface of the Customer Internal form.
- CSM-13632 Portal: Updated the user interface of the Discussion forms.
- CSM-14570 Forms: Users can now leverage adaptive design for Forms with the new Adaptive Layouts feature. Adaptive Layouts design tools are available in the Form Editor.
- CSM-14811 Browser Client and Portal: Removed individual error text from the multi-line error modal that displays when saving a record. The errors now display at the top of the form.
- CSM-15038 One-Steps: WebService calls now allow http-restricted headers.
- CSM-15229 Scheduler: Improved code performance to clean up stale scheduled items.
- CSM-15351 CSV Import: Enhanced the Import Data Wizard to create internal CSM Users from CSV files in addition to regular Business Objects. Imported user data can also be pulled from an external LDAP source. Also added the ability to update existing Users, Records, or Business Objects from a CSV import file.
- CSM-15361 Portal: Users are now be able to disable the default Cherwell help system and provide a URL to direct to a custom help system after clicking the Portal help button. A complete URL string must be provided. Customize Portal help system options in the CSM Administrator Site Editor. The selection is unique to individual sites.
- CSM-15368 Knowledge Pane: The default state of the "Show Options" checkbox has been changed from checked to unchecked to streamline the pane. All options are still present.
- CSM-15369 Browser Client and Portal: Upgraded to jQuery 3.2.1 and jQuery UI 1.12.1; removed Wijmo.
- CSM-15832 Browser Client: Updated the phrase on the release lock modal to the following: "The current record has changed. Releasing the lock will cause changes to be lost. Do you want to continue?"
- CSM-15856 Forms (Snap to Grid): New Editor button to configure and toggle Grid snap lines on the Form Designer for control movement and resizing. Toggle guide snap lines for aligning selected controls to neighboring controls and display helper lines and values when moving or resizing controls on the Form Designer.
- CSM-16275 Themes: This new feature allows end users to modify existing chart color palettes as well as create new ones that will fit organizational needs.
- CSM-16384 Relationships: Added columns "Child/Parent" and "Loads" to the relationship view of Business Objects. This enables the user to view these fields without needing to enter the properties dialog.

- CSM-16435 Portal: Updated the user interface of the Department Items Dashboard.
- CSM-16436 Portal: Updated the user interface of the Executive Items Dashboard.
- CSM-16437 Portal: Updated the user interface of the Frequently Asked Questions Dashboard.
- CSM-16439 Portal: Updated the user interface of the My Devices Dashboard.
- CSM-16440 Portal: Updated the user interface of the My Items Dashboard.
- CSM-16442 Portal: Updated the user interface of the My Service Orders Dashboard.
- CSM-16443 Portal: Updated the user interface for the Not Logged In Dashboard.
- CSM-16445 Portal: Removed the Service Catalog Dashboard. The new Service Catalog points to a Widget, so the Dashboard was not needed and had no dependency.
- CSM-17107 Linking: Updated several methods for linking directly to CSM Objects (deep linking). The old deep linking formats are still honored.
- CSM-17271 Portal: Removed the phone number from the "Cherwell Swoosh" emblem drop down on the portal.
- CSM-17725 Browser Client and Portal: Devices and screens with view widths below 768 pixels will responsively collapse the top menu into a hamburger menu. The hamburger menu behaves as an accordion to provide a mobile-friendly experience when accessing all menu and sub-menu items in addition to the user profile, login/logout capability, and the site picker in the Portal.
- CSM-17981 Browser Client and Portal: Modals have an updated user interface design. The new styling affects fonts, colors, buttons, and message wording (in some instances).
- CSM-18532 Portal: Updated the user interface for all Configuration Item forms.
- CSM-18540 Installer: CSM now targets .NET Framework 4.6.2, so this version of the .NET Framework must be installed for CSM clients and servers to function properly. The Auto-Deploy installer now checks to ensure that .NET Framework 4.6.2 is installed on the client machine and allow the User to install it if it is missing.
- CSM-18571 Automation Processes: Updated the Automation Process Server to allow multiple items to be processed asynchronously.
- CSM-18854 Trusted Agents: REST API LDAP and Windows Domain authentication will now route calls through Trusted Agents (if enabled).
- CSM-19134 Browser Client and Portal: Updated the user interface design of the Login prompt and Role Chooser prompt.
- CSM-19180 Browser Client and Portal: Added multi-tab browsing support, which provides the ability to operate in multiple web browser tabs, allowing you to work on multiple pages in CSM.
- CSM-19335 Logging: Logs now record time taken to process e-mails (when logging as Stats and above) and warnings when the process takes longer than 15 seconds (when logging as Warning and above).
- CSM-19943 Portal: Added a link to the Knowledge Articles Dashboard and FAQ Dashboard on the menu bar under Charts and Items.
- CSM-20351 Portal: Created a Make a Request Widget that directs the User to the Service Catalog.
- CSM-20366 Installer: Localized content is now included in the Demo and Starter databases by default. Globalization is enabled by default in the Demo database, but must be enabled in the

Starter database. To support this change, the option to specify localized content was removed from the Database Selection dialog in the CSM Installer.

