



CSM 9.7.0 Release Notes

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The Cherwell Software product suite includes:

- Cherwell Service Management
- Cherwell Asset Management

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Release Notes

View CSM enhancements and fixes, organized by version.

CSM 9.7.0 Enhancements List

CSM 9.7.0 Release Notes: enhancements include new features and changes in functionality.

- CSM-2945 Globalization: You can now view and save translation changes for a Language Pack. The log contains changes to Lookup tables, definitions, Portal strings, and platform strings. This enables you to understand the impact of your translations once you publish a Blueprint that contains the Language Pack.
- CSM-2949 Globalization: You can now change the installed culture for your system. This feature is intended for customers who upgraded CSM from a version earlier than 9.2.0 who may have chosen the incorrect installed culture during the upgrade process. You should carefully read the documentation and understand the impact of this change before changing the installed culture.
- CSM-34712 Globalization: Globalization is automatically enabled for all CSM systems. You cannot disable Globalization features, but you can hide or remove the culture selector globally or for specific Roles and users.
- CSM-3497 Documentation: Published recommendations for securing and testing on-premise CSM environments, including the database, Cherwell Service Host, and Internet Information Services (IIS).
- CSM-35036 Forms: Added functionality that shows an asterisk suffix on labels for required fields. This applies to forms in the Desktop Client, Browser Client, and Portal. The Form Editor in the Admin Client displays the asterisks on labels only when the associated field is configured as unconditionally required.
- CSM-36542 Accessibility: The Language Attribute for the Browser Client and the Customer Portal is now set within the HTML of the page. This allows screen readers to read the content in the appropriate language and facilitates automatic translation of content.
- CSM-38068 Branding: The Cherwell Service Management branding and corporate identity has been updated throughout the CSM Suite, including all of the following: About Modal, Auto-Deploy Config icon, Auto-Deploy icon, Cherwell Outlook Addin Installer icon, Cherwell Tools icon, Command Bar Editor icon, CSM Administrator icon, CSM Administrator Desktop shortcut, top-left of CSM Administrator windows, CSM Desktop Client icon, CSM Desktop Client Desktop shortcut, top-left of CSM Desktop Client windows, CSM Desktop Client Wizard Sidebar, Apply mApp Wizard Sidebar, CSM Desktop Client Wizard Top Banner, Definition Editor icon, HTML Editor icon, Import icon, License Generator icon, Server Config icon, Server Manager icon, System Restore icon, System Upgrade icon, Trebuchet Admin icon, Trebuchet App icon, Trebuchet Import Utility icon, Trebuchet Server App icon, Trebuchet Server Config icon.
- CSM-40477 Globalization: Blueprints created when a Language Pack is applied now only include definitions modified by the Language Pack.
- CSM-41016 Web Applications: Upgraded the Kendo control suite to Version 2019.1.220 (from 2017.2.621) and the jQuery Version to 3.3.1 (from 3.2.1), updating the following UI components: Grids, Modals, Dashboards, CSS Styling, Accessibility, Toolbars, Kendo Controls (Date/Time Picker), Query Builder, and Manager.
- CSM-41696 Globalization: You can now create and apply Language Packs that contain only new or modified definitions in a Blueprint or mApp Solution.

- CSM-41762 Globalization: When a new culture is added, newly created culture-specific fields are automatically populated with data from the primary culture. This prevents the culture-specific Fields from having null values.
- CSM-41787 Globalization: You can now choose a specific culture to use when a One-Step Action is run. This is particularly useful for ensuring that email messages sent by a One-Step Action are translated into a specific language.
- CSM-42349 Globalization: The culture selector that enables users to quickly change display languages in all CSM clients now includes only one choice that controls platform and content strings. The user's last culture selection is saved in all clients. In addition, date, time, number, and currency formats are now determined by the user's operating system's region setting for all CSM Windows-based clients and for the Microsoft Edge browser. For other web browsers, date, time, number, and currency formats are determined by the browser's language settings; the top language set for a browser is used for these formats.
- CSM-42774 Authentication: The Service Monitor and third-party reporting applications now provide a newly-designed login page for Customers and users to authenticate via a REST API. Therefore, the REST API must be installed on at least one server in the configuration. Error messages have been updated to assist with login errors.
- CSM-43013 Forms: Implemented an option to render group boxes with rounded corners in all clients. Exception: There is a known bug that prevents Internet Explorer from rendering group boxes with rounded corners. This is a limitation in the browser itself.
- CSM-43125 Forms: Added Form Editor options to control corner styling (System Default, Rounded and Right-angled) for web applications.
- CSM-43545 Accessibility: Added alternative text to images in the menu and header to provide information to screen reader users.
- CSM-43658 Accessibility: Added alternative text to toolbar images to provide information to screen reader users.
- CSM-44200 Web Applications: Added default system-level setting for controls' corner styling in web applications.
- CSM-44296 Web Applications: Added a Rounded Corner style option for web controls.
- CSM-44410 Forms: Added an option to Business Object properties allowing Administrators to enable/disable a required fields identifier.
- CSM-44843 CSM Administrator: Color lists in both the Custom Expression dialog and the Stored Expression dialog are now consistent in the context of a Business Object form and Dashboards. The Stored Expression dialog defaults back to the Default Theme colors when one of these contexts is not available.
- CSM-45649 Forms: Added "Clone this form..." option to the Form Editor.
- CSM-46715 Grids: All Grids in the Desktop Client, except those in Form Arrangements, now include all rows of data available when you Print or Export to CSV. These Grids display only the first 20,000 rows of data even if there is more data available. Grids in the Form Arrangements are not limited to 20,000 rows of data for display, print, and export.
- CSM-46775 Cherwell REST API: Added a new version of the REST API operation "storedsearches" which allows for an unlimited number of results to be returned. The prior version had a cap of 100,000 records.

- CSM-47131 Performance: Made improvements to increase scalability and reduce memory consumption.
- CSM-47390 Grids: You can now select multiple records in Search Results Grids in both the Desktop Client and Browser Client and run a One-Step Action or export those records to a file. The Grid menu bar now displays a Clear option for removing all records from the selection and a Selected option for providing a total count of records in the current selection. A check box in the Grid header allows you to select or clear all records on the current page. Note that moving to a new page in the Browser Client (with pagination enabled) clears the selection..
- CSM-47546 Portal: Added a new Site Manager setting to show/hide toolbars on Business Object Forms within the Portal Site. When filtering and sorting records in a Search Results Grid, the current selection of records is cleared after applying the sort or filter action. In addition, after applying a filter and selecting records in the filtered list, if you clear the filter, that selection is also cleared.
- CSM-47574 Browser Client: Removed duplicate warn-level log statement for the "The pre-requisite UpdateCommandPreRequisite was not satisfied" error message.
- CSM-47727 Grids: Grids displaying search or query results (except Form Arrangement) are limited to a maximum of 20,000 rows even though there may be many more rows of data available. Printing or exporting a grid will include all rows of data.
- CSM-47783 Service Monitor: Updated logging message format to use JSON so that messages are easier to read and manage.
- CSM-47851 Cherwell Service Host: Improved vertical scale of microservices to better handle demand spikes and ensure consistent scale down; introduced readable queue names in CherwellMQS; and improved the performance and stability of the queuing system.
- CSM-47878 Action Catalogs: All layers of a Cards with Search Action Catalog can now have the Card styling.
- CSM-47937 Grids: You can now export .xlsx (Excel) files from Grids in the Desktop Client, but these exports reflect the displayed Grid and are limited to the number of rows of data in the display.
- CSM-47974 Business Objects: Added the ability to create a customized Customer group Business Object.
- CSM-47981 Table Management: In the Browser Client, Table Management now has wider drop-down lists for the Type, Search, and Changed fields. In the Desktop Client, Table Management, CMDDB, and Contact Manager Search now has wider drop-down lists for Search fields. The combo boxes on the Related Clause Editor are now larger.
- CSM-48094 Action Catalogs: You can now add filters to an Action Catalog.
- CSM-48357 Grids: Search results in the list view will now display the row number of the results displayed on the page and the total number of results The results description will follow this pattern, "X to Y of [total in view]." The limit of records to display is 20,000. If fewer than 20,000 records are returned by the search, the total will be listed. If the actual record count is higher than the 20,000 record limit, another line of text appears displaying the total number of records along with a message saying that all records can be viewed by exporting the result set.
- CSM-48591 Portal: Dashboards can be configured individually to allow visibility for anonymous users in the Portal. When not configured, the anonymous user is prompted to log in to view the Dashboard. The configured Startup Dashboard is automatically visible to anonymous users regardless of the configured setting. You can now allow anonymous users to view the Service

