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CSM 9.3.0 Client Suite

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The Cherwell Software product suite includes:

- Cherwell Service Management
- Cherwell Asset Management

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Contents

Client Suite

Here is a more in-depth look at the CSM Clients:

CSM Desktop Client

The CSM Desktop Client is the main application in the CSM suite. The Client runs under Microsoft® Windows®, and provides all the features and default Business Objects/processes for service desk professionals to effectively and proactively manage their support desks.

About the CSM Desktop Client

Desktop Client features include:

- **Record Logging:** Log and manage records (ex: Incident, Problem, Change, Customer, CMDB, etc.).

- **Dashboards** and **Widgets:** Use Dashboards to view critical metrics, analyze and predict trends, drill-down into data, execute Actions, or just display a hodge-podge of information that might be relevant to a group of Users/Customers.

- **One-Steps:** Run One-Steps to initiate one or more defined Actions, automating common or repetitive tasks.

- **Searching:** Run Quick Searches or Search Groups (saved searches) to efficiently and thoroughly search/filter your CSM data, locating one record or a set of records.

- **Customer:** Use the Contact Manager to view and manage Customer records.

- **Reporting:** Use a host of powerful reporting tools (defined Reports and report writing tools, Search Groups, Dashboards/Widgets, and Visualizations) to gather and measure data, analyze metrics, and predict trends.

- **Knowledge:** Search for Knowledge from configured Knowledge Sources (ex: Knowledge Articles, records, attachments, web, etc.).

- **Additional Features:** Approvals, Attachments, Calendars, E-mail, Journals, Tasks, Queues, Settings, Visualization, etc.

Log in to the CSM Desktop Client or CSM Administrator

To log in to the CSM Desktop Client:

1. Double-click the blue **Cherwell Service Management icon** or orange **CSM Administrator** icon on the desktop, or click **Start>All Programs>Cherwell Service Management** or **Cherwell Administrator**.

   > **Note:** If the Automatically Use Connection Without Asking check box was previously selected or if the system administrator already set up a permanent database connection, the database connection window will not open.

2. Select a database connection:

   > **Note:** Typically, Users connect using an Application Server (3-tier connection), identified by the Application Server icon .

   a. Click the **All Users** tab to view database connections available to All Users or the User tab to view database connections available to only to the User logging in.

   b. Click a **database connection**.

      Note: To create a database connection, click **Add** to launch the Connection Wizard. To modify an existing database connection, click the **database connection**, then click **Edit**. To delete an existing database connection, click the **database connection**, then click **Delete**.

   c. Select the **Automatically Use Connection Without Asking** check box to automatically use this database connection each time CSM is launched. Afterward, the prompt is no longer available to select a connection.

   d. Click **OK.**

3. Provide the CSM login credentials:

   a. User ID: Provide the **CSM login ID** (this could be domain name/network Username or just Username).

   b. Password: Provide the **CSM password**. Passwords are case-sensitive.

      Tip: By default, there is a User ID called CSDAdmin with a password of CSDAdmin in the Demo and Starter databases.

   c. Automatically Login Without Asking: Select this check box to automatically use the above information at the next log in. This avoids a login prompt.

   d. Click **OK**.

   e. If a User is assigned to more than one CSM Role (and have not previously selected the Automatically Use Selected Role check box), the Choose Role window opens.

4. Select the login Role for the session:
    a. Click the appropriate **Role**.

    b. Always Use Selected Role: Select this check box to automatically use the selected Role at the next log in. This avoids the Role prompt.

Tour the CSM Desktop Client User Interface

The CSM Desktop Client User Interface is personal, dynamic, and highly configurable. Typically, the main window displays the following items:

- Menu bar
- Search Control
- Toolbar
- Task Pane
- Main Pane
- Knowledge Pane

Each User has a personal interface that is controlled by login Role, security rights, and personal settings. For example, your default Dashboard (displayed in the Main Pane when you log in or click the **Home** button might display real-time Incidents, Twitter Feeds, or metrics for your Team. Your default Calendar (displayed when you click the **Calendar** button might display your active Tasks. Your Task Pane might display your Queues or your common operations, such as Reports or One-Steps. The toolbars and panes are dynamic, so they change to accommodate active content. Toolbars and panes are also configurable, collapsible, and dockable so that you can display what you want and put it where you need it.

CSM provides a default Desktop Client interface; however, the system administrator typically tailors this to meet your organization's requirements (ex: The system administrator can configure what to display in the Task Pane, Knowledge Pane, Search Control, etc.). With security rights, you can also personalize the interface to meet your personal needs.

The following figure shows two sample main windows:
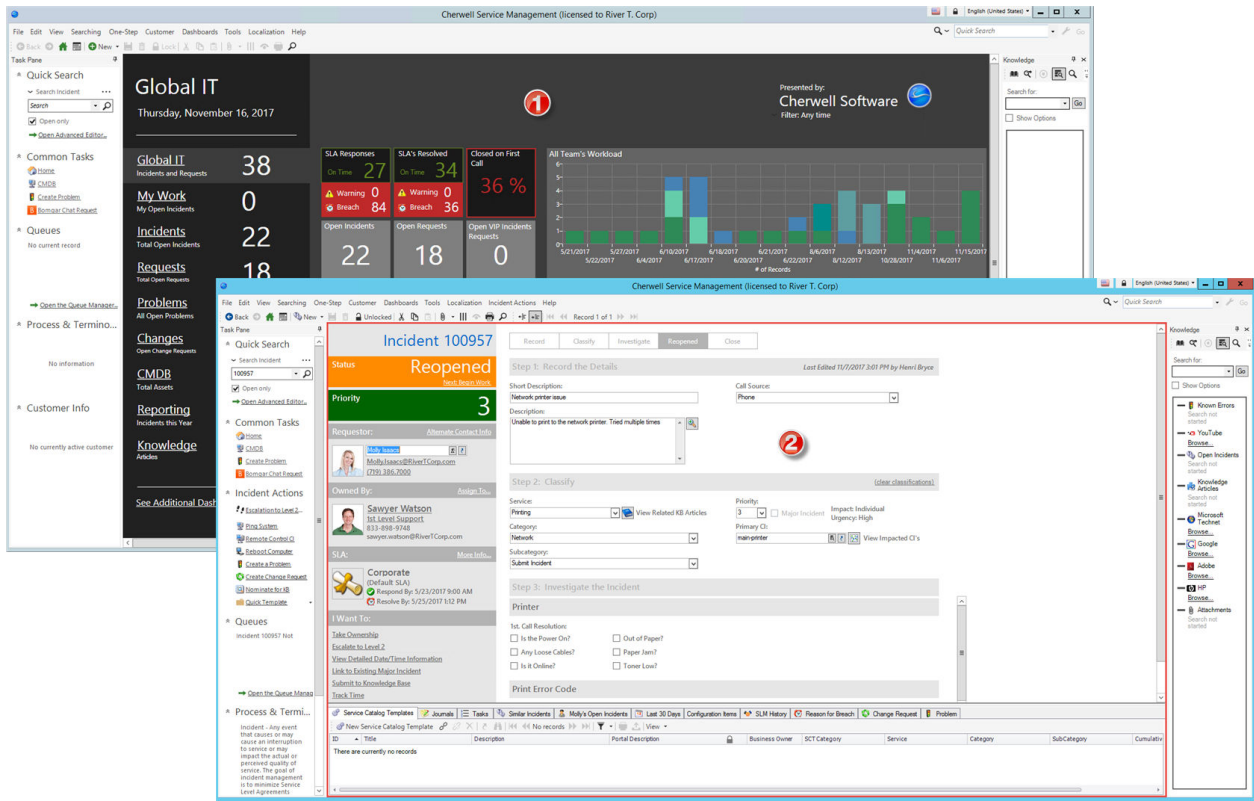
1. A sample Dashboard in the Main Pane.

2. A sample Incident record, along with its Arrangement, in the Main Pane. Notice that the Task Pane and Knowledge Pane can be collapsed to allow more area for the record. Also, notice that the Task Pane and CSM Desktop Client toolbar change to display information and buttons specific to the active record.

CSM Desktop Client Main Window

The CSM Desktop Client Main window is configurable and puts information at your fingertips. You decide what to display and where to put it. By default, the main window contains the following:
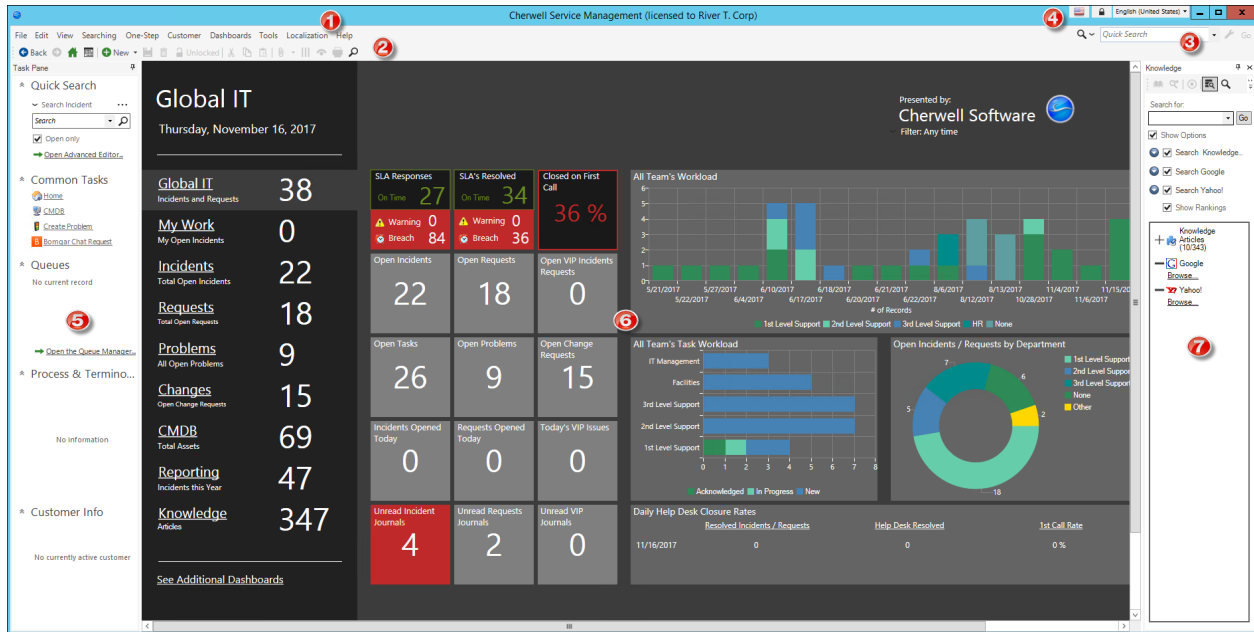
1. **Menu bar**: Dynamic row of drop-down menus that are used for common operations.

2. **Toolbars**: Dynamic row of buttons that are used for common operations.

3. **Search Control**: Search box to find specific words or phrases.

4. **Culture selector**: Switch cultures to change the language for platform and content strings. Available only when globalization features are enabled.

5. **Task Pane**: Highly configurable and dynamic tool used to quickly access operations.

6. **Main Pane**: Primary interface that displays the Records, Forms, etc. that you are working on.

7. **Knowledge Pane**: Highly configurable and dynamic tool used to quickly access Knowledge Sources in your Knowledge Base.

CSM Desktop Client Menu Bar

Use the CSM Desktop Client menu bar, located at the top of the main window, to access common CSM operations.