- CSM-20491 Widgets: Added a Tab Group Widget; you can now add a Tab Group to your Dashboards to display plain and rich text in a tabbed format.
- CSM-20503 Cherwell REST API: The getsearchresults operation now returns the internal name of the "Name" property instead of the display name.
- DR 39951 Performance: CSM will now use [n]varchar(max) and varbinary(max) instead of the older datatypes in SQL. The conversion to these fields will happen during System Upgrade.
- DR 41319 Forms: Allow related task tab buttons for Link and Unlink functions to be hidden when the Links toolbar is displayed.

CSM 9.2.0 Enhancements List

- CSM-2437 Cherwell REST API: Enables customers to delete Teams. This operation requires the Team ID and the necessary permissions.
- CSM-2450 Cherwell REST API: Enables customers to add images to the Cherwell platform using the API.
- CSM-2451 Cherwell REST API: Fixed the Cherwell API requirement for a Business Object to show in Search Manager in order to be searched. This is no longer required.

The operations to export search results return additional columns to make it easier to identify records. The new columns that are returned include Record ID, Public ID, Type, Owned By ID, Last Modified Date/Time, and Last Modified By. The Type column may not appear under certain conditions.

- CSM-2983 Globalization: Added localization support for Lookup Objects.
- CSM-2984 Blueprints: You can now store foreign keys for Fields that are validated from Lookup tables and that enforce validation. This ensures that changes to Lookup table values are updated in existing records.
- CSM-2994 Blueprints: Added a Definition Reviewer to provide a quick way to review and modify Forms, Grids, and Form Arrangements for all Business Objects. The Definition Reviewer is especially useful for ensuring consistency and usability across visual elements in your system after you apply translations to your system using the Globalization tool set.
- CSM-3106 Globalization: Added multi-language support for content in a single database, including on-the-fly culture/language switching in all clients. Additional changes include a Language Pack Editor for easy translation, translations for items within Managers in CSM Administrator, and a Content Optimization Tool to help prepare legacy content for translations.
- CSM-3323 Browser Client and Customer Portal: Updated the user interface design for the account information section (upper right-hand corner of the main pane), including changes to color, font, and drop-down styling. The contact card (Portal only) and Language Selector flag icons were removed. User information is still accessible via the User Info link.
- CSM-10347 Forms: There has been a change to the method by which Business Object Forms are scaled to account for the system DPI value. The functionality to manually scale Forms is no longer needed, and it has been removed from the Administrator Client.
- CSM-10399 Globalization: Added support for creating and applying localized mApps.
- CSM-10674 Administrator Client: Removed the preview of the account information section (upper right-hand corner of the main pane of the Customer Portal) from the Theme Manager and Site Manager.
- CSM-10711 Browser Client and Customer Portal: In the Browser Client, updated the user interface of the banner, including changes to color and font. The Cherwell logo and phrase "Service Management" displays in place of the previous "Cherwell Service Management" phrase; these items are not configurable. In the Customer Portal, the minimum height of the banner is 50 pixels for Sites that are configured without a fixed height; the banner grows to accommodate text and images.
- CSM-10789 Customer Portal: Customer Portal: In the OOTB Service Catalog, you will now have an improved search function that produces a list of suggested matches after you type three characters into the search box. The drop-down menu list of suggested results shows up to five suggestions;

click the More... link to view additional suggestions. Select the Search button or the enter key to view all search results.

- CSM-10805 Customer Portal: Child levels in the OOTB Service Catalog display in card format, with the title and description appearing with an ellipse if the text is longer than the card width allows.
- CSM-11028 Browser Client: Updated the user interface and user experience design for the main menu bar, including changes to color, font, drop-down styling, and menu wrapping. The new default menu bar height is 50 pixels.
- CSM-11029 Browser Client: Updated the user interface and user experience design for the Search Bar, including changes to color, font, and drop-down styling.
- CSM-11351 Customer Portal: The first level of the OOTB Service Catalog will display a title and description in a card format.
- CSM-11397 Customer Portal: Users can execute commands from the Service Catalog.
- CSM-11398 Customer Portal: Added breadcrumb navigation to OOTB Service Catalog.
- CSM-11400 Customer Portal: Created a new Theme for the header, account information section, and menu bar that includes changes to the color, font, and drop-down styling; the default values correspond with the new Browser Client design, but can be modified. The new default banner height is 50 pixels.
- CSM-11573 Customer Portal: In the Search Results page in the OOTB Service Catalog, results with an executable action are clickable.
- CSM-11578 Customer Portal: Added ability to execute items directly from the drop-down list of search results.
- CSM-12113 Blueprints: Blueprint contents are now included as part of the publish history.
- CSM-12182 Customer Portal: Created the ability to use a Theme for select Search Bar items, including the Go button, the MRU (Most Recently Used) drop-down, and check boxes/radio buttons in the Advanced Search pane; the default values correspond with the new Browser Client design, but can be modified.
- CSM-13257 Customer Portal: Updated OOTB Service Catalog to a new style. The new style ("Cards with Search") features new icons and category descriptions in a card format, breadcrumb navigation, and an improved search function.
- CSM-13449 Form Arrangement: Form Arrangement has been given an updated look and feel in the Browser Client and Portal.
- CSM-13588 Application Server: Added ability to override the location of the definition catalog.
- CSM-13593 Database: Enhanced local catalog caching to retrieve only new and changed items after publishing a Blueprint.
- CSM-13722 One-Steps: Increased the maximum timeout allowed for a Go to Action step.
- DR 35905 CSM: Logging has been added to the System Upgrade and System Restore utilities. Logging is based on Application Server logging settings set in the Server Manager.
- DR 41532 Relationships: All web client Relationships will be set to Load Keys Only by default. Added the ability to revert to configured behavior for 1-many Relationships if problems arise with Load Keys Only. This increases performance and provides smaller session sizes.