Catalog by enabling an Action Catalog Widget for anonymous view and linking to the Action Catalog from a Dashboard, Menu link, or Button. Business Object Forms can be configured to allow anonymous user access in the Portal. When an anonymous user clicks an authenticated action on a form, they are prompted to login. After successful login, the action runs. A new System Function `ViewAnonymous()` was added to be used as a visibility expression for an item on a Form or Dashboard. It can be set as a Boolean Property wherever a System Function can be accessed (e.g., One-Step Action, Expression, etc.). Set the value to `False` to restrict anonymous view.

- CSM-48642 One-Step Actions: Added the ability to run One-Step Actions from the Cherwell REST API.
- CSM-48645 One-Step Actions: Added the ability to run a Stored Import from a One-Step Action.
- CSM-48651 CSM Administrator: Added an option to the System Maintenance window for the ability to fix mismatched Definition IDs.
- CSM-48736 mApp Solutions: Administrators no longer have an option to customize the mApp Solution during installation where customization could lead to update issues.
- CSM-48738 mApp Solutions: mApp Solution developers can now select an option to prevent customization of the mApp Solution during installation.
- CSM-48788 Forms: Improvements were made to the Control Size/Position properties dialog in Form Designer to make entering values easier by auto-selecting existing values overtyping (when switching focus via TAB or ALT+ shortcuts).
- CSM-48789 Business Objects: The Health Check and Blueprint scan report errors if one of the reserved Business Object attributes is assigned to multiple Business Objects or if a Business Object has more than one reserved Business Object attribute. The reserved Business Object attributes are: `CustomerBusinessObject`, `ConfigurationItemBusinessObject`, and `DefaultPrimaryBusinessObject`.
- CSM-49067 Globalization: You can now change cultures as you manage Blueprints without closing the Blueprint. Only content strings change when you switch cultures in a Blueprint, unless you close the Blueprint. In this case, CSM Administrator uses the last-selected culture from the Blueprint.
- CSM-49104 CSM Administrator: Added a new system function to evaluate the required for save state of a control's associated field.
- CSM-49151 Action Catalogs: Added new controls to enable the user to select field values for Subtitle, Rating, and Footer. These will be enabled when the user selects the option "Always show items as cards". The existing Title and Description combo boxes are now required and work the same as before.
- CSM-49152 Action Catalogs: New template has been added in support of the new subcategory card layout.
- CSM-49156 Action Catalogs: Added the ability to create multiple sorts for a Cards with Search style Action Catalog, which can be triggered at the base level of the Action Catalog in the Portal.
- CSM-49235 Cherwell REST API: The "Copy API URL to Clipboard" action from Search Manager now uses the V2 version of the REST API method `storedsearches`.
- CSM-49243 One-Step Actions: You can now create a custom log when a One-Step Action is run. The log created by new Write to Log Action includes content defined in the Action, along with information based on the log level defined in the Action. The process or client used to run the One-Step Action determines the log location.

- CSM-49482 Globalization: All Portal Site translations are now managed through Language Packs. The ability to translate Portal content strings with an exported XML file has been removed. After the upgrade, Portal Sites that have been translated to languages that are not currently enabled elsewhere in the system are added to the enabled cultures list on the Manage Cultures dialog. To modify translations, create a Language Pack with the Portal Content Strings scope.
- CSM-49517 Business Objects: Removed the conversion of a legacy Approval URL request.
- CSM-49518 Business Objects: Added the ability to create a customized Journal Business Object, such as Journal OOTB.
- CSM-49899 Foreign Keys: Added a Sync option to the Field Validation/Auto-populate page that enables you to copy validation fields that are shared across Group Objects and Views.
- CSM-49902 Foreign Keys: Added the ability to automatically configure foreign key fields shared across Group Members and/or Views. This ensures that shared foreign key fields validate from the same table and field so that queries retrieve correct data. Use the Foreign Key Administrator to automatically configure all shared foreign keys in your system.
- CSM-50458 One-Step Actions: You can now select any Field and Field Value for the Go to a Record Action. If multiple records contain the specified value, the first record found is returned. After the upgrade to CSM 9.7.0, existing Go to Record a Actions that go to an arbitrary record will use the RecIDs of the Business Object and Field values.
- CSM-50472 Business Objects: Added the ability to create a customized Default Primary Business Object, such as Incident OOTB.
- CSM-50971 CSM: The Definition Editor was deprecated in March 2019 and is no longer available for upgrades or new installations of CSM.
- CSM-50987 CSM Administrator, CSM Desktop Client: The login dialog has been updated to match the new branding and corporate identity.
- CSM-54084 CSM Web Applications: Added support for on-premise customers to enable dynamic compression in Internet Information Services (IIS). This configuration can potentially improve response times for CSM Web Applications, particularly the Browser Client and Customer Portal. In many cases, the performance improvements are dramatic, so Cherwell highly recommends that you enable dynamic compression for all IIS instances. To learn more about dynamic compression and how to enable it, see <https://docs.microsoft.com/en-us/iis/configuration/system.webserver/httpcompression/#setup>.
- DR 15137 Business Objects: Replying to an email from the Journal - Notes now updates the Last Modified date/time of the top-level Business Object.
- DR 30196 Browser Client: Added the ability to search for items in Browser Client Managers.
- DR 31239 Grids: When editing a Grid configuration in the Administrator Client, you can select a column in the grid and then set horizontal alignment properties for that column (center, right, or left).
- DR 40045 Documentation: Clarified that the E-mail and Event Monitor processes emails using addresses in the TO: and CC: fields first, and then the CC: field. Also noted that email addresses in the BCC: field are not visible in Journal entries.
- DR 43252 Expressions: Added a new format for links in Custom Expressions: [LINK text|url], and added support for text before links in both formats.
- DR 43615 Documentation: Added content to clarify when conflicts might occur during concurrent development of fields on a Form.

- DR 44080 Documentation: Added wording to clarify that the System_LDAPPath field is a reserved field and is not for Customer mapping.
- DR 44910 Quick Search, Form Arrangements: Added a Show More link to the stacked zone in Portal Form Arrangements and the Browser Client and Portal Quick Search results.
- DR 44559 CSM: General security fix.
- QWIK-356 Blueprints, mApp Solutions, One-Step Actions: Added the ability to specify a post-publish One-Step Action for a mApp Solution.