These menu options appear only if they have been configured in CSM Administrator:

- Actions
- Localization

File Menu

Action	Description
New	Creates a new record (ex: Incident).
Save	Saves the active record.
Abandon	Abandons changes to the active record.
Delete	Deletes the active record.
Print	Prints the active pane.
Print Grid	Prints the active Grid.
Export Grid	Exports the active Grid to the following formats: • .csv • .html • .txt • .rtf • .xml
Send E-mail	Creates an e-mail to send.
E-mail Current Customer	Creates an e-mail to send to the active Customer.
New Window	Launches a new CSM window.
Logout	Logs you out of the CSM Desktop Client.
Close	Closes the CSM Desktop Client.

Edit Menu

Action	Description
Undo	Cancels the last operation.
Redo	Repeats the last operation.

Action	Description
Cut	Moves the selected item to the clipboard, where you can paste the item into a new location.
Copy	Copies the selected item to the clipboard, where you can paste the item to a new location.
Paste	Inserts an item from the clipboard.
Show Legal Values	Displays a list of legal values (for Lookup Fields only).
Refresh	Refreshes the active record.
Zoom	Zoom the Field into a larger window.
Unlock	Releases the lock (unlocks) the active record.
User Locks	Opens the Record Locking Manager, where you can view and release any/all locked records.

View Menu

Action	Description
Task Pane	Displays/hides the Task Pane.
Knowledge	Displays/hides the Knowledge Pane.
Navigation (window)	Displays the default (Home) Dashboard and navigates back/forward through the session history.
Record (Navigation)	Navigates through the current record set.

Searching Menu

Action	Description
Search Manager	Opens the Search Group Manager, where you can run and manage saved searches (Search Groups).
Quick Search Builder	Opens the Quick Search window, where you can build a Quick Search.
Edit Current Search	Opens the Edit Search window, where you can change the parameters of the active search.
Save Current Search As	Saves the active search as a saved search that you can use again later.
MRU list	Lists the MRU (Most Recently Used) items.

One-Step Menu

Action	Description
One-Step Manager	Opens the One-Step Manager, where you can run and manage One-Steps.
MRU list	Lists the most recently used (MRU) One-Steps.

Customer Menu

Action	Description
Contact Manager	Opens the Contact Manager, where you can view and manage Customer Records.
Current Info	Displays the current Customer's information.
Config Items	Displays the current Customer's Configuration Items.

Dashboards Menu

Action	Description
Dashboard Manager	Opens the Dashboard Manager, where you can view and manage Dashboards.
Edit <current Dashboard>	Opens the Dashboard Editor, where you can edit the current Dashboard.
Set <current Dashboard> as default	Changes the current Dashboard to be the User default.
Widget Manager	Opens the Widget Manager, where you can manage Widgets.
Metric Manager	Opens the Metric Manager, where you can manage Metrics.
Color Palette Manager	Opens the Color Palette Manager, where you can manage color palettes.
Heads-up Display	Opens the Heads-Up Display (HUD) in a new window.
MRU list	Lists the most recently used (MRU) Dashboards.

Tools Menu

Action	Description
CMDB	Opens the CMDB interface, where you can manage Configuration Items (CIs).
Queues	Opens the Queue Manager, where you can manage Queues.
Knowledge	Opens the Knowledge Pane, where you can search configured Knowledge Sources.

Action	Description
Reports	Opens the Report Manager, where you can run and manage Reports.
Calendars	Displays the default (Main) Calendar. Also displays an option to open the Calendar Manager, where you can view and manage Calendars.
Visualizations	Displays the default Visualization. Also displays an option to open the Visualization Manager, where you can view and manage Visualizations.
Attachments	Opens the Attachment Manager, where you can view and manage Attachments.
Current Record Automation Processes	Displays Automation Processes for the current record.
Table Management	Opens the Table Management interface, where you can manage Lookup Table values.
Options	Opens the Options window, where you can configure personal settings (ex: General, Display, Task Pane/Search Control, Dashboard/HUD/Calendar, User information, and E-mail).

Actions Menu

If configured, an Actions menu also appears when a record is displayed in the Main Pane (example: The Incident Actions menu item displays when an Incident is active). The Actions are defined as part of the Business Object definition in CSM Administrator.

Action	Description
Quick Templates	Displays a list of available Quick Templates (ex: Reset Password).

Localization Menu

This option is only available when Globalization is enabled.

Action	Description
Culture Quick Swap (CTRL+W)	Switch between the preferred culture and the last selected culture.
Preferred Culture (CTRL+D)	Switch to the preferred culture.
Previous Culture (CTRL+P)	Switch to the last culture you selected.

Help Menu

Action	Description
Contents	Opens the online help.

Action	Description
Reload Definitions	Reloads all definitions.
Current Field Information	Displays properties for the active Field (ex: Name, type, description, search properties, required or not, validation, and Field ID).
Report Error	Opens the Report Error window so you can report an error to Cherwell Software.
System Analyzer	Opens the System Analyzer, where you can track behind-the-scenes operations in a live environment directly from the CSM Desktop Client.
About	Display information about CSM (version, copyright, licensing details, and contact information).

CSM Desktop Client Search Control

Use the CSM Desktop Client Search Control, located in the upper right corner of the Main window, to quickly find all records that contain a specific word or phrase.

You can Quick Search all records (ex: Find all records that contain the word "printer") or limit the search to records of a particular type (ex: Find all Incidents that contain the word "printer"). When searching a particular Business Object, you can refine the search by defining search options, such as search open records only, search attachments and/or related Business Objects, search a timeframe, etc. If needed, you can also access the Search Manager to run or create a Search Group (saved search).

The Search Control is configurable (technically, it is a Search Widget) and can vary by Role. The system administrator decides if it is displayed, which Business Objects can be searched, and what the search options are. Your default Search Control (either System or Role) is initially set in CSM Administrator by a system administrator; however, if you have security rights, you can select your own default.

Good to know:

- Searches can use AND (all words) or OR (any word) logic; the system administrator defines this default.
- Wildcards (*, %) can be used.
- If results are the same type (ex: all are Incidents), the results are displayed in the Grid. If results are of different types (ex: Incidents and Problems), the results are displayed in a list.

The default Search Control contains the following items.

Action	Description
Choose Items to Search	Drops down so that you can select what to search: • Quick Search: Searches all records that contain a specific word or phrase (ex: find all records that contain the word "printer"). • Specific Search: Searches only records of a particular type (ex: find all Incidents that contain the word "printer").
Search	Displays the word or phrase to search for. The drop-down displays the most recently used (MRU) searches.
Go	Runs the search. Search results are displayed in a Grid (if they are of the same type) or a List (if they are of different types).
Search Options	Drops down so that you can refine search options for a specific record type.

Action	Description
Open "Business Objects" only	Limits the search to records that have not reached their final state (ex: not closed). **Note:** The lifecycle and terminology vary depending on the Business Object and scenario (ex: "Unapproved Changes only" might appear when searching Changes). If the Business Object does not have a "final" or closed state, the check box does not appear.
Changed Options	Limits the search to records that have changed during a specific timeframe.
Relationships	Includes related Business Objects in the search (ex: If the search word appears in a Journal entry, the Incident to which it is attached will be included in the search results).
Attachments	Includes record Attachments in the search (ex: Searches file attachments in each record).
Sort by	Selects the Business Object field (column) to use to sort the search results.
Descending Sort Order	Sorts the results in descending order (Z-A) instead of ascending order (A-Z).
Search Manager	Opens the Search Manager where you can create a Search Group.
Close	Closes the Search options drop-down box.

CSM Desktop Client Toolbar
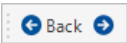
Use the CSM Desktop Client toolbar to quickly access common CSM operations. The toolbar is made up of several smaller toolbars:
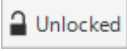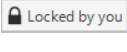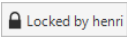
- **Main toolbar:** Displays buttons for performing common CSM operations.
- **Navigation toolbar:** Displays buttons for navigating between records (ex: Incident, Problem, etc.).
- **Action toolbars:** Display buttons specific to the type of record displayed in the Main Pane (ex: The Incident toolbar displays when an Incident is active). These toolbars are created as part of the Business Object definition in CSM Administrator.
- **User toolbars:** Display personal toolbars that Users create.
- **Arrangement/Relationship toolbars:** Display buttons for working with Form Arrangement records (child records in a relationship with a parent record).

By default, all toolbars are located under the menu bar in the main window; however you can independently display/hide and move/dock each toolbar so that you can display them when and where you want. Buttons are dynamic (ex: The Lock button appears only when a record is displayed in the Main window; the Save button is grayed out until CSM detects that there is content to save, etc.).

The default toolbars contain the following items.

Main Toolbar

Button	Action	Description
Back	**Back/Forward**	Navigates backward or forward in the content pane sequence.
	Home	Displays the CSM Home page with the default Dashboard active.
	Calendar	Displays the default Calendar.
New	**New**	Displays item options (you choose the type). The icon on the button indicates the type of record.
	Save	Saves changes in the active window.
	Abandon	Abandons changes to the current item.

Button	Action	Description
Unlocked Locked by you Locked by henri	Lock Record Unlock Record Record is locked by another User	Locks the active record. Unlocks the active record. Record is locked by another User. **Note:** This button toggles depending on the current status of the active record and who has the record locked. This button appears only if record locking is enabled and only when a record is active in the CSM Main Window.
✂	Cut	Moves the selected item to the clipboard, so you can then paste the item into a new location.
⧉	Copy	Creates a new item whose properties are the same as the copied item. The new item can then be named and customized.
📋	Paste	Inserts an item from the clipboard to a new location.
📎	Attach	Attaches a file, Web page, image or shortcut. Also, has an option for displaying/hiding the Attachment Bar.
|||	Show Legal Values (Lookup)	Displays a list of legal values (for lookup fields only).
🖨	Print	Prints the active pane.
🔍	Search Manager	Opens the Search Group Manager, where you can run and manage saved searches (Search Groups).

Navigation Toolbar

Button	Action	Description
⇥	Show results	Displays a set of records meeting a specific criteria.
⇥	Show current record	Displays the currently selected record.
⏮	Go to first record	Jumps to the first record in set.
⏪	Go to previous record	Jumps to the previous record in set.

▶▶	**Go to next record**	Jumps to the next record in set.
▶▶|	**Go to last record**	Jumps to the last record in the set.

Action Toolbar

The Action toolbars are created as part of a Business Object definition, vary by Record Type (ex: Incident is different than Problem), and appear only when a record is open.

Form Arrangement/Relationship Toolbar

The Relationship toolbars are created as part of the Form Arrangement definition, vary by Relationship, and appear only when a child tab is displayed in an Arrangement. The following figure shows an example of a Configuration Item (CI) toolbar displayed in an Incident's Arrangement.

Button	**Action**	**Description**
🔗	**Link**	Adds/links additional items.
⛓	**Unlink**	Unlinks the selected item.
↱	**Go To (Quick View)**	Goes to the source record.
💾	**Save**	Saves changes in the active window.
🔍	**Quick View**	Opens the item in a second window so you can take a quick look at the details.
◀◀	**Go to first record**	Jumps to the first record in the set.
◀◀	**Go to previous record**	Jumps to the previous record in the set.
▶▶	**Go to next record**	Jumps to the next record in the set.
▶▶|	**Go to last record**	Jumps to the last record in the set.
▼ ▾	**Filter**	Filter items in the Grid.
🖨	**Print**	Prints the active Grid.
↥	**Export**	Export Grid to a file.

		Displays items as:
View ▾	**View**	- Form - Grid - Split screen (both Form and Grid): horizontal or vertical.

CSM Desktop Client Task Pane

The CSM Desktop Client Task Pane is highly configurable and is used to quickly access tasks. The tasks in the Task Pane vary depending on the active item in the Main Pane (ex: If an Incident is active, the tasks will be Incident-specific).