- DR 42769 Cherwell REST API: New operation enables customers to update the current User's culture using the API. A culture code is required.

CSM 9.1.0 Enhancements List

- DR 28629 Cherwell REST API: Added operations for looking up a Business Object by its scan code.
- DR 29832 Cherwell REST API: Added an operation to create or update a Team or Workgroup.
- DR 31155, DR 32042 CSM Web Applications (Accessibility): Added screen reader support for elements on Grid Forms.
- DR 31323 CSM Web Applications (Accessibility): Added keyboard support for the Related Item Selector.
- DR 31337 CSM Web Applications (Accessibility): Added keyboard support for Quick Search results that contain multiple Business Objects.
- DR 33467 CSM Web Applications (Accessibility): Added keyboard support for major site-level elements.
- DR 35694 CSM Web Applications (Accessibility): Screen reader and keyboard support have been added to toolbars and the Related Item Selector for Form Grids.
- DR 35971 CSM Web Applications (Accessibility): Added keyboard and screen reader support for the toolbar on child Business Objects.
- DR 37708 CSM Web Applications (Accessibility): Added Grid support for applying focus to the Grid (ALT+W) and navigating through multiple pages (Page Up and Page Down).
- DR 37710 CSM Web Applications (Accessibility): Added tabbing capabilities for some prompts, such as the e-mail address book and One-Step prompts.
- DR 37917 CSM Web Applications (Accessibility): Added screen reader and keyboard support for the E-mail Message window toolbar.
- DR 37987, 37990 CSM Blueprints: To support concurrent development, Users can now view conflicts and choose whether to keep or discard Blueprint changes during publishing. In addition, Users can see when each item was edited and who made the changes.
- DR 38147 Cherwell REST API: Added support for HTML content in Business Object fields.
- DR 40218 CSM Modifiers: Added Modifiers for trimming start and end text for Text Expressions. Also added a Modulo type to Math Expressions so you can return the remainder of a division calculation.
- DR 40247 CSM Modifiers: Added Modifiers for applying cryptographic hashing algorithms to text strings. This enables you to create encrypted strings you can use to create tokens for APIs and to detect data changes.
- DR 40268 Cherwell REST API: Added operation to add users to a Team by batch.
- DR 41328 CSM Command Line: Removed nonexistent -w switch from Trebuchet.App.

Fixes

A list of fixes to CSM, organized by version.

For fix lists for older CSM releases, visit the [Cherwell Support Portal](#).

CSM 9.3.2 Fixes List

- CSM-28703 Globalization: Fixed an issue that prevented Approvals from functioning correctly in localized languages. To resolve this issue in upgraded systems, you must reapply any Language Pack that contains an Approval Object.
- DR 43672/43714 SAML: Fixed an issue that intermittently caused a blank screen during SAML authentication.
- DR 43743 Browser Client: Fixed an issue where accessing a record from a Dashboard Widget could result in this error message: "A column named 'ReclID' already belongs to this DataTable."
- DR 43761 Browser Client: Fixed an issue which caused Browser Client Dashboard global filters to apply to Widgets that do not require those filters.
- DR 43775 Browser Client: Fixed an issue where security segments were left in the URL after login, causing web server requests to fail.
- DR 43883 E-mail and Event Monitor: Fixed an issue where the E-mail and Event Monitor would occasionally process the same e-mail multiple times.

CSM 9.3.1 Fixes List

- CSM-23630 Forms: Fixed an issue where memory usage grows over time when using the Form Designer in CSM Administrator.
- CSM-23796 Database: Fixed an issue which could cause the database size to dramatically increase after upgrading to CSM 9.3.0.
- CSM-23857 Searching: Resolved an issue where deserializing values from a CSM client running on a Windows machine in a different region setting than the AppServer could cause blank values.
- CSM-23869 Forms: Addressed an upgrade issue where scroll bars appear in some embedded Forms after upgrading so that fewer Forms are affected by this issue.
- CSM-24282 Business Objects: Fixed an issue where invalid records would be added to the History relationship if it was set to Load Keys only and All Fields were selected, preventing the Business Object form from being saved.
- CSM-24609 CSM: Fixed an issue where mapping fields to external sources could result in an error message on import.
- CSM-24844/CSM-26176 Forms: Fixed an issue with upgrading Forms to support Adaptive Layouts. Some forms created in older versions using high-dpi systems were not upgrading correctly and appeared corrupted.



Important: If you upgrade to CSM 9.3.0 and experience these issues, revert to your pre-9.3.0 version and re-upgrade to 9.3.1. Once content has been upgraded to 9.3.0, it is not possible to automatically correct the Forms; the control sizes and positions must be manually edited.