CSM 9.7.0 Fixes List

CSM 9.7.0 Release Notes: this list describes fixed issues that were reported in previous releases.

- CSM-11646 Globalization: Fixed an issue where created date/time on the Manage Language Packs dialog was showing in UTC rather than the local timezone, which did not match the format for the Last Modified date/time column of same dialog.
- CSM-35566 Web Services: When using a JSON stored value or typed value within a One-Step Action, the “flattened” display better represents the JSON structure.
- CSM-37058 Dashboards: Dashboard Filter Widget text now displays correctly when hovering over it.
- CSM-38926 Dashboards: Translated messages now appear when there is no data series for a chart on a Dashboard.
- CSM-40203 Grids: Fixed an issue that prevented elements on the Grid toolbar from displaying a visual indicator when they have focus on the screen, allowing users to navigate the toolbar using the Tab key more efficiently.
- CSM-41956 Globalization: Fixed an issue that prevented renaming of Language Packs from the Language Pack Editor and Language Pack Settings dialog in CSM Administrator.
- CSM-42340 mApp Solutions: Fixed an issue where an error was sometimes shown when preparing a mApp Solution for distribution.
- CSM-42551 Dashboards: Changed how user date and query criteria are displayed when editing Dashboard Chart Widgets to better reflect which values apply to all chart series versus those that are specific to a single series.
- CSM-43081 Browser Client: Fixed an issue that cause display issues with Matrix Selector Widgets when users scrolled the Form in the browser window.
- CSM-43198 Globalization: Fixed an issue where the Create Language Pack Wizard would sometimes allow you to create an empty language pack bundle with no Language Packs inside it in certain edge cases (this would generally only happen in development environments when an older database that does not contain any TrebuchetPlatformResource records was used, but could have occurred in environments if an old database was restored using the System Restore utility and no further action was taken to populate the TrebuchetPlatformResource table). In such scenarios, the Create Language Pack Wizard now provides an error message and prevents completing the wizard so the empty LP bundle is not created.
- CSM-43570 Forms: Fixed an issue with Browser form controls that update color or style via an expression.
- CSM-44939 Portal: Fixed an issue where the language picker in the Portal Client did not correctly highlight the currently selected language.
- CSM-44943 Browser Client: Updated the manager view within the Browser Client so long text strings (for folders) display correctly.
- CSM-44952 Prompts: Fixed an issue with the Prompt for File Action that excluded .htm files when it should have allowed both .html and .htm file extensions.

- CSM-45032 Browser Client: Fixed an issue where access to a Business Object may be denied because a Relationship exists between the Business Object and another item the user does not have view rights to.
- CSM-45663 One-Step Editor: Fixed an issue where scrolling over the left sidebar pane (Actions pane) also scrolled/zoomed the designer board.
- CSM-45959 Database: Fixed in issue that occurred when attempting to connect to the database using a password containing a reserved character. Implemented special handling for reserved characters (single-quote, double-quote, and semicolon).
- CSM-46147 Site Editor: Fixed an issue in the Administrator Site Editor where if a non-default language pack is in use the Menu properties would not save.
- CSM-46151 Expressions: Fixed an issue in the Expression Editor that, under certain conditions, caused the right side operand to be reset when switching between basic and advanced view or when selecting different nodes on the expression tree in advanced view.
- CSM-46235 Business Objects: Fixed an issue where a new Business Object Lifecycle State value could not be added if the new value started with the same text of an existing State value.
- CSM-46477 Form Editor: Fixed an issue where, under certain conditions, the background color of a Rich Text Box control did not display properly when opening a form for editing in CSM Administrator.
- CSM-46601 Browser Client: When searching by Relevance, the None option was removed from the Sort By drop-down list.
- CSM-46642 Portal: When "New Browser Window" is selected on the Portal, the site that displays on the new browser tab is now the same as the site on the initiating browser tab.
- CSM-46849 Globalization: [Font] and strings that start with "BO:" and "DefType:" are now excluded from Language Packs.
- CSM-46964 Forms: Fixed an issue where form names with special characters would not render in embedded forms or Form Arrangements.
- CSM-47032 Web Applications: Fixed a display issue in the email dialog where the Importance button was not correctly sized and centered.
- CSM-47040 Globalization: Fixed an issue that caused leading and trailing spaces to be removed when TSV files were imported into a Language Pack.
- CSM-47288 Performance Health Check: A friendly message now displays if the default email account is not set up when submitting Health Check report.
- CSM-47297 CSM Administrator: When attempting to add links to a Business Object that has no Relationships set in the Edit Visualization Dialog, you will now see a No Relationship warning.
- CSM-47406 Email: Made improvements to file mask text boxes.
- CSM-47432 Browser Client: Fixed an issue where more than one modal displayed when searching for Manager with no result.
- CSM-47553 Forms: Fixed an issue where selecting a border width added second border around a group box. Fixed an issue where group box border width was not editable via Form Editor. Fixed an issue where the Browser Client did not render any borders for a group box if the default border color was used.

- CSM-47580 Activity Pane: Fixed an issue where images embedded in rich text Activity Pane items showed a completely disabled mini toolbar for image editing when the image was clicked (in the Desktop Client). The mini toolbar is now completely hidden and does not appear when the image is clicked.
- CSM-47660 Forms: Fixed the default behavior of auto-sized tabbed group boxes. Now tabbed group box display text should be shown in full without any changes to the position property.
- CSM-47926 Forms: Fixed the drop-down selector when setting new Default Form. Default Form text in the selector should now work correctly and only show for the currently set default form.
- CSM-48684 Security: Fixed an issue where revoking some security rights could result in not being able to grant them again.
- CSM-48692 Report Error: Fixed an issue where users without permission to use arbitrary addresses tried to send error reports, and error occurred and the email failed to send.
- CSM-48755 Portal: Fixed an issue related to an anonymous user being prompted to log in after selecting an action (example: Portal Knowledge Article "Add Comment" button). Previously, when the User logged in, they were redirected to the home page and the Action would run. Now the user is able to log in and stay on the page running the action.
- CSM-48846 Browser Client: Fixed TabbedGroupBox to show title, based on details entered in another field.
- CSM-48860 Browser Client: Fixed an issue that was causing controls that had been disabled using a calculated expression to remain enabled.
- CSM-48941 Browser Client: Fixed title overflow for tabbedgroupboxcontrol by adding ellipsis styling.
- CSM-49193 Forms: Fixed an issue where configured borders on an image control on a Business Object form were ignored and not rendered in the Browser Client, despite being rendered correctly in the Administrator and Desktop clients.
- CSM-49240 Portal: The Portal Login Command now redirects to the authenticated home page after login.
- CSM-49650 Trusted Agents: Changed the default Trusted Agent Hub ping frequency from 30 to 20 seconds to prevent temporary disconnections based on SignalR timeouts.
- CSM-49685 Globalization: Fixed an issue that prevented foreign key IDs from being set correctly when Blueprints containing new Business Objects were published.
- CSM-49703 Forms: Fixed an issue with the form layout on the My Profile page. The user Details calendar icons are no longer cropped.
- CSM-49744 Globalization: The culture selector is now fully localized for the selected culture.
- CSM-49882 Activity Pane: Enlarged the sort control text to fit translated strings in German, the longest translation in our supported languages.
- CSM-49947 CSM Administrator: Fixed an issue where Chromium temp folders were not being cleared when creating an embedded browser.
- CSM-49976 Automation Processes: Fixed an issue that prevented Automation Processes from running when foreign keys were enabled for the State field and the event was triggered in other cultures.