By default, the Task Pane is located on the left side of the main window; however, you can display it/hide it, collapse/pin it, and move/dock it so that you can display it when and where you want.

The system administrator initially chooses which items appear by default for each Role; however, if you have security rights, you can can select which items appear on your own Task Pane. By default, the Task Pane contains the following sections:

- Quick Search: Displays the Quick Search Control, and then create a simple query to quickly find all records that contain a specific word or phrase. In the Task Pane, a Quick Search finds all records of a particular type (Incident, Problem, etc.).

  Note: For more information, refer to About Quick Search.

- Common Tasks: Displays tasks you frequently do.

- Actions: Displays common actions for the active record. This area changes based on the record (Business Object) you are working with.

- Queues: Displays the current record and a list of specific grouped records.

  Note: For more information, refer to About Queues.

- Process & Terminology: Displays helpful text for the active record.

- Customer Info: Displays a mini Customer summary for any active record that allows you to select a Customer (ex: Incident).

CSM Desktop Client Main Pane

Use the CSM Desktop Client Main Pane to view data and to perform the majority of your CSM operations. Upon logging in, the Main Pane displays the Home Dashboard.

Depending on the operation, the Main Pane can also display:

- Records: Incident, Problem, Knowledge Article, etc.
- Search Results: Quick Search, Knowledge Search, etc.
- Default Calendar.
- Contact Manager.
- Configuration Management Database (CMDB).
- Table Management.

CSM Desktop Client Knowledge Pane

Use the CSM Desktop Client Knowledge Pane to quickly access the Knowledge Sources in your Knowledge Base (ex: Knowledge Articles, Business Objects, web, etc.). The available Knowledge Sources vary depending on which Business Object is displayed in the CSM Main Pane.

By default, the Knowledge Pane is located on the right side of the main window; however you can display/ hide it, collapse/pin it, and move/dock it so that you can display it when and where you want.
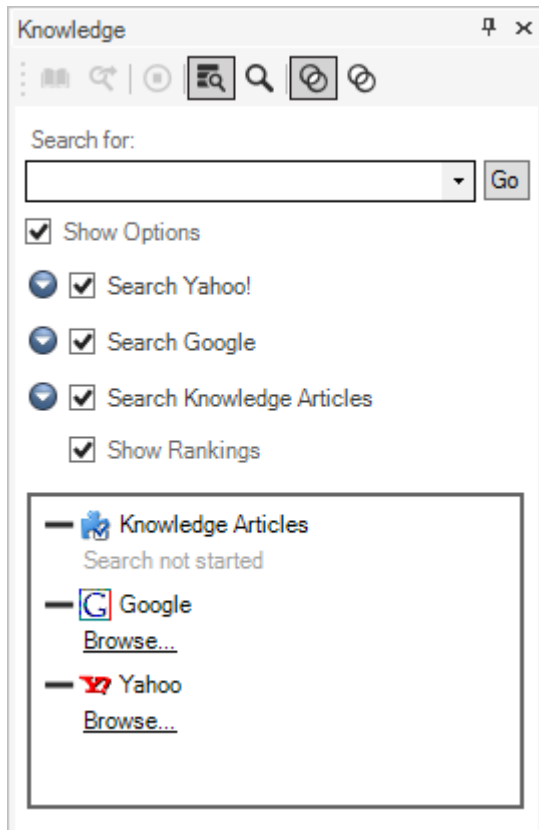
The system administrator decides which Knowledge Sources can be searched and the searching options. By default, the Knowledge Pane contains the following items:

Note: For more information about using the Knowledge Pane functionality, refer to About Knowledge Search.

CSM Desktop Client Search

CSM provides multiple ways to search for information and records. The Search feature can be viewed in two locations in the main window:

1. Task Pane
2. Search Control

Personalize the Desktop Client User Interface

The CSM Desktop Client interface is highly configurable. You can:

- Configure User settings: General, Display, Task Pane/Search Control, Dashboard/HUD/Calendar, User information, and E-mail.
- Display/hide a toolbar or pane.
- Pin/collapse a pane.
- Move/dock a pane.
- Move/dock a toolbar.
- Create a personal User toolbar.

Configure User Settings

Global and User settings are initially configured in CSM Administrator. Personal settings/defaults control how CSM looks and behaves for you, a User. Use the CSM Options window (Tools>Options) to configure the following User settings:

- **User General settings:** Restore, Searching, MRU (Most Recently Used), IME (Input Method Editor), Catalog, and Logging settings.
- **User Display settings:** Default Theme, and Windows titles, DPI/Scaling, and Multiple Monitor settings.
- **User Task Pane and Search settings:** Which default items appear in the Task Pane and which Search Control is used on the CSM menu bar.
- **User Dashboard and Calendar settings:** Personal default Dashboard, Heads-Up Display (HUD), Calendar, and Mobile Dashboard. You can also configure personal Web Proxies for Web Requests (RSS, Twitter, etc.).
- **User Information settings:** Personal login credentials, authentication, User Profile information.
- **User E-mail settings:** Personal e-mail accounts.

Configure User General Settings

Use the General page in the Options window to configure the following General settings for a User:

- **Restore Settings:** Reset message prompts and Grids to their default settings.
- **Searching:** Automatically open a record if it is the only record returned in a Search.
- **MRU (Most Recently Used) Items:** Define the number of items that display in a CSM Item's MRU list (in the CSM Desktop Client menu bar). Ten items display by default.

    > **Note:** The number of items that can be viewed in the MRU list at one time includes items that are pinned using CSM Item Managers.

- **IME (Input Method Editor):** Use IME capabilities so that Users can enter characters and symbols (ex: Chinese, Japanese, or Korean language symbols) not found on the input device (ex: Keyboard).
- **Logging:** Configure event logging for the CSM Desktop Client, which records significant events/errors and is used for troubleshooting. When you configure event logging, you define:
    - Where to log events: To the event log (so they can be viewed by the Windows Event Viewer), to a specified file (where you determine location and size), or to a Splunk server (so you can use the tool to manage event data).
    - Which classification of server events to log: Debug, Stats, Info, Warning, Error, or Fatal.

To configure User General settings:

1. From the menu bar, select **Tools>Options**.
2. Click the **General** page.
3. Configure Restore settings for messages and Grids:
    a. Restore All Dismissed Message Prompts: Select this check box to restore any previously dismissed message prompts so that they appear again.
    b. Restore All Customized Grids to Admin Defaults: Select this check box to restore all customized Grids back to their default definitions.
4. Configure Search Results settings:
    a. If Only One Record is Found in a Search, Automatically Go To That Record: Select this check box to be directed straight to the only search result, instead of first viewing the single item in a Grid List.
5. Configure MRU settings:
    a. Use the up and down arrows to increase or decrease the number of CSM Items that display in the item's MRU list (in the CSM Desktop Client menu bar). Ten items display by default.
6. Configure IME Compatibility settings:
    a. Use IME Compatible Multi-line Text Controls: Select this check box to allow Input Method Editor (IME) capabilities so that Users can enter characters and symbols (example: Chinese, Japanese, or Korean language symbols) not found on the input device (example: Keyboard).
    b. Configure Definition Catalog settings:

       i. Select an option for storing primary system definitions in a local catalog file on a User's machine:

- Use System Settings: Select this option to adhere to the Administrator definitions of catalog usage.

- Use a Local Definition Catalog: Select this option to ensure the usage of a catalog, regardless of Administrator definitions.

- Don't Use a Local Definition Catalog: Select this option to ensure a catalog is *not* used, regardless of Administrator definitions.

7. Configure event logging for the CSM Desktop Client:
   a. Configure: Click the **Configure** button to open the Logging options window.

   b. Select where to log CSM events (select one or more options):

   - Log to event log: Check this box to log CSM events so that they can be viewed by the Windows Event Viewer. Then, select which events to log:
      - Debug and above: Very verbose messages. Leaving this on continuously can get space and resource intensive.

      - Stats and above: Detailed messages that track performance.

      - Info and above: Informational messages that can be used to diagnose a problem with your Server.

      - Warning and above: Warning messages that occurred while the Server was running.

      - Error and above: Errors that were encountered while the Server was running.

      - Fatal only: Errors that were encountered while the Server was running that caused the Server to stop.

   - Log to file: Check this box to write the logs to a specific file and location. Then, set your file limits.
      - Log Level: Select an event classification as described above (example: Debug and above, Info and above, etc.)

      - File Name: Click the **Ellipses** button [...] to select a location for the log file.

      - File Size Limit: By default, the file size is set to 10 MB, but can be changed by entering a new value in the field.

      - File Count Limit: Rolling event logs are used, so that when the maximum file size is reached for a log file, a new file is created. By default, the number of files is set to 20 (but can be changed), after which the oldest log file is overwritten by continued logging.

   - Log to Splunk: Check this check box to log CSM events to a Splunk server, where they can be indexed and searched. Then, set your server parameters.
      - Log Level: Select an event classification as described above (example: Debug and above, Info and above, etc.)

      - Server: The name of the Splunk server. If a Splunk server has not already been configured, go to the next step.

      - (Optional) If a Splunk server has not been configured, click **Configure**.

      The Splunk Server Settings window opens.

Define the following, and then click **OK**:

- ◦ Server URL: Type the **URL** of the Splunk server (example: https://splunkserver:8089).
- ◦ User Name: Type the **user name** of the individual with an account on the Splunk server.
- ◦ Password: Type the **password** of the individual with an account on the Splunk server.
- ◦ Ignore Certificate Errors: Check this box to ignore certificate errors that might be generated by Splunk using self-signed certificates to encrypt data. **Tip:** Check this box if you trust your connection is with the server.
- ◦ Test: Click this button to test the CSM connection to the Splunk server.

8. Click **OK** to close the Logging options window.

9. Click **OK**.

Configure User Display Settings

Use the Display page in the CSM Options window to configure the following User Display settings:

- The application skin for the Desktop Client and Administrator Client
- Windows titles
- DPI/Scaling settings
- Multiple monitor settings
- Accessibility display options for Forms

To configure User Display settings:

1. From the menu bar, select **Tools>Options**.
2. Click the **Display** page.
3. Select an application skin from the **Skin** list to control the appearance of the Desktop Client and Administrator Client shells.
4. Configure Window Title settings by selecting the **Display Connection information** check box. You can choose to show the database name, connection name, or both.

   > **Note:** This setting applies to all CSM databases (ex: CSM Administrator) on your current computer.

5. (Not recommended) Select the **Override system scaling settings** check box to control how Business Object Forms are scaled based on a User's Windows DPI settings.

   These settings do not control scaling of other visual elements in CSM. These settings only apply to the current database in which you define the settings.

6. If you have multiple monitors, you can specify where to open/restore CSM application windows. Not all Cherwell windows persist their location. For those windows, the standard behavior depends on Microsoft Windows.

   Select the **Override System Window Restore Settings** check box, and then select one of these options:

   ◦ **Original Monitor**

   Window opens in the same location on the same monitor where it was last closed.

   ◦ **Application Main Window Monitor**

   Window opens in the same location on the same monitor as the application Main window (the upper-left of the main application is the control point if the application straddles multiple monitors).

   ◦ **Mouse Pointer Monitor**

Window opens in the same location on the same monitor as the mouse pointer. This option only differs from the Application Main Window Monitor option when the User uses the keyboard to open windows in CSM, and the mouse pointer is located on a different monitor from the one where the application Main window is located. For example, if you have the CSM Main application on monitor 2, but bring up the One-Step Manager and drag it to monitor 1, when you edit an existing One-Step, the Manager will appear on monitor 1, even though the main application is still on monitor 2.