- CSM-24862 System Performance: Blueprint-scoped Stored Values are no longer stored in the catalog, improving performance.
- DR 33667/38394/40509 CSM: General security fix.
- DR 38394/40509 CSM: General security fix.
- DR 43467 Performance: Resolved an issue that caused the CSM Desktop Client and CSM Administrator to hang when running on some configurations of Windows 7.
- DR 43510 One-Step Actions: Fixed an error that prevented the use of external objects containing a unique identifier column.
- DR 43610 E-mail and Event Monitor: Fixed issue that required restarting the E-mail Monitor after changes or additions to the monitor.
- DR 43689 Automation Processes: Fixed an issue that caused the approval engine to periodically create multiple records for the same process.

- DR 43706 Automation Processes: Fixed an issue where copies of Automation Processes could not be deleted
- DR 43715 Portal: Fixed an issue that could prevent the submission of Incidents and Service Requests from the Service Catalog Widget on non-default Portal sites.
- DR 43731 Business Objects: Fixed an issue where some non-ASCII characters in an encrypted field value could result in a different string being returned when decrypted.

CSM 9.3.0 Fixes List

- CSM-11501 CSM: General security fix.
- CSM-11512 CSM: General security fix.
- CSM-11665 CSM: General security fix.
- CSM-11674 CSM: General security fix.
- CSM-11682 CSM: General security fix.
- CSM-12575 One-Steps: Re-added "Record to select after run" options in Step Through Children Action editor.
- CSM-13263 Forms: Fixed an issue that kept records from locking when editing a drop-down, date, or number fields on the specifics form.
- CSM-14285 Dashboards: Fixed an issue where filters were not applied to a results Grid after drilling down into a Widget.
- CSM-14373 Authentication: Resolved issue where multiple failed login attempts with the same Login ID caused slow database performance.
- CSM-14424 Portal and Browser Client: Updated a flag in the web.config files to force HTTP requests to redirect to the HTTPS version of the site. This is OPTIONAL and can be enabled via the relevant web.config (for Portal or Browser Client).
- CSM-14447 CSM: General security fix.
- CSM-14622 Browser Client: Resolved an issue where a keyboard input of any value would incorrectly clear the Priority field on an Incident form. All values must be selected using the popup window; however, the field might still be cleared using the keyboard by pressing the correct keys.
- CSM-14635 Cherwell REST API: Fixed a spelling error in the REST API response messages.
- CSM-15045 Cherwell REST API: The getbusinessobjectattachment operation now returns a meaningful error in the event of a problem.
- CSM-15224 One-Steps: Fixed an issue where updating the parameters on a One-Step REST API web service call appeared to take effect but was not reflected in the resulting call.
- CSM-15231 One-Steps: Improved security surrounding global One-Steps.
- CSM-15757 Web Applications: Fixed an issue which prevented the use of a self-signed certificate for making web service calls.
- CSM-15836 Cherwell REST API: Fixed an issue that caused the search results export operation to fail.
- CSM-16235 Browser Client: Fixed an issue that caused an incorrect filter to be applied to results when Users drilled down on a Widget in a filtered Dashboard that displayed a list of records.
- CSM-16591 E-mail Monitor: Fixed an issue where, under certain circumstances, E-mail Monitors did not honor a setting to attach e-mail inline images to business objects.
- CSM-16695 Attachments: Fixed an issue that caused all e-mail attachments to be stored in SQL despite configured restrictions on the handling of attachments.
- CSM-16992 Security: Fixed an issue with password requirements in CSM Administrator.

- CSM-17374 Prompts: Fixed an issue that required creation of two prompts when creating a search against a Date field.
- CSM-17546 CSM Database: Running the System Upgrade utility now clears old records from the TrebuchetDbSync table.
- CSM-17756 Grids: Fixed an issue where adding a column to a Grid in the Blueprint Editor caused the column headers to display incorrectly.
- CSM-18583 Installer: Improved the error message that appears when the server installer is run when IIS 4.0 or later is not present.
- CSM-19138 One-Steps: Updated the Send an E-mail Action for a One-Step to notify the web client (when running in interactive mode) if an error occurred. Also added information-level success or failure logging.
- CSM-19722 Browser Client: Fixed an issue that caused Business Object form errors when image tags were used in rich text fields.
- CSM-20000 E-mail Monitor: Fixed an issue that prevented e-mails from being processed when an in-line image had certain properties and the "Preserve inline images within e-mail body" option was checked.
- CSM-20003 Browser Client and Portal: Attempts to navigate to an invalid Portal or Browser Client URL now produce a "Site not found" error instead of redirecting users to the default site.
- CSM-20310 Browser Client: Fixed an issue where clicking Save on the toolbar did not display appropriate errors on the top of the form.
- CSM-20574 Globalization: Fixed an issue that prevented the system from respecting the user-specific culture for Users who log in using LDAP.
- CSM-20687 Browser Client: Resolved an issue that caused the toolbar to remain accessible when the User logged out of the system.
- CSM-21405 Browser Client: Fixed an issue where an error and corresponding message dialog displayed when attempting to advance a new Incident workflow without entering all required fields.
- CSM-21693 Blueprints: Fixed broken Edit Business Object Actions links on main toolbar and side action panel in CSM Administrator.
- CSM-21826 Reports: Fixed an issue that caused SQL errors to occur when a Report that contained foreign-key-validated Fields was edited or run.
- CSM-21837 Cherwell REST API: Added inline help labels to Swagger for getclientsecuritysettings/applicationtype/{applicationtype}. Removed /api/v1/getbusinessobject/cachekey/ operation that was originally intended for internal use only.
- CSM-23319 CSM: Increased startup performance of the CSM Desktop Client and CSM Administrator when Globalization is enabled.
- DR 16011 Site Manager: Fixed an issue that caused URL commands to fail without an error message being displayed to the user.
- DR 16428 Visualizations: Relationships now load when the Visualization is launched.
- DR 2719 Browser Client and Customer Portal: Fixed an issue that caused labels with ampersands to display incorrectly.
- DR 33830 CSM: General security fix.