- CSM-50074 Logging: Fixed an issue where some controls in the Log Viewer were not localized for cultures other than English.
- CSM-50153 Performance: Fixed issues to increase scalability and reduce memory consumption.
- CSM-50222 Grids: Fixed an issue with Desktop Client Search Results Grids so that searches can successfully group rows by a particular field when that field is also used to order the rows.
- CSM-50348 Email and Event Monitor: Improved functionality in next word and previous word modifiers.
- CSM-50353 Cherwell REST API: Fixed an issue that prevented the Sync Service from properly handling time differences when web and database servers have different times. The issue was not related to time zones because the times followed the UTC time standard; instead, the problem was caused when the servers varied in UTC by minutes or even a few seconds.
- CSM-50452 Security: Corrected security issue caused by subject line being interpreted by the Browser Client as html rather than text.
- CSM-50456 Exports: This change fixed an issue where CSV or text exports using the getsearchresultsexport REST API method took an excessively long time to complete.
- CSM-50582 Foreign Keys: Fixed readability issues with Store Foreign Key validation warnings that are longer than seven lines.
- CSM-50686 Table Management: Fixed an issue where the displayed result count in table management (Desktop Client) was improperly formatted.
- CSM-50928 Portal: Removed duplicate "Change Password" title from modal.
- CSM-51049 Content: ITIL and KCS options have been removed from the Process and Procedure property editor for Business Objects and Fields. ITIL and KCS icons have been removed from the Process and Terminology section of the Common Task Pane in the Desktop Client.
- CSM-51051 Business Objects: When scanning a Blueprint with an invalid Business Object database storage name, the resulting error is now more specific (example: storage name "User" is a reserved word).
- CSM-51126 Forms: Fixed an issue in the Form Editor where a label could be tied to more than one control.
- CSM-51182 Forms: Fixed an issue where adding a label to a Form being edited in a Blueprint, was not initially loading the Edit Tool Bar actions.
- CSM-51189 Dashboards: Dashboard search results Widget row height and web font size were reduced.
- CSM-51216 Email: Fixed an issue where trying to send emails to multiple recipients in a One-Step Action when using a SQL Server on an Amazon RDS instance caused the Desktop Client to lock up and eventually display an error message.
- CSM-51449 Action Catalogs: Fixed an issue where the Always Show Items As Cards check box was not enabled in other platform cultures.
- CSM-51555 Logging: Fixed an issue where log messages in EventLog did not display all data.
- CSM-51566 Security: The RabbitMQ password is no longer output in `_Trebuchet-CLC-rabbitmqinstall.txt` after installation.
- CSM-51660 Fields: Required fields now cannot be saved if the text only contains whitespace.

- CSM-51901 mApp Solutions: Fixed an unhandled exception when loading a mApp Solution with corrupt data.
- CSM-52391 Dashboards: Fixed a rare issue in the Desktop Client that resulted in a "Collection was modified" error when leaving a Dashboard or exiting the application.
- CSM-52439 Forms: The OnParentChanged event handler of the BusObForm class has been altered so that non-embedded forms do not need to take the AutoScroll property into account when adjusting the minimum form size. As a result, non-embedded forms now show scroll bars when being resized.
- CSM-53189 Email: Fixed an issue that caused the send-email dialog in the Desktop Client and mobile Chrome browsers to show the "Attach TO..." check boxes on top of the email text area.
- CSM-53476 Command Line Configure Utility: Fixed the incorrect error message that occurred when running Trebuchet.CommandLineConfigure.exe with an invalid environment value.
- CSM-53479 Prompts: Fixed an issue that allowed a prompt for date and time to be temporarily overwritten within a query expression when used with a Filter Widget.
- CSM-53488 Grids: Grid rows in the Browser Client now only show a single line of text (or as much of a multi-line text field as can fit on one line), so all grid rows will be the same height.
- DR 30592/DR 44667 E-mail and Event Monitor: Fixed an issue where the TextAfter modifier with option "to end of line" was not properly processing text in One-Step Actions.
- DR 42833 Forms: Updated radio buttons to group by parent container so that the same field can be set in multiple forms on the same page.
- DR 43003 Searching: Fixed an issue where DateTime math used in Expressions specified as the correct operand in search clauses would not yield the correct results.
- DR 43232 Grids: Fixed an issue where rows cannot be filtered in a grid when querying a column equal to a string containing apostrophes.
- DR 43272 Expressions: Fixed an issue where adding minutes/hours to a date based on business hours would round up the seconds to the next full minute, if the addition pushed into the next work day. Conversely, subtracting minutes/hours from a date based on business hours would round down the seconds to the previous full minute if the subtraction pushed into the previous day.
- DR 43553 Cherwell REST API: Fixed an issue in the REST API that excluded the search term parameter when running searches and exporting data.
- DR 43631 Printing: Fixed an issue in the Desktop Client where the number of copies in a print operation were not respected.
- DR 43632 Globalization: Updated logic to store the DateTime.MinValue as an ISO8601 format. This removes any local or cultural influence as the format is stored as an industry standard. Updated SystemUpdater to correct any existing customer Defs where the format has been stored as a known erroneous format.
- DR 43636 Grids: Fixed an issue with Grid range filtering so that the correct filter is produced when the start and end dates are the same.
- DR 43654, DR 44994 Automation Processes: Fixed an issue that prevented Automation Processes from evaluating foreign key field values for Field change events when the event was triggered in other cultures.

- DR 43674 Globalization: Fixed an issue that sometimes caused "duplicate name" errors after a new Group Member was added in a multi-language system.
- DR 43679 Expressions: Commas are now handled correctly when calculating number expression results.
- DR 43687 Desktop Client: Fixed an issue where the user was prompted to save changes to a form containing radio buttons, but no changes were actually made.
- DR 43688 CMDB: Fixed issue that could result in relationships being lost when CSM is closed while related cursor in a Related Item Picker field.
- DR 43717 Form Arrangements: Fixed an issue in the Form Arrangement where tab view options and display mode were not respecting the supported views set in the admin tab properties on the Browser Client.
- DR 43720 Forms: Fixed the Allow Scroll Bars option on embedded forms. When the check box is cleared, no scroll bars appear.
- DR 43746 One-Step Actions: When executing a One-Step with a Contact Manager step, the Browser Client presented an unfriendly error message. This has been replaced by a friendlier and more descriptive message.
- DR 43779 Automation Processes: Fixed an issue that prevented Automation Processes from triggering when they included a One-Step Action that changed a child object.
- DR 43817 Stored Values: Fixed an issue with numeric entries not accepting decimal values past the thousandth place. Adjusted the numeric entry control to allow decimal input as entered by user.
- DR 43822 Forms: Fixed an issue which resulted in duplicate form names within the Display Form drop-down menu in the Create Business Object Options dialog. Each entry is now prefixed with the name of the corresponding view (example: view name - form name).
- DR 43827 Globalization: Definitions for deleted cultures are now removed from Grids and Forms. This prevents errors from occurring when publishing a Blueprint with deleted cultures.
- DR 43872 Database: Expected database exception no longer recorded in the log.
- DR 43880 Automation Processes: The options to enable and disable Automation Processes have been removed from the Automation Process Blueprint since these options were applied immediately and not with the Blueprint publish.
- DR 43911 Documentation: Updated product documentation to explain expected behavior of container Controls on the Form Editor.
- DR 43929 Security: Applicable Queue context menu items in the Desktop Client are now governed by the corresponding security rights set in CSM Administrator.
- DR 43945 CSM Administrator: Fixed an issue with the Related Item Picker dialog box not resizing to correctly display full field values.
- DR 43952 Reports: Fixed an issue that caused incorrect grouping for Reports that group results by an associated Business Object. This probably only occurred in cultures other than English (US).
- DR 43959 Dashboards: Fixed an issue that prevented records from opening when search results were grouped by Date/Time Fields.
- DR 43977 Email and Event Monitor: Fixed an issue where metric properties were not saved when configuring fields in a Create Business Object Action.