Note: This setting applies to all CSM databases (example: CSM Administrator) on your current computer. Windows that always open fully on the screen are not governed by these changes. If a window is too large to physically fit on the monitor, it will be snapped to the left and/or top edges depending on if it is too big in just one or both dimensions. You might notice this if you consistently drags windows partially off of the screen and expect them to open that way the next time.

7. **Override Business Object form themes with Windows colors**

   Select this check box to use Windows colors instead of the Form's defined Theme. This assists users with accessibility needs because the Forms display with high-contrast colors.

8. Click **OK**.

Override System Scaling Settings

If you have security rights, you can override the global CSM Administrator system scaling settings.

Note: Overriding the global scaling settings is not recommended. If Users increase their Windows DPI levels above 96, the default settings in CSM Administrator allow for automatic scaling of Business Object Forms in CSM. If the default settings are overridden, items will not be scaled at higher DPI settings. Business Object Forms can be manually scaled during design, but this leaves more room for error.

To override system scaling settings:

1. Open the CSM Display page (**Tools > Options > Display Page**).
2. Define personal scaling settings:
   a. Override System Scaling Settings: Select this check box to override the global scaling settings defined in CSM Administrator.

   b. Scale Business Object Forms Based on User's Text Size (DPI): Select this check box to have Business Object Forms automatically scaled.

   c. When a Creation Size Does Not Exist, Use: Select an option in the drop-downs to determine whether Business Object Forms are scaled from a specific DPI value if there are no cached DPI property values in CSM.
      i. Select a **specific DPI value** to scale Business Object Forms from a certain DPI level when CSM does not have any cached DPI values. This setting allows the system to assume that the Forms were created at the selected DPI.

      ii. Select **None** if you don't want items to be automatically scaled from a certain DPI value when a creation size does not exist. In this case, CSM will not attempt to scale Forms that have not been edited in version 4.60 or later, and Forms will likely be skewed and hard to read at higher DPI values.

Configure User Task Pane and Search Control Settings

Use the Task Pane and Search page in the CSM Options window to configure which default items appear in the Task Pane and which Search Control is used on the CSM menu bar.

To configure User Task Pane and Search Control settings:

1. From the menu bar, select **Tools>Options**.

2. Click the **Task Pane and Search** page.

3. Configure Task Pane settings:
   - View or hide sections.
   - Add new sections.
   - Configure sections (only applicable to new sections).
   - Delete sections (only applicable to new sections).
   - Organize sections.

4. Check or uncheck the corresponding check box to view or hide the following sections in the Task Pane:
   - Quick Search
   - Common Tasks
   - Actions
   - Queues
   - Process and Terminology
   - Customer Information

5. Add items to the Task Pane (if not using the Default Task Pane Setup):
   a. Uncheck Default Task Pane Setup check box.
   b. Click **Add** to open the Task Pane Section window.
   c. Specify a **name** for the Task pane section.
   d. Click **Add** to open the Action Manager.
   e. Select the items you want to appear in the Task Pane (example: Calendars).

6. Customize the CSM Search Control in the menu bar Search Options:
   - Use Default: Use the Default Search Menu Search Widget, which allows Users to run a Quick Search on multiple Business Objects simultaneously (example: Knowledge Article and Change Request). Users can also select a Business Object in the drop-down to search one item at a time (Specific Search).
   - Use Search Widget: Click the **Ellipses** button to open the Widget Manager and select an existing Search Widget or create your own.
   - No Menu Bar Search: Remove the option to search from the menu bar.

7. Click **OK**.

Configure User Dashboard and Calendar Settings

Use the Dashboards & Calendars page in the CSM Options window to configure the following User Dashboard and Calendar settings:

- Default Dashboard (Home Dashboard).
- Default Heads Up Display (HUD).
- Default Calendar.
- Default Mobile settings: Configure how Cherwell Mobile looks and behaves on your personal mobile device.
- Allow Web Proxies for Web Requests (RSS, Twitter, etc.).
- Clear the local Metric Cache.

To configure User Dashboard and Calendar settings:

1. From the menu bar, select **Tools>Options**.
2. Click the **Dashboards & Calendars** page.
3. Select a default Dashboard:
   a. Use default: Select this radio button to use the global default Dashboard.
   b. Dashboard: Select this radio button to use select your own Dashboard instead of the default Dashboard.
   c. Click the **Dashboard** button to open the Dashboard Manager, and then select an existing Dashboard or create a new Dashboard.
4. Select a default HUD:
   a. Use default: Select this radio button to use the global default HUD.
   b. Heads-up Display: Select this radio button to select your own HUD instead of the default HUD.
5. Select a default Calendar:
   a. Use default: Select this radio button to use the global default Calendar.
   b. Calendar: Select this radio button to select your own Calendar instead of the default Calendar.
   c. Click the **Calendar** button to open the Calendar Manager, and then select an existing Calendar or create a new Calendar to use as the default.
6. Configure default Mobile Settings:
   a. Customize Mobile Settings: Select this check box to override the default Cherwell Mobile Dashboards configured in CSM Administrator.
   b. Click the Mobile Dashboards button to open the Default Mobile Access Setup window, and then define how Cherwell Mobile looks and behaves on your personal mobile device.

      Note: For more information, refer to Define User Cherwell Mobile Settings in the Cherwell Mobile documentation.

7. Configure whether or not to allow Web Proxy for RSS, Twitter, and other Web requests:

a. **Allow Web Proxy for RSS, Twitter, and Other Web Requests:** Select this check box to receive CSM RSS Feeds.

> **Note:** CSM RSS Feeds allow Customers of an RSS reader to subscribe to CSM data (such as newly created Incidents) based on a Search Group or other criteria. Note that for RSS Feeds to operate, the Cherwell Web Service must be installed. RSS Feeds are disabled in the Browser Application settings in CSM Administrator.

8. Clear the Local Metric Cache: Click this button to clear all the Metric values that are stored on your local machine.

9. Click **OK**.

Define Personal User Information

Use the User Information page in the CSM Options window to configure User Login Credentials, Authentication options, and User details.

To configure User Information settings:

1. From the menu bar, select **Tools>Options**.

2. Click the **User Info** page.

3. View or change the information for the current User.

4. Click **OK**.

Configure User E-mail Settings

Use the E-mail page in the CSM Options window to configure the following User e-mail settings:

- Adding a new e-mail account.
- Editing or copying an existing account.
- Deleting an account.
- Designating an account as the default account for sending e-mails from within CSM.
- Finding dependencies.

To configure User e-mail settings:

1. From the menu bar, select **Tools>Options**.
2. Click the **E-mail** page.
3. Configure a personal e-mail account or customize a Global e-mail account:
    - Add button: Click to configure a new personal e-mail account (POP, IMAP, or Exchange).
    - Edit button: Click to edit the settings for an existing account.
    - Delete button: Click to delete an existing account.
    - Revert: Click to remove your personal settings and revert to the default settings for a global e-mail account.
    - Copy: Click to copy the settings for an existing account, and then edit the settings as necessary.
4. Define e-mail account settings:
    a. Define personal POP or IMAP Account settings.
    b. Define personal Microsoft Exchange Account settings.
5. Spell check e-mail: Select this check box to have CSM spell-check e-mails before they are sent.
6. Make default account: Makes the selected account the default account for sending e-mails within CSM.
7. Find dependencies: Displays other CSM Items using the selected e-mail account (example: An E-mail and Event Monitor).
8. Click **OK**.

> **Note:** For more information about e-mail accounts and how to use e-mail in CSM, refer to the E-mail documentation.

Configure User Cherwell Mobile Settings

Use the Default Mobile Access window (accessed from the Dashboards & Calendars page in the CSM Desktop Client Options window) to configure how Cherwell Mobile looks and behaves on your personal mobile device. You can configure which:

- Mobile Home Dashboard to display by default.
- Mobile Alert Dashboard to display by default.
- Business Objects to make available. Associated Search Groups will also be available.
- Actions/One-Steps to make available for each Business Object.

Good to know:

- Users must have Cherwell Mobile security rights to configure User Cherwell Mobile settings.

To configure User Cherwell Mobile settings:

1. From the CSM Desktop Client toolbar, click **Tools>Options**.
2. Click the **Dashboards and Calendars** page.
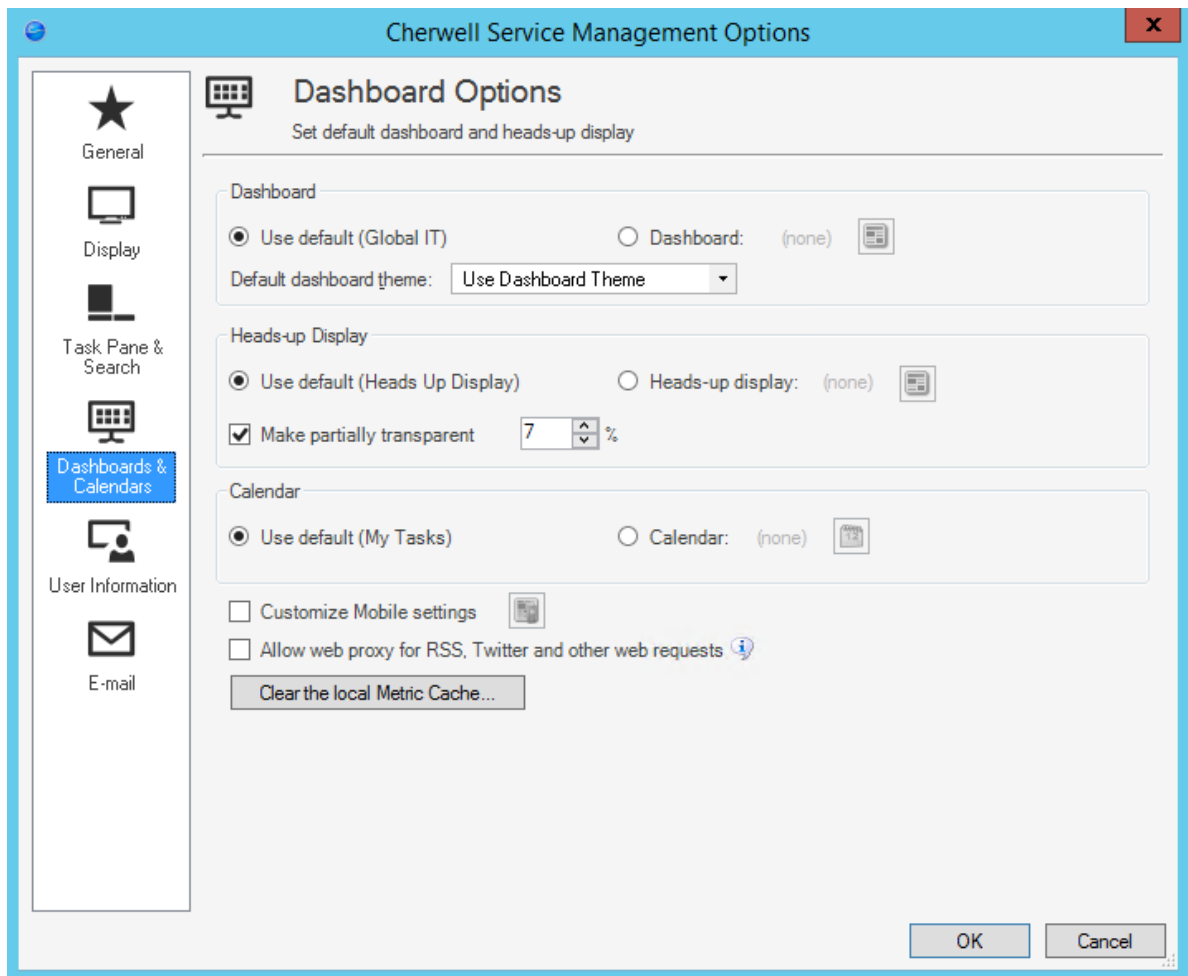
3. Select the **Customize Mobile Settings** check box.