- DR 34616 Widgets: Fixed an issue where filter limits applied to search Widgets on a Dashboard were not being applied.
- DR 34918 Browser Client: Fixed an issue where simultaneous access by multiple users could cause a file locking scenario.
- DR 36266 Forms: Fixed data filtering on the dialog for linking Configuration Items to other Business objects.
- DR 37923 Web Applications: Removed excessive "Duplicate script key being added with key" messages that were being generated in log files.
- DR 39740/DR 43519 Browser Client and Portal: The Related Item Selector now correctly sets a Requestor if the field is already populated with a value.
- DR 41920 Service Catalog Templates: Fixed an issue that allowed retired Service Catalog Templates to be run. Retired templates cannot be selected in Incidents, however.
- DR 42387 Browser Client: Fixed an issue where clicking the Knowledge Search button on the toolbar only displayed Problem search results.
- DR 42433 CMDB: Fixed an issue that caused an exception error when using the Remember Current Groupings function in the CMDB.
- DR 42449 Browser Client: Resolved an issue where if an item was selected twice in the Related Item Picker, duplicate error windows displayed.
- DR 42509 One-Steps: Fixed an issue that caused e-mail sent through One-Steps to lose rich text formatting.
- DR 42584 Browser Client: Improved the performance of redrawing full-screen forms (example: Incident) in Internet Explorer and Edge.
- DR 42763 Logging: Moved the CorrelationID to the front of the message to prevent truncation.
- DR 42865 Searching: Fixed an issue with the Search Editor so the correct DateTime value is selected when editing existing search criteria.
- DR 42903 Blueprints: Fixed an issue that hid the OK and Cancel buttons in the client approval e-mail message edit dialog.
- DR 43055 Browser Client and Portal: Fixed an issue where broken images were returned when linking directly to Knowledge Articles using Windows credentials another site that used HTTP referrer calls.
- DR 43071 Forms: Fixed an issue that caused an object reference error when there is a group member field filter on a Related Item Picker.
- DR 43073 Browser Client: Fixed an issue in the merge dialog box which could lock the Browser Client.
- DR 43085 System Analyzer: Fixed an issue that caused the System Analyzer to continue logging even though it was stopped.
- DR 43119 CSM Browser and Portal Client: Fixed an intermittent issue in the Browser client where e-mail messages sent from the e-mail menu or via a One-Step are never sent and do not appear in the Journals.
- DR 43156 Data Imports: Fixed issue with using a filter while importing from an external data source.

- DR 43184 Email and Event Monitor: The Email and Event Monitor now checks for def updates every five minutes; users will no longer need to restart the Email and Event Monitor after every change.
- DR 43206 E-mail: Fixed an issue that caused rich text formatting to be lost in the mail history record when sending an e-mail via a One-Step.
- DR 43224 Globalization: Fixed an issue where a translated value in German caused an error when publishing a Blueprint.
- DR 43335 Reports: Fixed an issue that caused some reports to produce no data when based on a related entity with a constraint that contains less than or greater than.
- DR 43380 Portal: Fixed an issue that caused a blank page to load when Users accessed a Portal site for a non-English culture. This problem only occurred with SAML logins.
- DR 43404 Prompts: Fixed an error on prompt grids that caused an error when selecting an owner.
- DR 43431: Fixed an issue that cause the browser to go to an invalid state when Users clicked the Cancel button on the Role Selection dialog.
- DR 43471 Expressions: Fixed an issue that caused Expressions to lose image values when the Expression was edited.
- DR 43475 Browser Client: Fixed an issue with the Date/Time control that prevented users from selecting and modifying values if the control was initially disabled.
- DR 43524 Globalization: Fixed an issue that caused the Automation Process server to generate errors when running on a machine that has its regional settings set to a culture that is not one of the CSM globalized cultures.
- DR 43536 Globalization: Fixed an issue that caused new Business Object Group Members to have to the same alias as the group leader in all languages by default. This problem caused Blueprint Scan errors. The Group Member now has the name of the object in which it was created for all cultures.