- DR 43981 CSM Administrator: Fixed an issue that prevented the Order By button from toggling properly between Ascending and Descending sort order in the Stacked Arrangement view of a Form.
- DR 43992 Attachments: Attachments added to Business Objects from the Browser Client or Portal will now have file extensions shown in the displayed file name. This matches the behavior of the Desktop Client.
- DR 44018 Reports: Fixed an issue that caused the CSM Desktop Client and Browser Client (if connected through the Application Server) to freeze after designing or running multiple reports in a very short period of time.
- DR 44096 Security: Fixed an issue that prevented files being linked if they were larger than the import file size limit.
- DR 44113 Connections: Fixed an issue that prevented users from logging into the Desktop Client with a 3-tier connection if their Windows locale, such as Finnish, used periods for date/time formats.
- DR 44117 One-Step Actions: A full list of Business Objects is now available in the Create a Business Object and Go to a Record Actions, rather than restricting the available Business Objects to the logged-in user's current role.
- DR 44126 Scheduled Items: Fixed an issue that required you to use the "Use this Domain" setting for Scheduled Items that used the Portal Credentials action.
- DR 44144 Forms: Fixed automatic scrolling to allow scrollbars to follow active focus when tabbing.
- DR 44150 Cherwell REST API: Fixed an issue where the file attachment settings for allowing specific file types was not respected.
- DR 44154 Desktop Client: Fixed an issue in the Searching menu where pinned searches were disappearing after the user pinned ten searches and then ran searches that were not pinned.
- DR 44232 One-Step Actions: Correct values now persist in custom buttons when copying and editing One-Step Action pop-up sub-step buttons.
- DR 44234 Customer Manager: Fixed an issue that could prevent imported customers' credentials from working.
- DR 44243 Grids: Changed the behavior of Search Results grids so that the first row in the grid is always selected after sorting the items in the grid. This behavior already exists when filtering grids.
- DR 44245 Widgets: Fixed the Chart Widget to honor administrator settings and display point labels on the Browser Client.
- DR 44249 Auto-Deploy: The Auto-Deploy installer now uses accounts in priority order. It first tries to find an account whose domain matches the current domain. If no matching domain is found, it uses a local account which is saved at the bottom of the account list.
- DR 44268 Fields: Fixed an issue where clicking out of a number field after changing its value from the default (e.g., 0.00), to within a fraction of its max (e.g., 99.95), caused the fractional part of the value to be reset to zeroes.
- DR 44272 Performance Health Check: Fixed an issue that caused system tables to incorrectly be included in Health Check results.
- DR 44273 Fields: Fixed an issue that caused the contents of a rich text field to be removed when closing the quick view dialog.

- DR 44274 Automation Processes: Fixed an issue with that caused visual workflow processes that were set to trigger for a Field change event to incorrectly run when a field value was not changed.
- DR 44281 Searching: Fixed an issue with search filters used in a current search that were not transferring when attempting to edit or save the search.
- DR 44302 Widgets: Filter Widget images will now be displayed in the Browser Client regardless of the Widget level (Dashboard or Widget level) or whether or not it is toggled on (latched).
- DR 44310 Fields: Fixed an issue where a required field for saving in a Specifics Form was not honored when using an Expression.
- DR 44349 Widgets: Fixed an issue where clicking an item within a Command Palette Widget only worked for the first click. Clicking the same item again resulted in that item not executing its assigned function unless the page was re-loaded.
- DR 44407 One-Step Actions: Fixed issue that caused a One-Step Action that included an Action Command for attaching a file to freeze the page for a few minutes.
- DR 44412 Fields: You can now select multiple validation types when editing a field.
- DR 44439 Cherwell REST API: Fixed an issue so that the LinkRelatedBusinessObjectByReclD operation throws an error to the caller when the link is not created due to a missing child object.
- DR 44443 Fields: Fixed an issue where the assigned tooltip would not display when hovering over a rich text box in the Browser Client.
- DR 44459 Approvals: The process for determining if an approval is accepted has been reviewed and revised.
- DR 44464 Rich Text Editor: Fixed the Rich Text Editor Zoom to display a large thumbnail if the image is set to display full size and it exceeds the width of the Rich Text Editor. To see the full image, click it to open it in another window.
- DR 44485 Calendars: Fixed Calendar control issue where adding an item at midnight on the first day of any month triggered a duplicate entry.
- DR 44489 Automation Processes: Fixed an issue that caused Visual Workflow Automation Processes to trigger multiple times for related child events.
- DR 44517 Grids: Fixed an issue in CSM Administrator to improve the visual display of multiple types of Grids, including Relationship Grids, when using the Cherwell Dark theme.
- DR 44520 Form Arrangements: Fixed an issue causing an Incident form with stacked zones to not display in Portal view.
- DR 44542 Forms: In the Desktop Client grid selectors (e.g., "Site Selector"), the "New" menu option is now disabled when a user is missing the required permissions.
- DR 44572 Searching: Fixed an issue that occurred when building a search with an expression that used a prompt. If you used the "Copy the current clause" option and changed the operator, the prompt ran twice when running the search. The clause no longer keeps and executes its copied prompt expression.
- DR 44579 Import Utility: Improved the error messaging to be more clear when the Test LDAP Tool is used with a bad server name or insufficient credentials.
- DR 44602 One-Step Actions: Fixed an issue where Fields that utilize a foreign key relationship could evaluate incorrectly if used within an Expression.

- DR 44624 Themes: Added a checkbox to allow users to choose a background color for a site. If checkbox is cleared, the color selector is disabled and default value will be 'From Theme.' When the checkbox is selected it will always display a color and not 'From Theme'.
- DR 44625 Searching: Fixed a error that appeared when comparing Date Searches between two different Business Objects that start with the same word or prefix.
- DR 44636 Prompts: Fixed an issue where a user was prompted to enter both date and time in cases where only the time was required.
- DR 44646 Web Applications: Fixed some menus that were rendering past the screen frame with no scroll bar. Added scrolling feature to those menus.
- DR 44656 Blueprints: Fixed an issue where a Business Object form's size was being modified any time the CSM Administrator window was resized. This resulted in users seeing modifications to a form's width and height within a Blueprint when none were expected.
- DR 44658 Widgets: Fixed a problem where the Combine Values options for Dashboard chart series were incorrectly being shown when grouping for a series was enabled.
- DR 44660 Printing: When viewing the page to be printed in a One-Step print Action, the selected page settings are now used for displaying the page size.
- DR 44668 Globalization: Added the option to include Views when you create or apply a Language Pack that has a scope limited to specific Business Objects.
- DR 44684 Widgets: Tab group Widget tab location settings are now honored (top, bottom, left, right) in both the Desktop Client and Browser Client/Portal while in a non-English environment.
- DR 44696 Managers: Fixed an issue that caused problems for definitions created with an association of (none).
- DR 44706 Knowledge Mapping: Fixed an issue that occurred when attaching a Knowledge Article to an Incident when using Relationship. The Knowledge Article now successfully attaches.
- DR 44712 Browser Client: Fixed an issue to allow all columns to load in the Column Selector window when customizing columns for a Grid when a Business Object group that is part of a relationship.
- DR 44747 External Connections: Fixed an issue where external queries were using square brackets in databases other than SQL Server or Microsoft Access, which caused failures.
- DR 44750 Browser Client: Fixed the CMDDB Related Item Picker Customer filter to behave in the same manner as the Desktop Client.
- DR 44754 Desktop Client: Fixed an issue that prevented predefined column widths in Search Result Grids to remain persistent after reloading the search query or Widget.
- DR 44760 Security: Fixed double encoding of SAML URLs.
- DR 44771 Forms: Fixed an issue where in the Quick View of a child object of an Incident, One-Step Actions that have the Show Progress option cleared still displayed a progress indicator.
- DR 44783 Relationships: Fixed an issue that caused incorrect results to be returned when queries were evaluated against Group Leaders that used a constraint-based Relationship to itself.
- DR 44789 Relationships: Fixed an issue that caused Expressions set for a Field to be ignored if the Child Object was changed for a Relationship. Updated the Documentation Portal to recommend that Field properties should be defined before Group Membership settings.