> **Note:** If you do not have rights, this check box does not show up in the window. If you clear this check box, the Cherwell Mobile settings revert to the Global or Role default.

4. Select default Mobile Dashboards (Home and Alert)

   Tip: If you do not want to display any Dashboards, remove the Dashboard item from the *List of Objects to Display on Mobile Device* list.

   a. Home Page: Select a default Mobile Home Dashboard.
      ◦ Click the drop-down to select from a list of recently used Mobile Dashboards.

      ◦ Click the **Mobile Dashboard** button [icon] to open the Mobile Dashboard Manager, and then select an existing Mobile Dashboard or create a new Mobile Dashboard.

   b. Alerts Page: Select a default Mobile Alert Dashboard.
      ◦ Click the drop-down to select from a list of recently used Mobile Dashboards

      ◦ Click the **Mobile Dashboard** button [icon] to open the Mobile Dashboard Manager,and then select an existing Mobile Alert Dashboard or create a new Mobile Alert Dashboard..

5. Select the Business Objects to make available in Cherwell Mobile:

   Note: In order for a Business Object to be available, it must have the *Show in Search Manager* property set (in the Business Object properties within a Blueprint).

   a. Override List of Objects to Display on Mobile Device: Select this check box to override the current default list of available Business Objects (Global or Role, set in CSM Administrator).

   b. Click **Add**, and then select the **Business Object** to make available on mobile devices.

      Tip: Click **Edit** to edit a selected item. Click **Remove** to remove the selected item from the list.
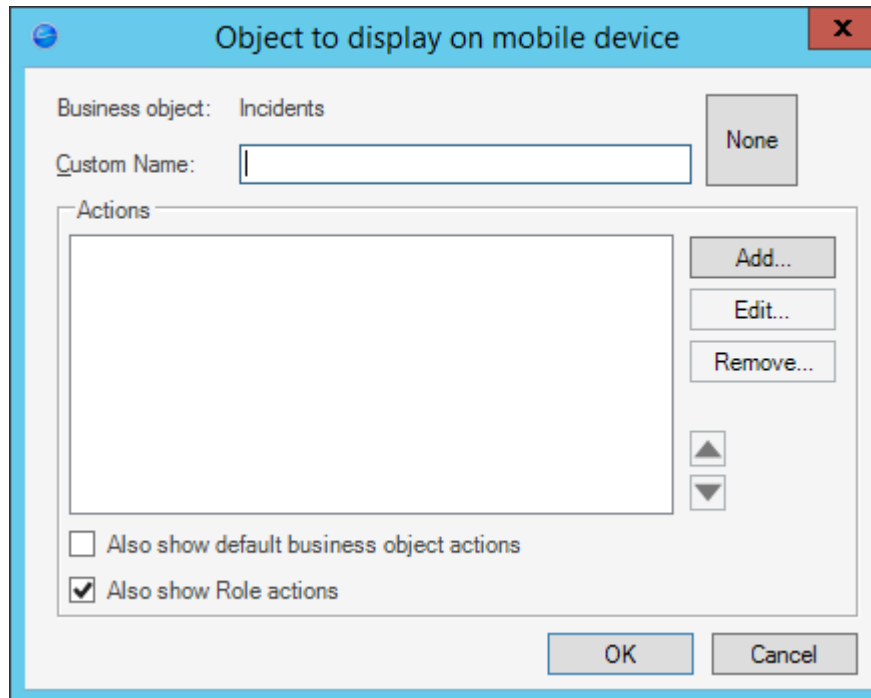
c. Define how to display the Business Object in Cherwell Mobile:
   ◦ Custom Name: Provide a **display name** to use in Cherwell Mobile. If this is left blank, the Business Object name will be displayed.

   ◦ Custom Image:

   Click the **Image** button to open the Image Manager, and then select an existing image or import a new image to represent the item in the UI.

   If you do not select an image (None), the default image for the Business Object is displayed.

   Android: Android devices use standard color images. For the best results, use the images in the BusObs>32x32 folder in the Image Manager. If you are setting up a mobile configuration for use on both Android™ and iOS® devices, use the iOS-specific images. They are automatically mapped to equivalent standard images for non-iOS® devices.

d. Select the Actions/One-Steps to make available in Cherwell Mobile:
   i. Click **Add** to add a new Action/One-Step to the list.

   Tip: Click **Edit** to edit a selected item. Click **Remove** to remove the selected item from the list. Use the **Up/Down** arrows to change the order of the Actions/One-Steps when displayed in Cherwell Mobile (ex: In the Actions list).

   ii. Define additional options for the list of Actions.
      ◦ Also Show Default Business Object Actions: Select this check box to make available any default Actions for the Business Object. This option is only available if

the Business Object has default Actions available (ex: Approvals have built-in functionality to approve, deny, and abstain).

- ◦ Also Show Role Actions: Select this check box to make available any Actions that were configured for the Business Object as part of the User's default Role settings. If no defaults were configured for the Role, then Global defaults are used.

6. Configure the order of the Actions when displayed in Cherwell Mobile (ex: On the Actions popup list):

a. Use the **Up/Down arrows** ▼ ▲ to order the Actions.

> **Note:** You can change the order for all custom Actions/One-Steps, but you cannot change the order of the Barcode scan, camera, and Location Awareness Actions/One-Steps.

7. Click **OK**.

Display/Hide a Toolbar or Pane

The CSM toolbars and Knowledge Pane can be displayed or hidden.

To display/hide a toolbar or pane:

1. Right-click anywhere on a CSM menu bar, toolbar, or pane.

   A drop-down appears, listing the items that can be displayed/hidden. Currently displayed items have a check next to them.

2. Select an **item** to display it. Clear a checked item to hide it.

Pin/Collapse a Pane

The Task Pane and Knowledge pane can be temporarily viewed, or permanently pinned in the CSM Main window.

To pin/collapse a pane:

- Click the **Pin** button [icon] in the upper right corner of a pane to collapse it. The pane displays as a tab on the left side of the CSM Main window.

- Click the tab to temporarily view a collapsed pane. The pane displays until the cursor is removed from inside the pane.

- Click the horizontal **Pin** icon [icon] to permanently display the pane.

Move/Dock a Pane

The Task Pane and Knowledge Pane can be moved anywhere within the CSM Main window or docked to their default locations.

To move a pane:

1. Click the **banner title** until a Four-Arrow Plus Sign ⊕ appears.

2. Drag the pane to any location in the CSM Main window. After the pane is removed from the original location, it becomes a small window that can be resized.

   The following image shows the Task Pane moved into the Main Pane.

   Tip: To dock the pane back to its default location, double-click the **banner title**.

Move/Dock a Toolbar

Use the Grab bars ⋮ on a CSM toolbar to move, dock, and re-dock a toolbar.

To move a toolbar within the menu bar and toolbar area:

1. There are two ways to move a toolbar:

   ○ Double-click the **Grab bar** ⋮ on the left side of the toolbar, and then drag the toolbar to a new location within the toolbar area.

     Note: If the toolbar is moved from the toolbar area, it becomes an independent window that can be resized.

   ○ Click the **Grab bar** until the Four-Arrow Plus Sign ✛ appears, and then drag the toolbar to a new location within the toolbar area.

   The following figure shows the Navigation toolbar moved to the line below where it was initially pinned.

2. Let go of the cursor to dock the toolbar.

To move a toolbar outside the menu bar and toolbar area:

1. There are two ways to move a toolbar:

   ○ Double-click the **Grab bar** ⋮ on the left side of the toolbar, and then drag the toolbar to a new location in the CSM window.

     Note: If the toolbar is moved from the toolbar area, it becomes an independent window that can be resized.

   ○ Click the **Grab bar** until the Four-Arrow Plus Sign ✛ appears, and then drag the toolbar to a new location within the CSM window.

   The following figure shows the Navigation toolbar moved to the Main pane.

   Tip: Double-click the header banner of an undocked toolbar to re-dock the toolbar back to its default location.

Create a User Toolbar

Create one or more personal toolbars (called a User toolbar) to initiate important Actions. For example, create a User toolbar to:

- Run a One-Step.
- Run a command (Zoom, Attach, Undo, etc.).
- Display a Dashboard, Calendar, or Visualization.
- Run a Report or Search Group.

A User toolbar displays with the other CSM toolbars in the CSM Main window.

To create a User toolbar:

1. Right-click anywhere in the CSM toolbar area, and then select **Customize.**

    The toolbars for User window opens.

2. Click the **Add** button.

    The New Toolbar window opens, listing Actions that are applicable for a toolbar.

3. Click the **Add Action** button ⊕, and then select the type of **Action** to add to the toolbar (ex: Add Command Action).

    A CSM Item Manager opens (varies by type of Action selected in the previous step) to select/create the CSM Item to initiate through the Action.

4. Select a CSM Item (ex: a specific Dashboard).

5. Define properties for a new Action:
    a. **Action:** Displays the name of the Action as it is recognized by CSM (ex: Name of the Dashboard or Report). It is recommended that you do not change this.
    b. **Display text:** Type the **text** to display on the toolbar button if the "Show text on button check box" (below) is checked.
    c. **Image button:**

       Click the **Image** button to open the Image Manager, and then select an existing image or import a new image to represent the item in the UI.

    d. **Help text:** Type a **tooltip** to display when the cursor is on the menu item.
    e. **Begin group:** Select this check box to display a horizontal line before the menu item, separating it from other menu items.
    f. **Show text on button:** Select this check box to display the Display Text on the toolbar button.
6. Add additional actions to the toolbar.

7. Click **OK**.

Keyboard Shortcuts

Key	Action
F1	Help
F2	Rename current item
F3	Show the legal values for a Field
F4	Heads Up Display
F5	Refresh
F6	Displays the current User's information
F7	Displays the current User's configuration items
F8	Zooms the current Field (if a large text Field)
F10	Select Menu
CTRL+C	Copy current text to the clipboard
CTRL+D	Switch to the preferred culture. This option is only available when Globalization is enabled.
CTRL+K	Paste the text from the current Field into Knowledge Search pane
CTRL+P	Switch to the last culture you selected. This option is only available when Globalization is enabled.
CTRL+S	Save the current record
CTRL+T	Toggle between form and list views
CTRL+V	Paste text from the clipboard
CTRL+W	Switch between the preferred culture and the last selected culture. This option is only available when Globalization is enabled.
CTRL+X	Cut current text to the clipboard
CTRL+Y	Redo last operation that was undone
CTRL+Z	Undo last operation
ALT+DOWN ARROW	Drop-down a combo-box Move down in a list of records

Key	Action
ALT+LEFT ARROW	Move back to previous location
ALT+RIGHT ARROW	Move forward
ALT+F1–F8	Select tab in the current Form Arrangement
CTRL+F4	Go to Home Page
CTRL+F5	Displays Self-Service settings (Self-Service setup must be configured on your machine and you must be on a customer type that is set up to be exposed via Self-Service)
CTRL+SCROLL	Zoom in/out in Editors
CTRL+SHIFT+E	Email current customer
CTRL+SHIFT+K	Paste the text from the current Field into Knowledge Search pane and searches
SHIFT+DRAG	Ignore snapping in an Editor
Defined in our database, but can be changed by the User:	
CTRL+SHIFT+I	New Incident
SHIFT+ALT+C	Go to Quick Search for Customer

CSM Web Applications

CSM includes two web applications:

- CSM Browser Client
- Customer Portal

Browser Client

The CSM Browser Client is a web application that enables Users to access most of the features available from the CSM Windows-based Desktop Client using a browser. The CSM Browser Client supports most major modern browsers on desktop machines and tablets.