CSM 9.2.1 Fixes List

- CSM-15717 CSM Desktop Client: Fixed an issue that repeatedly prompted users to enter a date range when attempting to sort search results.
- CSM-16074 Dashboards: Fixed an issue where navigating away from a Dashboard chart widget that displays an error range caused an exception message to be displayed in the chart area.
- CSM-17166 CSM Browser Client: Fixed an issue on the Incident pop-up grid that caused the owner selection to not save correctly.
- CSM-17253 Foreign Keys: Fixed an issue that prevented constraints from functioning when foreign keys were enabled.
- CSM-17368 Foreign Keys: Fixed an issue that prevented some foreign keys from being updated in CSM Administrator. This typically occurred when the foreign keys used a foreign key relationship. In addition, an irrelevant warning that appeared during a Blueprint scan has been removed.
- DR 5206 CSM Form Arrangements: Fixed an issue where a tab in a Form Arrangement displays a default Grid instead of the custom Grid.
- DR 42673 CSM Scheduler: Fixed an issue that caused scheduled jobs to indicate an error despite success.
- DR 42834 CSM Web Application: Fixed an issue with a low-level .Net exception that caused the application pool to crash and restart.
- DR 42924 CSM Security: Fixed an issue where the password text box would not allow more than 20 characters.
- DR 43036 CSM Managers: Fixed an issue where copying items in managers caused errors.

CSM 9.2.0 Fixes List

- CSM-2452 Cherwell Rest API: Implement final URI response posting.
- CSM-2879 CSM Security: You can now enforce security for Fields that are validated from Lookup Tables. If you enable Lookup Table security, be sure to review and modify Lookup Object security rights for all security groups in your system.
- CSM-10054 Customer Portal: Fixed an issue where MRU (Most Recently Used) Searches did not display in the Search bar drop-down during the current session.
- CSM-10974 Browser Client and Customer Portal: Fixed an issue that caused the down arrow in the account information area to display a white background when the button was clicked. Affected Internet Explorer only.
- CSM-11032 Browser Client and Customer Portal: The User Name field has been relabeled as the User ID field on the Sign-in pages.
- CSM-12390 CSM One-Steps: Fixed an issue with One-Step processing that prevented Field values in Relationships from being retrieved correctly.
- CSM-13867 Browser Client and Customer Portal: Fixed issue that prevented data from a Relationship from appearing in a Grid. This problem occurred when the Relationship load options are set to Load Keys Only.
- CSM-13885 E-mail Attachments: Fixed an issue that prevented the current record from showing a list of attachments.
- CSM-14005: Fixed wording in Browser Application settings to clarify application pool idle time configuration.
- CSM-14010 CSM: Imported images will be cached in memory for 1 hour to improve performance.
- CSM-14422 Installer: You must install CSM as a user with administrator rights. This includes all components, including Auto-Deploy.
- DR 25151 CSM Browser Client: Fixed an issue that caused a "Not Authorized to Edit Report" error for Users with run-only Report access.
- DR 40834 Security: The logged in and logged out dates in the User Log are now both displayed in UTC.
- DR 42455/36903 CSM Authentication: Fixed an issue where query string parameters were incorrectly appended to existing query string parameters.
- DR 42477 CSM Browser Client: Fixed an issue that caused Chrome and Firefox to download multiple copies of attachments on Incident records.
- DR 42517 Cherwell REST API: Fixed an issue that prevented the REST API operation `api/v1/getbusinessobjectattachment` from working properly.

CSM 9.1.1 Fixes List

- DR 16135 CSM Calendars: Fixed an issue that caused the application to become unresponsive when enabling legend items.
- DR 29840 CSM Email: Fixed an issue that caused some e-mail attachments to be deleted.
- DR 33253 CSM Portal: Updated Kendu UI library from version 2016.2.714 to version 2016.3.1118 to address copy and paste issues in Internet Explorer 11.
- DR 34918 CSM Web Applications: Fixed an intermittent problem with broken images.
- DR 35971 CSM Browser Client: Fixed an issue that caused duplicate dialog boxes to open when a menu item was selected.
- DR 36045 Expressions: Fixed an issue that failed to evaluate Business Object and Business Object Form Expressions.
- DR 37842 CSM Browser Client: Fixed an issue that caused high CPU usage when using old Dashboard themes.
- DR 39596 CSM Web Applications: Fixed an issue in CSM Browser Client and Portal run time registration for Dashboards and Widgets that caused dependency failed errors.
- DR 40496 CSM Authentication: Added a configuration setting in the Cherwell Service web.config file to indicate if an Identity Provider is SAML or not.
- DR 41933 CSM Application Server: Added a web farm mode check to ensure Desktop Client users will not experience disconnects while active.
- DR 42504 CSM One-Steps: Fixed an issue with One-Step prompt logic that when configured to return a single field would return an entire row instead.
- DR 42620 CSM Scheduler: Fixed an issue that blocked database calls.