- DR 44810 Expressions: Fixed an issue that was allowing Blueprint-scoped stored expressions to be edited in the Desktop and Browser Clients.
- DR 44816 Attachments: Fixed an issue that prevented CSM file attachments from being purged in the user's temporary system directory when the CSM Desktop Client was closed.
- DR 44829 Metrics: Fixed issue that caused metrics that have user-based system functions in their query to return the same value to all users.
- DR 44835 Themes: Fixed bug that caused the Portal theme to not update correctly after making changes to the theme.
- DR 44836 Cherwell REST API: General security fix.
- DR 44853 Record Locking: Fixed an issue where plain text values were compared to HTML values, triggering a record lock despite no actual changes to the text.
- DR 44861 Blueprints: Fixed an issue that caused the Add to Blueprint context menu option to be disabled for items within an Item Manager search results list.
- DR 44867 One-Step Actions: Fixed issue that caused reports run through the CSM Browser Client to default to running against all records.
- DR 44871 Automation Processes: Fixed timing support for Wait For Time or Event Action after an event occurs that jumps back to the Wait For Time or Event Action.
- DR 44884 Expressions: Fixed an issue in CSM Administrator which caused Expression conditions to always render in English even if the display language not English.
- DR 44887 One-Step Actions: Fixed an issue where opening a Dashboard with multiple adaptive layouts from a One-Step Action could result in an error.
- DR 44888 Performance: Fixed a rare issue where the Performance Health Check of hosted Customers displayed the wrong database name.
- DR 44892 Browser Client: Fixed an error that occurred when opening an Incident with Quick View from the Search Results grid.
- DR 44894 Globalization: Fixed an issue that caused Expressions based on life-cycle state changes that depend on a particular state to work incorrectly when users selected a different language than the one used to define a Business Object. For example, if an Incident's Closed Date field is defined to set the current date and time when the status of the incident is changed to Closed, CSM now sets the date and time correctly if the language is changed.
- DR 44900 Documentation: Updated Documentation Portal to note the Powershell script for upgrading CSM to 9.6.0 will fail if you have %HOMEDRIVE% mapped a network drive.
- DR 44902 Fields: Resolved an issue where there description was being double encoded on display in the text field.
- DR 44905 Portal: Fixed an issue that caused the help button in the Portal to display despite being disabled in CSM Administrator.
- DR 44921 Logging: Fixed Automation Process log to use the correct recID and typeID during debugging.
- DR 44923 One-Step Actions: One-Step Actions now check for duplicates when linking related Business Objects.

- DR 44925 Browser Client: Fixed an issue with a One-Step Action Command Button Message pop-up. The buttons no longer display with a spinning icon (as if still loading) and the buttons are clickable.
- DR 44927 Web Applications: Fixed an issue with negative values in a One-Step Action Numeric Field prompt. The option to allow negative values is now respected.
- DR 44937 Installer: The Cherwell Message Service/RabbitMQ service is now correctly installed when the installation path contains brackets.
- DR 44944 Browser Client: Fixed an issue with the scaling of a One-Step Action pop-up. The text box will now scale to the full size of the modal.
- DR 44945 Automation Processes: When logging in with a non-imported Active Directory user for the first time, the user is created. Now, if needed, Business Intelligence Events are also created, allowing Automation Processes watching the UserInfo table to be triggered correctly.
- DR 44946 Fields: Fixed issue causing incorrect formatting within rich text fields when the default value or calculated values were entered as multiple lines.
- DR 44951 Dashboards: Fixed a issue where an exception was thrown when a change to a Business Object resulted in a currently displayed search results list with grouping enabled to display zero rows on refresh.
- DR 44958 Searching: Fixed an issue that stopped the ability to search when a related field from another Business Object contained certain text. Example: searching for Incidents that were linked to Problem records where the problem record title contained "printer".
- DR 44965 Fields: Blank lines are now correctly applied to pop-up content generated on the Portal.
- DR 44986 Email and Event Monitor: Fixed an issue with searching for a Record ID in an email subject or body when the search is set to "after term: end of line" or "between terms". The monitor search now returns the first number encountered in the subsection of text created by the search terms.
- DR 45019 Automation Processes: Added error handling for the Scheduling Service to prevent the ServiceHost from crashing due to un-handled exceptions when attempting to mark a scheduled item as failed and schedule the next occurrence. Improved the log message context for error message "Unable to retrieve scheduled item" to include the DefId.
- DR 45029 Trusted Agents: Fixed a problem with Trusted Agent operations which prevented errors from being returned to the caller and could cause the caller to hang indefinitely.
- DR 45051 Fields: Fixed an issue where the Problem.Owned By ID Field was incorrectly auto-populating when there was a change in the Incident table instead of the Problem table.
- DR 45059 Globalization: Fixed an issue where a Business Object relationship with foreign key was not getting picked up when the Business Object had multiple relationships. The issue prevented field validation from working correctly.
- DR 44713 Dates: Fixed an issue where dates of 12-30-1899, which were used in the system previously to indicate an empty or null date, were no longer being treated as empty.

CSM 9.7.1 Fixes List

CSM 9.7.1 Release Notes: this list describes fixed issues that were reported in previous releases.