About the CSM Browser Client

CSM Browser Client features include:

- **Record Logging:** Log and manage records (example: Incident, Problem, Change, Customer, CMDB, etc.).
- **Searching:** Run Quick Searches or Search Groups (saved searches) to efficiently and thoroughly search/filter CSM data, locating one record or a set of records.
- **One-Steps:** Run One-Steps to initiate one or more defined Actions, automating common or repetitive tasks.
- **E-mail:** Send E-mails to a single recipient or a group of recipients.
- **Dashboards** and **Widgets:** Use Dashboards to view critical metrics, analyze and predict trends, drill down into data, execute Actions, or just display a collection of information that might be relevant to a group of Users/Customers.
- **Reporting:** Use a host of powerful reporting tools (defined Reports and report writing tools, Search Groups, Dashboards/Widgets, and Visualizations) to gather and measure data, analyze metrics, and predict trends.
- **Visualizations:** View Visualizations to see the relationships between records in a variety of layouts.
- **Calendars:** View Calendars to keep track of ongoing or upcoming Tasks.
- **Tools:** Access the Contact Manager, Table Management, and CMDB.
- **Additional Features:** Access/use HTML Pages, Knowledge Articles, and Queues.
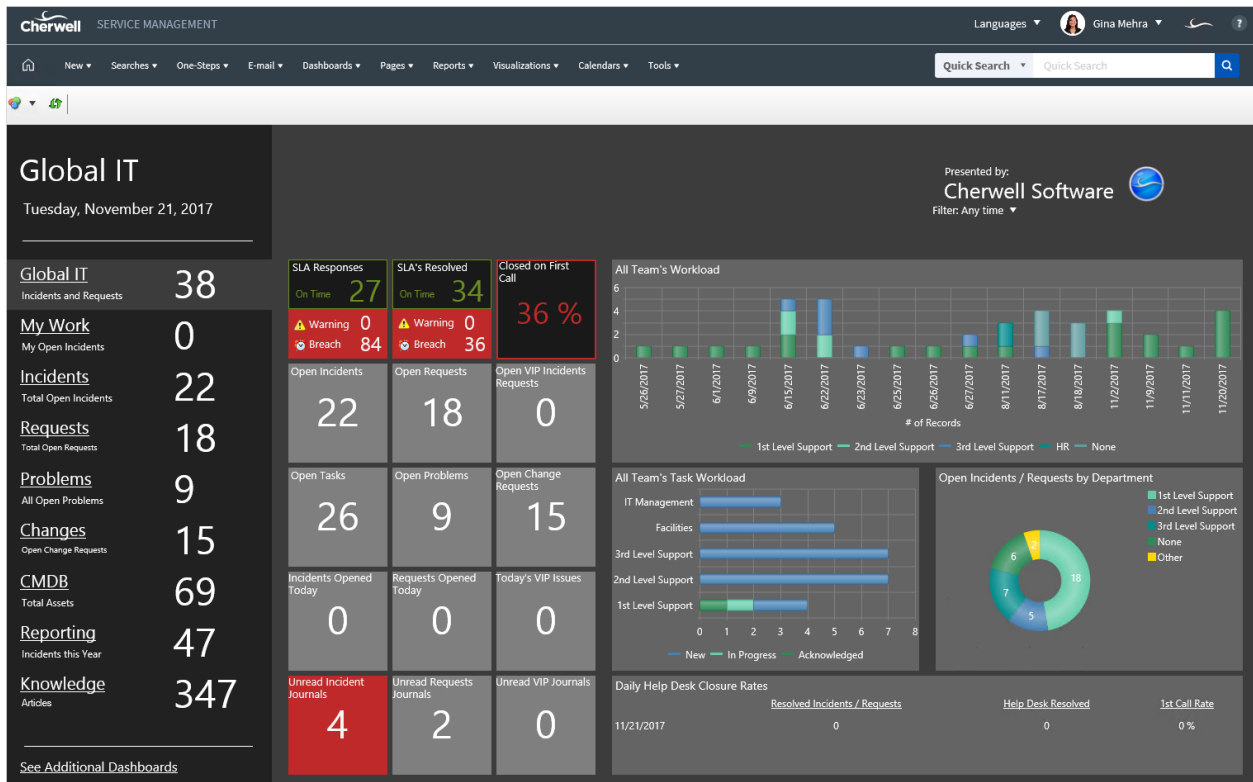
The main Business Objects available in the Desktop Client are also available in the Browser Client, so there is as little difference as possible between the two clients. The majority of the differences in functionality lie in configuring and administrative functions within the Browser Client. The configurations and settings for the Browser Client are determined in the CSM Desktop Client and CSM Administrator. Many functions behave differently in the Browser Client than they do in the Desktop Client. To see the differences in functionality between the Browser Client and the Desktop Client, see Browser Client Features.

Before Users can access the Browser Client, it must be configured by a system administrator. After the Browser Client has been configured, Users access the Browser Client via a web browser (Chrome™, Mozilla Firefox®, Internet Explorer®, etc.).

Tour the Browser Client User Interface (UI)

The Browser Client User Interface (UI) is similar to theCSM Desktop Client and provides efficient access to CSM while you are away from the Desktop Client. The main window displays the following items:

- Account information
- Menu bar
- Toolbar
- Main Pane
- Search Control

Each User has a personal interface that is controlled by login Role and security rights. For example, the default Dashboard (displayed in the main pane upon log in or by clicking the Home button) might display real-time Incidents, Twitter Feeds, or metrics for a Team.

The Browser Client menu bar collapses into a hamburger menu on mobile screens and browser windows sized below 768 pixels. It cannot be configured, but the CSM Items accessed from the menu bar are driven by configurations and personal settings in the Desktop Client. For example, a Search Group can be created and saved in the Desktop Client and then used in the Browser Client by using the Browser Client Managers.

Note: The Navigation toolbar opens when a record is active in the main pane.

Browser Client Main Window

The Browser Client main window is simplified compared to the dynamic capabilities of the CSM Desktop Client, but the look-and-feel is similar.
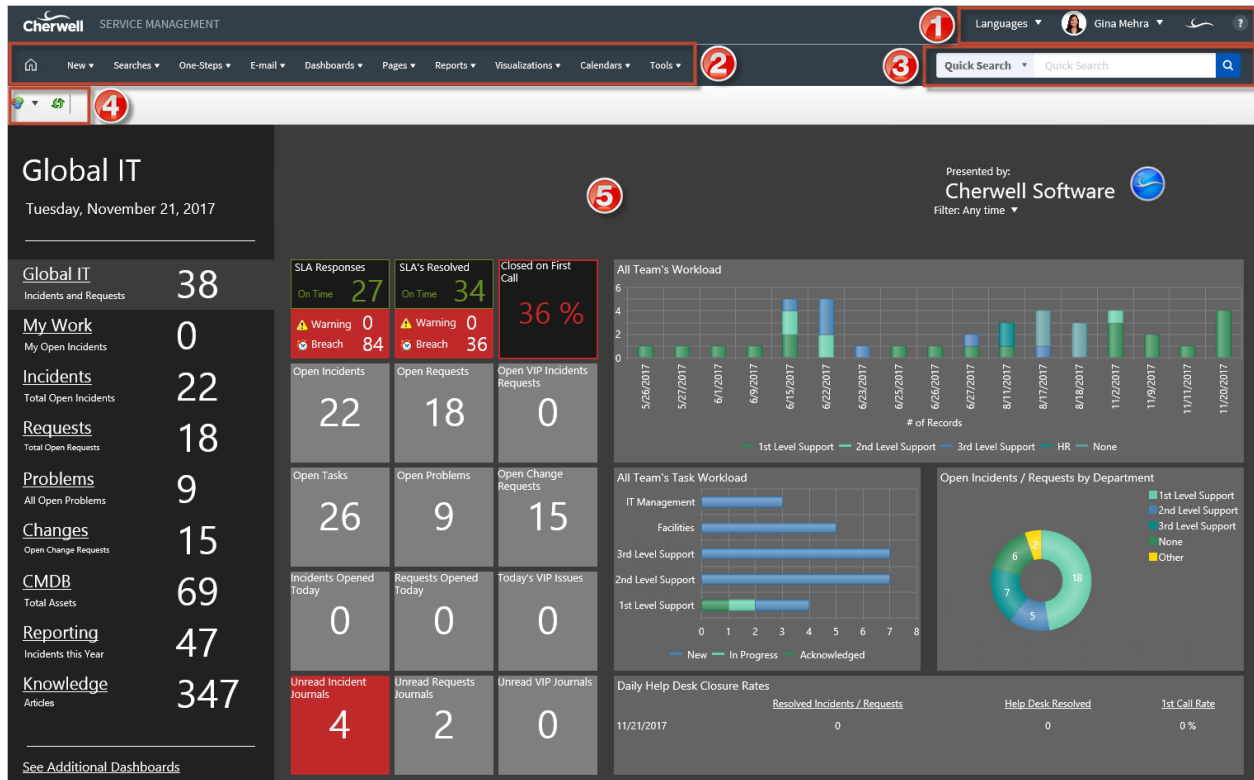
1. Account Information: Displays login and User/company information.

2. Menu bar: Displays drop-down menus for features and functions within the Browser Client. The Browser Client menu bar collapses into a hamburger menu on mobile screens and browser windows sized below 768 pixels.

3. Search Control: Allows Users to run Quick Searches and specific record Searches.

4. Toolbar: Displays available actions and operations within the main pane and within records.

5. Main pane: Displays Dashboards, records, Reports, and Search Results.

Browser Client Item Managers are opened from the menu bar. To open a Manager, click the desired **menu** (example: Dashboards) and then select **[Item] Manager**.

Browser Client Account Information

Options in the Browser Client account information section are described below.

Table 1. User Information

Action	Description
Languages	Allows Users to switch cultures to change the language for platform and content strings.
My Profile	Allows Users to view their personal information (Contact information, manager information, etc.). The form is populated using information from the User Profile.
Logout	Logs the User out of the current session.

Table 2. Company Information

Action	Description
Report Error	Allows Users to submit information about an error they receive while working in Cherwell Service Management to the Cherwell Software Support Team.
(719) 386-7000	Cherwell Software company phone number.
<Version Number>	Current version of Cherwell Service Management.
Cherwell Copyright © 2006-2017 Cherwell Software, LLC.	Cherwell Service Management copyright information.

Table 3. Help Icon

Action	Description
Help Icon	Allows Users to access a defined Help System/site. For information on configuring a Help site, see Configure Global Help Settings.

Browser Client Menu Bar

Options in the Browser Client menu bar are described below.

| 🏠 | New ▾ | Searches ▾ | One-Steps ▾ | E-mail ▾ | Dashboards ▾ | Pages ▾ | Reports ▾ | Visualizations ▾ | Calendars ▾ | Tools ▾ |
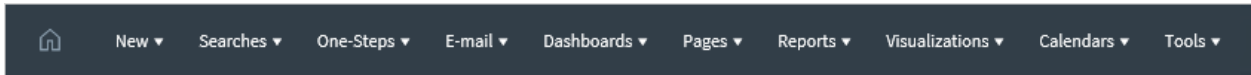
Table 1. Home

Action	Description
Home	Opens the default home Dashboard.

Table 2. New

Action	Description
New	Creates a new record (example: New Config - Mobile Device).

Table 3. Searches

Action	Description
Search Manager	Opens the Search Group Manager, where you can run saved searches (Search Groups).
Quick Search Builder	Opens the Quick Search Builder, where you can create a Quick Search.
Queues	Opens the Queues menu, including the Queue Manager and Most Recently Used (MRU) Queues.