CSM 9.1.0 Fixes List


- DR 16135 CSM Calendars: Capped Calendar appointments at 10,000 to prevent Calendars from not responding when too much data is returned.
- DR 16157 CSM Grids: CSM now respects the Windows Regional Settings for currency formats in the CSM Desktop Client. This change fixed an issue that caused an additional space to display for Currency Fields in Grids.
- DR 31052 CSM One-Steps: Fixed an issue that caused incorrect link formatting in e-mails originated from One-Steps. This problem occurred when the "[LINK]" method was used.
- DR 35372 CSM: General security fix.
- DR 35624 CSM Grids: Fixed an issue that caused Numeric Fields with a ShowBlank attribute to show 0 as a value rather than show a blank value.
- DR 36151 CSM Reports: Fixed an issue that caused an incorrect list of child items to be returned in a Report that uses a join table.
- DR 36563 CSM One-Steps: Fixed theming issues in the One-Step Editor.
- DR 37745 CSM: Fixed an issue that caused potential performance problems due to text parameters for a Unicode database that were not always specified as Unicode.
- DR 38672 CSM: General security fix.
- DR 38742 CSM Browser Client: Fixed an issue that caused an error when Users merged child records for a Relationship that has the Load Keys Only option set.
- DR 39060 CSM Dashboards: Fixed an issue that caused an error to occur when Users clicked a toolbar button but they did not have an object selected.
- DR 39286 Cherwell REST API: Fixed an issue that prevented users from getting a new access token if they were already logged in.
- DR 39365 Cherwell REST API: Fixed an issue that prevented the getbatchuser operation from returning records for Users who have a CSM login ID and a Windows login ID associated with their account.
- DR 39494 CSM Expressions: Fixed an issue that prevented Users from selecting condition options after they deleted an Advanced condition from an Expression clause.
- DR 39577 CSM Scheduler: Updated process terminations and fixed an issue where multiple scheduling jobs were incorrectly shown as running.
- DR 39592 CSM Desktop Client: Fixed an issue that caused the Desktop Client to fail when spell check was used with Rich Text Fields.
- DR 39846 CSM Browser Client (Accessibility): Fixed an issue that caused focus on the Related Item Selector to be lost after Users typed a few characters, then pressed the Tab key and selected an item from the pop-up window.
- DR 39917 Cherwell REST API: Fixed an issue that caused an object null reference error for the api/v1/getsearchresults operation.
- DR 40809 CSM: Changed the icon for the Action button to a Play arrow.
- DR 40047 CSM Blueprints: Fixed an issue where changing the size of a column used by an index caused an error during publish.

- DR 40099 CSM Modifiers: Fixed an issue that caused Expressions with Tokens to fail after a Modifier was removed.
- DR 40276 CSM Administrator: Fixed an issue that prevented the Relationship Properties dialog from being resized horizontally.
- DR 40810 CSM Item Managers: When a Manager dialog is opened from a selected Action, the Action is now highlighted in the Manager.
- DR 41011 CSM German: Corrected translations for the Requester Fields Tree Node Title and Owner Fields Tree Node Title in the Query Builder.
- DR 41238 CSM Authentication: Fixed an issue that caused an exception to occur when Users attempted to log in to the Browser Client and Mobile Clients. This problem occurred when Users did not have rights to view common fields of other Users.
- DR 41432 Cherwell REST API: Fixed an issue in the REST API Discovery tool (Swagger) that prevented passwords with special characters from working correctly.
- DR 41462 Cherwell REST API: Added final URI redirect posting of a form to have SAML work for CSM desktop clients and Web Applications.
- DR 41717 CSM Application Server: Added improved logging and exception handling
- DR 41866 CSM Authentication: Added two new SAML Security options to select the specific type of signing being used by the selected identity provider.


System Requirements

Learn about system requirements for CSM clients, servers, and third-party applications.

Minimum System Requirements (Client)

System Processor:	Dual Core CPU or equivalent (1)
System Memory:	3 GB (4 GB or more recommended)
Operating System:	Windows 10, Windows 8/8.1 x86 or x64 Pro or Enterprise editions, or Microsoft Windows 7 Service Pack 1 (SP1), x86 or x64 editions
Free Disk Space:	Minimum: 1.5 GB (2 GB recommended)
Networking:	Internet access required for online documentation feature
Desktop Browser (5):	<p>CSM works with Internet Explorer 11+ and the current versions of the following browsers:</p> <ul style="list-style-type: none"> • Google™ Chrome™ • Firefox • Microsoft Edge • Mac only: Safari
Mobile Browser (5):	<p>CSM works with:</p> <ul style="list-style-type: none"> • Safari on the latest version of iOS (version 11) • Chrome on the last two major versions of Android: Nougat (version 7.x) and Oreo (version 8.x)
Cherwell Mobile Devices:  Note: The Cherwell Mobile applications for iOS and Android were deprecated in March 2019 and are no longer available in their respective application stores.	<p>Cherwell Mobile 2.0 for iOS: iPhone®/iPad®/iPod Touch® (iOS 8.0+)</p> <p>Cherwell Mobile for Android: Android® 4.4+</p>
Other:	Microsoft .NET 4.6.2+

Minimum System Requirements (Server)

System Processor:	Dual Core CPU or equivalent (1)
System Memory:	4 GB (6 GB or more recommended). Note that if you have SQL Server® installed on the same server, more RAM is recommended.
Operating System:	Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, or Microsoft Windows Server 2008 R2
Free Disk Space:	Minimum: 5 GB Recommended: 10 GB
Networking:	Dual Core CPU or equivalent (1) Internet access required for online documentation feature
Database:	Microsoft SQL Server 2016, Microsoft SQL Server 2014, Microsoft SQL Server 2012, or Microsoft SQL Server 2008 R2. Database can be on a separate server.  Note: Full-text indexing must be enabled. Requires SQL Standard Edition (minimum), either a Processor License or a Server License with sufficient number of Client Access licenses.
Other:	Microsoft .NET 4.6.2+ Internet Information Services (IIS) 7.5+ (required for Web Applications and when hosting the Cherwell Application Server in IIS) (2)

Other Requirements

Bomgar (Platform integration):	Versions 16.1.3, 15.2.1, or 15.1.4
Bomgar mApp:	Refer to Bomgar Integration mApp documentation on the Cherwell mApp Exchange .
E-mail:	Server running SMTP and POP or IMAP, Microsoft® Exchange 2016, Microsoft® Exchange 2013, or Microsoft® Exchange 2010
LDAP:	Microsoft Active Directory® 2003+, Novell® eDirectory™. Other LDAP servers might allow some/all functionality.