- CSM-53395 Automation Processes: Fixed an issue where automated threshold processes would sometimes not run.
- CSM-55208 CSM: Fixed a performance issue that caused excessive database queries for every user login.
- CSM-56119 System Settings: The setting `OverrideDefaultOperationTimeout` in `trebuchet.settings` was not being respected and a default of 60 seconds was being used. The setting now respects the user-provided value as long as it is greater than 60 seconds. This setting is an override on the WCF operation timeout for calls.
- CSM-56338 Scheduler: The Schedule Items field `*Maximum time to block other schedules*` has been renamed to `*Maximum runtime*`. The minimum value is now 5 minutes and the maximum value is now 1440 minutes (24 hours).
- CSM-56630 Searching: Fixed issues where changed primary keys on existing Business Objects were not being respected, and fields designated primary keys when mapping external Business Objects to new Business Objects were not being respected.
- CSM-56948 One-Step Actions: The One-Step Action scan bar code command is updated to pause the One-Step Action until the scan is complete. You can now pick the field to store scanned values. This will allow multiple fields to store the scanned value. If no associated field is selected, the bar code value will populate in the Business Object field that contains the "BarcodeScan" attribute as it has before.
- CSM-57227 AWS: Added support for setting the batch size for external data imports when performed by a Trusted Agent. This setting can be used to avoid load balancer timeouts by setting the batch size small enough to complete before the load balancer times out.
- CSM-57747 CSM: Fixed an issue where under very high load, the Portal or Browser Client could lock and stop accepting requests.
- CSM-57797 CSM: Fixed a performance issue with One-Step Actions which caused sub-actions to perform extremely slow if a variable with more than a minor amount of text was used.
- CSM-58090 Service Host: For some users running CSM 9.6.x or 9.7.0, navigating to Server Manager > Cherwell Service Host > Advanced Settings then selecting OK could result in setting the `MaxWorkers` value under `ScheduleLeaderSettings` to 1. This issue has been fixed in 9.7.1. To update the `MaxWorker` value manually, navigate to Server Manager > Cherwell Service Host > Advanced Settings and set the `MaxWorkers` value to 5.
- DR 43827 Globalization: Definitions for deleted cultures are now removed from Grids and Forms. This prevents errors from occurring when publishing a Blueprint with deleted cultures.
- DR 1154 Scheduling: Improved manual external data imports so the connection doesn't need to remain open, which could incur the Application Load Balancer idle timeout.
- DR 44738 Authentication: Fixed an issue where the login button would not appropriately process login requests on Portal and Browser Clients when Windows login was configured and the user was using Internet Explorer 11.

- DR 45172 Forms: Fixed an issue where encrypted fields could not be encrypted/decrypted over a 3-tier connection before saving a record.
- DR 45222 Upgrading: Improved performance of some upgrade operations.

CSM 9.7.4 Fixes List

CSM 9.7.4 Release Notes: this list describes fixed issues that were reported in previous releases.

- CSM-58363 Browser Client and Portal: When you have multiple tabs open, running a One-Step Action now only effects the active tab. Previously, under certain circumstances, all open tabs were affected and showed the result of the One-Step Action.
- CSM-58663 Security: Updated access control to resources which could be accessed without logging into CSM.
- CSM-59220 Performance: Made performance improvements that mostly impacted execution of One-Step Actions and Expressions, but also improved other areas of CSM. Resolved several log errors, specifically "Out of Memory" and "Parameter is not valid" messages, which were caused by rich text parsing.
- CSM-59882 Performance: Reduced contention on Trebuchet.settings file caused by many calls to Trusted Agents.
- CSM-59463 Performance: Fixed a regression issue with Automation Process Leader which previously paused between retrieving blocks of events to process. Fixed leader to only pause when no events were picked up for processing.
- CSM-59464 Performance: Improved performance of the Automation Process by increasing the number of events that can be sent to the queue in any given period of time.
- CSM-60143 One-Step Actions: Trusted Agent Sub-Action failures will no longer terminate the parent One-Step Action.
- CSM-60468 Business Objects: Fixed an error which could occur when many requests called a Save Action at the same time.
- CSM-60802 Portal: Fixed detection of the requested site and locale for non-default Portal sites when verifying authorization to execute "/Product/~" requests. Resolved the 401 errors being throw for Product requests when the user was properly authenticated with a non-default Portal site.
- CSM-61216 Performance: Fixed a performance issue which could cause high CPU usage due to thread locks and contention.
- CSM-62416 Performance: Fixed an issue that slowed performance when using the HTTP module for viewing reports.
- DR 1162 Trusted Agent: Added retry logic to Trusted Agent Hub calls from the Trusted Agent Server to make it more resilient when network issues are encountered.
- DR-45214 Scheduling: Enabled vertical scaling for the Scheduler and increased the default Max Runtime of a scheduled job from 20 minutes to four hours.
- DR 45303/50121/CSM-60276 Email: Fixed an issue where HTML and Rich Text could be lost if tokens were nested inside of other One-Step Sub-Actions.
- DR 50126 Email and Event Monitor: Fixed an issue which prevented Exchange email text from being imported into new Incidents.

CSM 9.7.0 Known Issues

CSM 9.7.0 Release Notes: You can view details about known issues and possible workarounds in the Cherwell Knowledge Center.

- CSM Browser Client: Print button does not work for Reports. See <https://zero.comaround.com/link/b32c0e1a8b57415613c108d75595a57b/>.

System Requirements


CSM 9.7.0 Release Notes: 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 x86 or x64, Windows 8.1 x86 or x64, or Microsoft Windows 7 Service Pack 1 (SP1), x86 or x64 editions. Pro or Enterprise editions required.
Free Disk Space	Minimum: 1.5 GB (2 GB recommended)
Networking	Internet access required for online documentation feature
Desktop Browser (5)	CSM works with the current versions of the following desktop browsers: <ul style="list-style-type: none"> • Google™ Chrome™ • Microsoft Edge • Internet Explorer 11+ • Mac only: Safari
Mobile Browser (5)	CSM works with the current versions of the following mobile browsers: <ul style="list-style-type: none"> • Safari on the latest version of iOS (version 12) • Chrome on the last two major versions of Android: Pie (version 9.x) and Oreo (version 8.x)
Other	Microsoft .NET 4.7.2 (required); latest version recommended. (6) Transport Layer Security (TLS) 1.2

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 2019, Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, or Microsoft Windows Server 2008 R2 SP1
Free Disk Space	Minimum: 5 GB Recommended: 10 GB
Networking	Internet access required for online documentation feature
Database	<p>Microsoft SQL Server 2017, Microsoft SQL Server 2016, Microsoft SQL Server 2014, or Microsoft SQL Server 2012</p> <p>We recommend using SQL Server on a separate server.</p> <p> 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.</p>
Other	<p>Microsoft .NET 4.7.2 (required); latest version recommended. (6)</p> <p>Erlang 21.0 (installed automatically with CSM; used for message queuing)</p> <p>RabbitMQ 3.7.14 (installed automatically with CSM; used for message queueing)</p> <p>Internet Information Services (IIS) 7.5+ (required for Web Applications and when hosting the Cherwell Application Server in IIS) (2)</p> <p>Transport Layer Security (TLS) 1.2</p>

Other Requirements

BeyondTrust (formerly Bomgar) mApp	Refer to BeyondTrust Remote Support mApp .
Email	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 SP1, Server 2012, Server 2012 R2, Server 2016
Load Balancing (3) (4)	Redis® Server 3.0.504 or Redis® Labs Enterprise Cluster (RLEC), any version.

Notes

1. Recent model required.
2. For 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 3.0.504. 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.
6. Due to changes in Microsoft .NET, FIPS (Federal Information Processing Standards) compliant setup is no longer supported.

Revision History

A list of CSM revisions by date and changes.

Revision	Date	Changes
9.7.4	May 2020	Software fixes. For a list of fixes, see CSM 9.7.4 Fixes List .
9.7.1	February 2020	Software fixes. For a list of fixes, see CSM 9.7.1 Fixes List .
9.7.0	November 2019	<p>Platform changes:</p> <ul style="list-style-type: none"> • Multiple record selection in Search Results Grids • Call One-Step Actions from the Cherwell REST API • Configure cards with Search for Action Catalog Widgets • Add sorts and filters to an Action Catalog • Clone a Form <p>OOTB content changes:</p> <ul style="list-style-type: none"> • Knowledge Article content enhancements • CMDB Installed Software and Service Forms redesign • Submit on behalf of <p>For additional features, see What's New in CSM 9.7.0.</p>
9.6.3	September 2019	Software fixes. For a list of fixes, see CSM 9.6.3 Fixes List .
9.6.2	September 2019	Software fixes. For a list of fixes, see CSM 9.6.2 Fixes List .
9.6.1	July 2019	Software fixes. For a list of fixes, see CSM 9.6.1 Fixes List .