Table 4. One-Steps

Action	Description
One-Step Manager	Opens the One-Step Manager, where you can run One-Steps.
Recent Unassociated One-Steps	Runs the Most Recently Used (MRU) One-Steps.

Table 5. E-mail

Action	Description
Send E-mail	Opens the E-mail Message window to create and send e-mails directly from the CSM Browser Client. 🖉 **Note:** An e-mail account must first be set up and given security rights in order to send an e-mail. See Send an E-mail from Within CSM.
E-mail Current Customer	Opens the E-mail Message window to create and send e-mails to a Customer's e-mail address from your current page (An Incident record, Problem record, etc.). The To line is automatically populated with this address, and an error will open if there is no active Customer on the record.

Table 6. Dashboards

Action	Description
Home	Directs you back to the default Home Dashboard.
Dashboard Manager	Opens the Dashboard Manager, where you can view Dashboards.
MRU	Lists the Most Recently Used (MRU) Dashboards.

Table 7. Pages

Action	Description
Pages Manager	Opens the HTML Page Manager, where you can view HTML Pages.
MRU	Lists the Most Recently Used (MRU) Pages.

Table 8. Reports

Action	Description
Report Manager	Opens the Report Manager, where you can run Reports.
MRU	Lists the Most Recently Used (MRU) Reports.

Table 9. Visualizations

Action	Description
Visualization Manager	Opens the Visualization Manager, where you can run Visualizations.
Config Visualization	Opens the Configuration Map Visualization.
MRU	Lists the Most Recently Used (MRU) Visualizations.

Table 10. Calendars

Action	Description
Calendar Manager	Opens the Calendar Manager, where you can run Calendars.
Main Calendar	Opens the Main Calendar. **Note:** This is configured in CSM Administrator. For more information, refer to the Calendars documentation.
MRU	Lists the Most Recently Used (MRU) Calendars.

Table 11. Tools

Action	Description
Contact Manager	Opens the Contact Manager, where you can view and manage Customer Records.
Table Management	Opens the Table Management interface, where you can manage Lookup Table values.

Action	Description
CMDB	Opens the CMDB interface, where you can manage Configuration Items (CIs).

Note: The Browser Client menu bar collapses into a hamburger menu on mobile screens and browser windows sized below 768 pixels.

Browser Client Search Control

Options in the Browser Client Search Control are described below.

Table 1. Search Control

Item	Description
Quick Search drop-down	Allows Users to select the type of Search: • Quick Search: Searches all records that contain a specific word or phrase (example: Find all records that contain the word "printer"). • Specific Search: Searches only records of a particular type (example: Find all Incidents that contain the word "printer").
Search field	Displays the word or phrase to be searched. The drop-down displays the most recently used (MRU) searches. The Search field supports: • AND (all words) logic or the OR (any word) logic. System administrators define the default. • Wildcards (*, %) can be used.
Search options (wrench icon)	Displays advanced search options for a specific record type (ex: Incident). **Note:** Advanced options are not available for Quick Searches; a specific record type must be selected before the options become visible. The search options for each record type are configured by a system administrator.
Search (magnifying glass icon)	Runs the search. If results are the same type (example: Results are only Incidents), the results are displayed in the Grid. If results are different types (example: Results are Incidents and Problems), the results are displayed in a list.

Browser Client Toolbars

Options for the Browser Client toolbars are described below.

Table 1. Dashboard Theme Toolbar

Button	Action	Description
	Select a Theme	Applies a new Theme to the current Dashboard.
	Refresh the Dashboard	Refreshes the current Dashboard.

Table 2. Record Toolbar

Button	Action	Description
	Save	Saves changes in the active window.
	Abandon	Abandons changes to the current item.
	Refresh	Refreshes the data of the current item.
	Delete	Deletes the current selection.
	Legal values	Displays a list of legal values (for lookup fields only).
	Attach	Import a file attachment.
	Search Knowledge	Search for Knowledge sources related to the current record (example: Incident).
	Go to first record	Navigate to the first record.
	Go to previous record	Navigate to the previous record.
	Go to next record	Navigate to the next record.
	Go to last record	Navigate to the last record.

Button	Action	Description
	Add to Queue	Add the record to a Queue.

Browser Client Main Pane

The Browser Client main pane is located in the center of the CSM main window and displays content relevant to the current operation. When you log in, the main pane displays the Home Dashboard. Depending on the operation, the main pane can also display the following:

- Records (Incident, Problem, Knowledge Article, etc.).
- Search Results (Quick Search, Knowledge Article Search, etc.).
- Reports, Calendars, Visualizations, Grids, and more.

Browser Client Managers

CSM Item Managers help manage CSM items (Dashboards, Search Groups, One-Steps, etc.). In the Browser Client Managers, Users can:

- Run/Display: Runs/displays the selected item (example: Run a Search Group, One-Step™, or Report; display a Dashboard).
- Filter (Association or Status): Filters items by record type (Incident, Problem, Change, etc.) or Status (for the Queue Manager).

    Note: Filtering by record type is only available in the Search Group, One-Step™, Dashboard, and Report Managers.

- View: View a list of available items in either List view or Icon view.

To open Managers in the CSM Browser Client:

1. From the Browser Client menu bar, click the desired **menu** (example: Dashboards), and then click the **[Item] Manager**.

Rather than utilizing the folder structure of the CSM Desktop Client and Administrator Managers, Browser Client Managers use tabs to navigate the areas where CSM items are located within the Manager. The tabs correspond to folders in the Desktop Client and contain the same CSM items. Clicking a tab takes you to the items located in that file. Clicking an Item's Home takes you to the base file structure (example: Dashboards>Pinboard, User, Role, Team, Global).

Browser Client Features

The CSM Browser Client has been designed to be as similar in behavior to the CSM Desktop Client as possible. The main Business Objects and features available in the Desktop Client are also available in the Browser Client. However, there are several differences in the following Browser Client features:

- Forms
- Searches, including the Quick Search Builder and Queues
- Grids
- One-Steps
- E-mail
- Dashboards and Widgets
- HTML Pages
- Reports
- Visualizations
- Calendars
- Knowledge
- Tools (Contact Manager, Table Management, and CMDB)

Features Supported in the Browser Client

Feature	Supported	Details
Actions	✔	Run Only.
Attachments	✔	Import file attachments and view imported file attachments only.
Automation Processes	✔	Run Only.
Blueprints	✖	CSM Administrator Only.
Business Hours	✔	View Only.
Business Objects	✔	View, create, edit, and delete Business Object records, but not the Business Objects themselves.
Calendars	✔	View Only.
Contact Manager	✔	

Counters	✔	View Only.
Dashboards	✔	
Definition Editor	✖	
Document Repositories	✔	Via Attachments.
E-mail	✔	Send e-mail. Configuring e-mail must be done in CSM Administrator.
Expressions	✔	
Forms	✔	Users can work in Forms but Forms cannot be created or deleted from the Browser Client.
Grids	✔	
HTML Pages	✔	View Only.
Knowledge	✔	Search for and create Knowledge Articles.
Metrics	✔	View Only.
Modifiers	✔	
One-Steps	✔	
Prompts	✔	
Queues	✔	View Only.
Record Locking	✔	
Reports	✔	View only.
Rich Text	✔	

Searching	✔	Searches can be run, created, edited, and deleted (with security rights).
System Analyzer	✖	
Table Management	✔	
Themes	✔	Run Only.
Tokens	✔	
Visualizations	✔	View Only.
Widgets	✔	View and drill-down only.

Browser Client Forms

Forms and Grids in the CSM Browser Client are very similar in appearance and functionality to Forms in the Desktop Client.

Using Forms in the Browser Client, Users can:

- View existing records (example: Incident, Change, Problem, etc.).
- View child objects for records in the Form Arrangement (example: Journals, Tasks, Queues, etc.).
- Log a record (example: Incident, Change, Problem, etc.).

In the Browser Client, Form functionality is accessed using the New drop-down on the Browser Client menu bar to log a new record or by drilling down into a Widget and then opening an existing record via a Grid.

Good to know:

- In addition to the record itself, Forms in the Browser Client contain a Form Arrangement area as they do in the CSM Desktop Client. The Form Arrangement contains child objects and supporting tabs (example: Journal, Queues, Tasks, etc.).

- Users can now zoom into Fields by clicking the Text Editor button [image] in a Field.

- Browser Client Forms feature splitters that help you size the Form Arrangement as needed.

- For more information about Forms and Form Arrangements, refer to the Forms documentation.

Browser Client Form Splitters

In the Browser Client, Forms contain splitters that help Users resize the Form Arrangement using both horizontal and vertical splitters.

Good to know:

- In an open record, the horizontal splitter above the Form Arrangement (child object tabs) adjusts the overall height of the Form Arrangement. The vertical splitter in the middle of the Form Arrangement adjusts the overall width of the Form Arrangement if the tab features more than one section.
- Adjust the Form Arrangement by clicking anywhere on the splitters except for the Show/Hide Form Arrangement arrows and the Show/Hide Child Object Details arrows.

There are several buttons and icons featured in the Browser Client splitters.

Button/Icon	Action	Description
	Show Form Arrangement	Shows a currently hidden Form Arrangement.
Or	**Separators**	Indicate that the splitter bars can be dragged-and-dropped where needed.
	Hide Form Arrangement	Hides a currently visible Form Arrangement.
	Show Child Object Details	Shows the child object, including details or additional Forms.
	Hide Child Object Details	Hides the child object details or additional Forms so only the child object Grid is visible.

To show or hide the Form Arrangement:

1. Click the **Show Form Arrangement** arrows to show a currently hidden Form Arrangement.

   To expand the Form Arrangement so that it fills the full area of the record, click the **Show Form Arrangement** arrows a second time.

2. Click the **Hide Form Arrangement** arrows to hide a currently displayed Form Arrangement.

   To hide the Form Arrangement after expanding it to fill the entire area of the record, click the **Hide Form Arrangement** arrows twice: once to return the Form Arrangement to its original size, and then again to hide it completely.

To adjust the overall height of the Form Arrangement:

1. Click and hold the **horizontal splitter** above the Form Arrangement.

2. Move the horizontal splitter up or down until the Form Arrangement is the desired height.

To show or hide a child object's details or additional Forms:

1. Click the **Show Child Object Details** arrows to show both the child object (example: Task) and its additional details or Forms (example: Task form).

   To expand the child object's additional details or Forms on the right-hand side of the Form Arrangement space, click the **Show Child Object Details** arrows a second time.

2. Click the **Hide Child Object Details** arrows to hide the additional details or Forms.

   To hide the additional details or Forms after expanding them to fill the entire area of the Form Arrangement, click the **Hide Child Object Details** arrows twice: once to return it to its original size, and then again to hide it completely and only display the child object's Grid.

To adjust the overall width of the child objects and their details or additional forms:

1. Click and hold the vertical splitter in the middle of the Form Arrangement.

2. Move the vertical splitter left or right until the child object and its details are the desired width.

Browser Client Text Editor

Using the Text Editor, Users can:

- Edit text in the Field.
- Zoom in or out on the text for ease of viewing.
- Import an image.

The Text Editor can be opened by clicking the Text Editor button in a Field on a Form in the Browser Client.

The Rich Text Editor does not support:

- Dragging and dropping of text or images from any other source. If you drag and drop an image in Mozilla Firefox, it will appear to work; however, once you click away from the window or submit the form it will disappear. Instead, use the Import Image button to add an image.
- Coping and pasting images from the clipboard.

Browser Client Grids

Grids in the Browser Client and Portal look very similar to Desktop Client Grids, except that Export, Run Action, and Add/Remove Grid column options are available on a Grid toolbar rather than from a context menu or menu bar. Grid grouping is not currently available.