Trusted Agent Server (3):	Dual Core CPU or equivalent (1); 4 GB (6 GB or more recommended); 1 GB free disk space; Microsoft 2008 Server R2, Server 2012, or Server 2012 R2
Load Balancing (3) (4):	Redis® Server 2.8.x or Redis® Labs Enterprise Cluster (RLEC), any version.

1. Recent model required.
2. If you host the Cherwell Application Server in IIS, Windows Communication Foundation (HTTP and Non-HTTP Activation) components are also required.
3. Optional. The Trusted Agent Server, Redis® Server, and Redis® Labs Enterprise Cluster are installed separately from the CSM server.
4. Testing was performed against open source Redis 2.8. No known compatibility issues exist with later Redis versions, however.
5. CSM may work with other browsers, but certain features may not be available or may not work as expected.

Revision History

A list of CSM revisions by date and changes.

Revision	Date	Changes
9.3.2	April 2018	Added CSM 9.3.2 fix list.
9.3.1	February 2018	Added CSM 9.3.1 fix list. Minor help updates.
9.3.0	December 2017	Added CSM 9.3.0 features.
9.2.0	August 2017	Added CSM 9.2.0 features.
9.1.0	March 2017	Added CSM 9.1.0 features.
9.0.1	February 2017	Added CSM 9.0.1 features.
8.3.2	December 2016	Added Server Farm support for Redis® Labs Enterprise Cluster.
8.3.1	November 2016	Added CSM 8.3.1 updates; context-sensitive help.
8.2.1	29 July 2016	Minor updates.
8.2.0	30 June 2016	Added CSM 8.2.0 features.
8.1.0 Rev1	29 April 2016	Minor updates.
8.1.0	31 March 2016	Added CSM 8.1.0 features, including new documentation platform.
8.0.0 Rev1	29 January 2016	Minor updates.
8.0.0	30 December 2015	Added CSM 8.0.0 features.
7.00 Rev1	31 October 2015	New mApp Tech Notes; added early versions of What's New feature lists; additional minor updates.
7.00	30 September 2015	Added 7.00 features.
6.00 Rev1	31 August 2015	New mApp Tech Notes; Portal content updates.
6.00	31 July 2015	Added 6.00 features.
5.00 Rev8	13 April 2015	New mApp/Integration Tech Notes, and new content for Cherwell Mobile Browser, CSM Item Managers, Tokens, RSS Feeds, and Widgets.
5.00 Rev7	07 March 2015	New mApp/Integration Tech Notes, and new content for CSM Item Managers, Tokens, LDAP, Business Object Views, and Forms.
5.00 Rev6	30 January 2015	Added 5.11 features. Help system also includes new mApp and Integration Tech Notes, and new content for Business Objects, Relationships, Fields, Forms, Reporting, Data and Databases, and Table Management.
5.00 Rev5	09 January 2015	New mApp/Integration Tech Notes, and new content for Business Objects, Data/Databases, Relationships, Fields, Forms, and Reporting.

5.00 Rev4	17 December 2014	New mApp/Integration Tech Notes, and new content for Business Objects, Data/Databases, Relationships, Reporting, Scheduler, and Themes.
5.00 Rev3	01 December 2014	Added 5.10 features. Help system also includes new mApp Tech Notes and new Integration Tech Notes.
5.00 Rev2	31 October 2014	Minor fixes and some new content (ex:3-minute videos, updated system requirements, new integration and mApp topics, etc.).
5.00	31 July 2014	Added 5.00 features. Help system also include a major reorganization, many new sections (ex: CSM Essentials), and new content for all features, with particular emphasis on our default system (Business Processes, how to implement, logging records, etc.).
4.60b	04 November 2013	New content for E-mail, Blueprints, One-Steps, Browser Client, Portal, Problem Management, and Change Management.
4.60	28 June 2013	Added 4.60 enhancements. Also, new content for Business Processes, Queues, External Data and Databases, Knowledge, and Working with Records (Service, SLA, Incidents, and Knowledge).
4.30	26 November 2012	Added 4.30 enhancements. Also, new content for the Portal, Security, Calendars, Searching, Dashboards, and Widgets.
4.0 Rev2	10 August 2012	Updates to Portal, context-sensitive link changes.
4.0-1	30 July 2012	Updates to UI, Security, Portal, Dashboards, Calendar, Installing, and CDI.
4.0	30 April 2012	Help system beta.

CSM Documentation Archive

The Product Documentation portal provides a single point of entry for Cherwell products starting with CSM 9.3.0. Older versions of product documentation are available, however.

Documentation for previous versions of Cherwell products can be found at these locations:

- [CSM 9.2.0](#)
- [CSM 9.1.0](#)
- [CSM 9.0.1](#)
- [CSM 8.3.2](#)
- [CSM 8.2.1](#)
- [CSM 8.1.0](#)
- [CSM 8.00](#)
- [CSM 7.00](#)