9.6.0	June 2019	<p>Platform changes:</p> <ul style="list-style-type: none"> • Activity Pane • Third-party reporting • Search relevance • Log Viewer in CSM Administrator • Queuing for CSM Services <p>OOTB content changes:</p> <ul style="list-style-type: none"> • Updated Forms and Dashboards for the OOTB content <p>For additional features, see What's New in CSM 9.6.0.</p>
9.5.3	April 2019	<p>Software fixes.</p> <p>For a list of fixes, see CSM 9.5.3 Fixes List.</p>
9.5.2	February 2019	<p>Software fixes.</p> <p>For a list of fixes, see CSM 9.5.2 Fixes List.</p>
9.5.1	December 2018	<p>Software fixes.</p> <p>For a list of fixes, see CSM 9.5.1 Fixes List.</p>
9.5.0	November 2018	<p>Platform changes:</p> <ul style="list-style-type: none"> • Trusted Agents for One-Step™ Actions • Translatable platform strings • Multi-byte support for Language Packs • Camera and location services added to the Browser Client • Print Action support for Web Applications <p>OOTB content changes:</p> <ul style="list-style-type: none"> • Site and Building management <p>For additional features, see What's New in CSM 9.5.0.</p>

9.4.0	July 2018	<p>Platform changes:</p> <ul style="list-style-type: none"> • Adaptive Layouts functionality for Dashboards • Common One-Step™ Action execution engine • Enhanced Prompts and Prompts Manager • Cherwell Rest API Named Object Operations • Enhanced Cherwell documentation portal: Product Documentation <p>OOTB content changes:</p> <ul style="list-style-type: none"> • Task as a Group Business Object <p>For additional features, see What's New in CSM 9.4.0.</p>
9.3.2	April 2018	<p>Software fixes.</p> <p>For a list of fixes, see CSM 9.3.2 Fixes List.</p>
9.3.1	February 2018	<p>Software fixes.</p> <p>For a list of fixes, see CSM 9.3.1 Fixes List.</p>
9.3.0	December 2017	<p>Platform changes:</p> <ul style="list-style-type: none"> • Adaptive Layouts for Forms • Support for Trusted Agents for e-mail • Multi-tab browsing support • Modal design update • E-mail attachments handling improvements <p>OOTB content changes:</p> <ul style="list-style-type: none"> • Globalization enabled by default • Customer Portal Dashboard design • Customer Portal Form design • Adaptive Layouts for Portal Forms <p>For additional features, see What's New in CSM 9.3.0.</p>
9.2.1	September 2017	<p>Software fixes.</p>

9.2.0	August 2017	<p>Platform changes:</p> <ul style="list-style-type: none"> • New Globalization support management tool • Foreign key support for validated and auto-populated Fields • Definition Reviewer • Enhancements to Browser Client and Customer Portal User Interface • New Download a Blueprint Button <p>OOTB content changes:</p> <ul style="list-style-type: none"> • Service Catalog and search improvements • Localized OOTB content <p>For additional features, see What's New in CSM 9.2.0.</p>
9.1.0	March 2017	<p>Platform changes:</p> <ul style="list-style-type: none"> • Concurrent development for Blueprints • Accessibility improvements for CSM Web applications • New Team Operations for the Cherwell REST API • New Modifiers
9.0.1	February 2017	<p>Platform changes:</p> <ul style="list-style-type: none"> • One-Step™ Action Annotations • Guidance for CSM system design using concurrent development • Trusted Agents for bulk data imports • Trusted Agents for request routing and fault tolerance • Trusted Agents Hub scale-out using Redis <p>For additional features, see What's New in CSM 9.0.1.</p>
8.3.1	November 2016	<p>Platform changes:</p> <ul style="list-style-type: none"> • Continual Service Improvements • Context-sensitive help for Windows clients <p>OOTB content changes:</p> <ul style="list-style-type: none"> • Service Catalog Template functionality enhancement

8.2.1	July 2016	<p>Platform changes:</p> <ul style="list-style-type: none">• New One-Step™ Action branching• Service Health Monitor• Grid exporting enhancement• Auto-Deploy enhancement• Platform support <p>OOTB content changes:</p> <ul style="list-style-type: none">• Incident functionality enhancement• New company logo• Internal customer security upgrade <p>For additional features, see What's New in CSM 8.2.1.</p>
8.1.0	March 2016	<p>Platform changes:</p> <ul style="list-style-type: none">• Field-level encryption and view auditing• Card view display• Cherwell Mobile for iOS enhancement• New documentation platform <p>OOTB content changes:</p> <ul style="list-style-type: none">• New license usage functionality• New view of Pending Status details• Incident Resolution from Problem improvements• Business Object Grids updates• Portal enhancements <p>For additional features, see What's New in CSM 8.1.0.</p>

8.00	December 2015	<p>Platform changes:</p> <ul style="list-style-type: none"> • Desktop Client and Administrator improvements • Browser Client improvements • HTTP-based RESTful API • JSON support for One-Step™ Actions <p>OOTB content changes:</p> <ul style="list-style-type: none"> • Portal improvements • New Dashboards • Specifics Forms <p>For additional features, see What's New in CSM 8.00.</p>
7.00 Rev1	October 2015	Software fixes.
7.00	September 2015	<p>Platform changes:</p> <ul style="list-style-type: none"> • Performance Health Check tool • Trusted Agent Server Integration feature • Enhanced SAML integration • Blueprint scan alerts <p>OOTB content changes:</p> <ul style="list-style-type: none"> • IT Management Dashboards • Change Management Dashboards • Automatic Incident escalation <p>For additional features, see What's New in CSM 7.00.</p>
6.00 Rev1	August 2015	Software fixes.

6.00	July 2015	<p>Platform changes:</p> <ul style="list-style-type: none"> • One-Step improvements • New Dashboard Chart Widget types • Theme improvements and Portal support • Browser and Portal updates • Browser usability <p>For additional features, see What's New in CSM 6.00.</p>
5.00 Rev2	October 2014	Software fixes.
5.00	July 2014	<p>Platform changes:</p> <ul style="list-style-type: none"> • mApp Solutions • mApp Solutions and Integration page • Business Intelligence enhancements • One-Step enhancements • Advanced record locking <p>For additional features, see What's New in CSM 5.00.</p>
4.60b	November 2013	Software fixes.
4.60	June 2013	<p>Platform changes:</p> <ul style="list-style-type: none"> • Rich Text support • Bomgar platform integration • Ease-of-Use/Look-and-Feel enhancements • Embedded Forms • Grid enhancements <p>For additional features, see What's New in CSM 4.60.</p>
4.31	February 2013	<p>Platform changes:</p> <ul style="list-style-type: none"> • iCherwell enhancements • Widget enhancements • New Dashboards • Portal and Browser enhancements

4.30	November 2012	<p>Platform changes:</p> <ul style="list-style-type: none">• SAML Support• Grid enhancements• Portal and Browser Client enhancements• CSM Manager enhancements• Form Editor enhancements <p>For additional features, see What's New in CSM 4.3.</p>
4.0 Rev2	August 2012	Software fixes.
4.0-1	July 2012	Software fixes.
4.0	April 2012	<p>Platform changes:</p> <ul style="list-style-type: none">• Cherwell Portal• Cherwell Browser Client• Searching• Action Catalogs• Security enhancements

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](#)