1. **Grid menu bar:** Displays actions available for the Grid, including navigation, Actions, and available columns.

2. **Title:** Grid title. This might or might not match the name of the Business Object that the Grid represents. Also, a Business Object might have multiple Grids, so each might have its own name.

3. **Sort icon:** Indicates the column currently sorting the Grid and if it is in ascending or descending order (⬆⬇). Click the icon to toggle sorting. By default, the Browser Client sorts Grids using single-column sorting. To sort the Grid using multiple columns, click the **Multi-column sorting** button in the Grid menu bar.

4. **Filter icon:** Indicates the column data can be filtered. Click the icon to show filtering options (possible filter values appear in the column's Filter drop-down).

5. **Sizing handles:** Allow you to drag the column to the width you want.

6. **Grid item:** Each item within a Grid contains its own line of information. Clicking the item opens the record in the Main Pane.

7. **Images:** Expression-driven images can be used to indicate a condition has been met (example: Display breached SLAs with an Alarm Clock image). Grid rows also support expression-driven colors.

To view a Grid in the Browser Client:

1. A Grid can be viewed several ways:
   ◦ Search Results: List of records located through a Quick Search or Search Group.
   ◦ Search Results List Widget: List of results on a Dashboard.
   ◦ Form Arrangement: List of related records on a tab.

- ◦ Contact Manager: List of Customer records.
- ◦ CMDB interface: List of Configuration Item records.
- ◦ Table Management interface: List of Lookup values.
- ◦ CSM Item Managers: List of CSM Items (example: List of Dashboards in the Dashboard Manager).

There are several actions available when working with Grids in the Browser Client:

Grid Capability	Description
Export	Export a Grid to use CSM data in other applications for reporting or display purposes (example: Export your Customers to a .csv file so that you can use a spreadsheet tool to manage a mass mail communication). You can export to .csv and .xls formats.
Run an Action	Run a defined Business Object context menu Action directly from a Business Object Grid (record Grid) to quickly initiate common operations. Context Menu Actions are defined as part of a Business Object's definition.
Sort	Sort a Grid in alphabetical or numerical order, in ascending (1-10 or A-Z) or descending order (10-1 or Z-A). Grids in the Browser Client can also be sorted using single-column sorting (the default setting for Browser Client Grids) or multi-column sorting, allowing Users to sort the Grid using multiple columns at a time.
Filter	Filter a Grid by a column value so that the Grid shows only the data you want (example: Show only New Incidents). To show even more specific data, multi-filter a Grid, either by using multiple values in a single column (example: Show Incidents with a status of Assigned, In Progress, *or* Pending) or by using multiple column values (example: Filter by owner, and then by status).
Size	Size a Grid column to a specific width to see as much or as little data as you want.
Move/reorder	Rearrange a Grid by moving (reordering) a Grid column to a different location in a Grid.
Add/remove columns	Business Object Grids are created and managed by a system administrator in CSM Administrator; however, you can add and remove columns (Fields) from your instance of the Grid to display only Fields that are important to you (example: Add the Owned By field to the Incident grid to view record owners). If configured, you can also add Fields from other Business Object.

For more information on Grid function in the Browser Client, see Browser Client Grid Functions.

Browser Client Grid Functions

Working with Browser Client Grids, Users can:

- View a Grid.
- Export a Grid.
- Run an Action from a Grid.
- Filter a Grid.
- Add/Remove a Grid column.

Good to know:

- In order to Export Grids, the User must have **Can export data from grids** and **Can customize grids that support customization** Application Security Rights enabled.
- Export and filter options are located in the Grid toolbar, rather than from a context (right-click) menu.
- Exportable Fields are organized by category; uncategorized Fields are listed at the top, and are likely listed in the menu. Relationships Fields are listed below the Relationship node (example: Incident Links Problem Fields).
- By default, all rows in the Grid are selected to export.
- If a column has a filter applied to it, the Filter icon will have a highlighted square around it to indicate that a filter has been applied.
- Grid changes are remembered until the Grid is reset in the CSM Desktop Client or Administrator, the settings are cleared (Tools>Options>General>Restore all Customized Grids to the Admin Defaults, or File>Clear Settings in the Role or User Manager), or a new System Grid definition is automatically pushed out. If a new System Grid definition is pushed out, a Personal Grid definition can be reverted manually but the changes in the new definition will be lost. For detailed information, refer to Grid Persistence.

To view a Grid in the Browser Client:

1. A Grid can be viewed several ways:
   - Search Results: List of records located through a Quick Search or Search Group.
   - Search Results List Widget: List of results on a Dashboard.
   - Form Arrangement: List of related records on a tab.
   - Contact Manager: List of Customer records.
   - CMDB interface: List of Configuration Item records.
   - Table Management interface: List of Lookup values.
   - CSM Item Managers: List of CSM Items (example: List of Dashboards in the Dashboard Manager).

To export a Grid in the Browser Client or Portal:

1. In a Grid, click the **Export** button on the Grid toolbar.

2. Select the **columns** to export.

3. In the File Format drop-down, select a **file type** for the exported file. Options include:
   ◦ csv
   ◦ .xls (Excel)

4. Click **Export**.

   The Opening Data Table window opens, to open the file in a selected program (Open With) or save the file (Save File).

5. Click **OK** to complete the operation.

For more information on filtering Grids, refer to the Exporting Grids documentation.

To run an Action from a Grid in the Browser Client or Portal:

1. In a Grid, select a **row** (record) by selecting the radio button next to the row.

2. In the Actions drop-down, select an **Action**.

To filter a Grid in the Browser Client or Portal:

1. In a Grid, click the **Filter icon** ▼ in the header of the column to filter.

2. Click in the Filter box to activate the window.

   A Filter list drops down, showing filtering options/values; options/values vary according to the type of data in the column (example: Number, Text, etc.).

3. Select a **filtering option/value**, and then click the **Filter** button.

4. To continue filtering by another column, click the **Filter icon** over another column, and then select another **filtering option/value**.

   The Grid filters the data again and redisplays the filtered results.

   Tip: To clear the filtering criteria, click the **Filter icon** on the filtered column, and then click the **Clear** button in the Filter drop-down.

For more information on filtering Grids, refer to the Grids documentation.

To add/remove a Grid column in the Browser Client or Portal:

1. In a Grid, click the **Columns** drop-down on the Grid toolbar.

   The menu expands to show which Fields are currently selected to display in the Grid. An alphabetical list of uncategorized Fields from the original Grid definition are also listed. Fields currently displayed in the Grid have a check mark to indicate that they are included.

   Note: The uncategorized Fields list is limited.

2. Select a **Field** to add as a column (example: Incident.Category).

The added column displays on the far right-hand side of the Grid and can be moved anywhere in the Grid by dragging-and-dropping the column to the desired location.

Browser Client Searches

Searches in the Browser Client behave very similarly to those in the Desktop Client. Search behaviors include:

- Searches edited or saved in the Browser Client carry over to the Desktop Client. Depending on Role and the scope (folder) of the Search, others may be able to see and use created Searches (example: If you create an All Tasks Search and save it to the Team folder, only members of your Team will have access the Search).

- Use the Search Manager to create, edit, and delete Search Groups (saved Searches) or use the Quick Search Builder to create and run a one-time Search. Both are accessed via the Searches drop-down on the menu bar.

- The Search Manager behaves differently in the Browser Client than it does in the CSM Desktop Client. See Browser Client Managers for more information.

- Queues can be run from the Queue Manager in the Browser Client, but cannot be created, edited, or deleted. The Queue Manager and MRU Queues are accessed via the Search drop-down on the menu bar.

To run a Search:

1. From the Browser Client menu bar, click the **Searches** drop-down.

2. Select an option from the drop-down:
    - Search Manager: Create and/or run a defined Search.

    - Quick Search Builder: Create a run a Quick Search.

    - Queues: Select and run a Queue from the Queue Manager.

    The results display in the Main Pane.

If card view is enabled for a Business Object, Search results are displayed as medium or large cards. To view a specific record in card view, select an item from the results list or the title link in a card.

In card view, you can:

1. Navigation: Use page numbers and arrow buttons that allow you to navigate between pages of results.

2. Side menu: Access options, such as showing the currently selected record or showing results in a Grid view, sorting results by a Field in ascending or descending order, and changing card size.

> **Note:** To ensure that card size selections persist and do not revert to the default, uninstall WebDAV in IIS.

3. Ellipses: Access a menu of actions available for the Business Object. Actions can be run directly from the card view without drilling down into a record.

When viewing the Search results, more options become available in the Search menu drop-down that allow Users to edit the current Search and save the current Search.

Browser Client Quick Search Builder

The Browser Client Quick Search Builder is very similar in behavior to that of the Desktop Client Quick Search Builder.

Searches saved in the Browser Client carry over to the Desktop Client. Depending on Role and the scope of the search, others might be able to see and use created Searches (example: If you create an All Tasks Search and save it to the Team folder, members of your Team will be able to access the All Tasks Search).

Browser Client Queues

Access Queues from the Queues drop-down in the Searches menu or work with Queues from the Business Object toolbar. Queues cannot be created or edited in the Browser Client and they can only be viewed in the Browser Client with the proper security rights and Role defined in CSM Administrator.

To open a Queue:

1. Click **Queues** in the Searches drop-down.

2. To find a Queue that is not listed in the Queues MRU menu, click **Queue Manager**.

> **Note:** The Queue Manager behaves differently in the Browser Client than in the Desktop Client. See Browser Client Managers for more information.

Queue results appear in the same list format as other Browser Search results.

To work with Queues:

1. Open a Business Object record.

2. On the Business Object toolbar, click **Queues**.

   The Queue Status window opens. If the record is not currently in a Queue, the only enabled button on the Queue Status toolbar is Add.

3. Add a record to a Queue:
   a. On the Queue Status toolbar, click **Add**.

   b. From the Queue Manager, select a **Queue** (ex: Network Support).

      The name of the Queue displays in the Queues Containing Record section.

4. Check out/check in a record from the Queue:
   a. In the Queues Containing Record section, select a **Queue**.

   b. On the Queue Status toolbar, click **Check Out**.

      When a record is checked out of the Queue, the record cannot be checked out by another User until the User working with the record checks it in.

   c. On the Queue Status toolbar, click **Check In**.

      After the record is checked in, it can be checked out by another User.

5. Remove a record from a Queue:
   a. On the Queue Status toolbar, click **Remove**.

      The record is no longer in the Queue.

Browser Client One-Steps

Browser Client One-Steps look and behave similarly to One-Steps in the Desktop Client. In the Browser Client, Users can run One-Steps from:

- The Browser Client menu bar (run from the One-Step Manager or the list of Most Recently Used (MRU) One-Steps).
- Buttons, links, and Widgets on Dashboards.
- Business Object records (as buttons or links). Some One-Steps might also run as Automatic Actions that are executed when a Business Object is saved.
- The One-Step Manager (accessed from the Browser Client menu bar).
- An Actions menu on a Grid.

Good to know:

- The One-Steps accessed and run in the Browser Client are created in the CSM Desktop Client or in CSM Administrator. One-Steps cannot be created, edited, deleted, or run against groups of records in the Browser Client.
- The One-Step Manager behaves differently in the Browser Client than it does in the CSM Desktop Client. See Browser Client Managers for more information.
- The ability to run certain One-Steps depends on security rights. For example, to run a One-Step from a Team folder (scope), you must have rights to run Team One-Steps.
- Actions/One-Steps that are available as buttons and links on records, in Actions context menus, and/or that run automatically are configured by your Administrator.
- Printing One-Steps will only work if a specific, server-accessible printer is selected.
- Executing commands will only work for commands that are mapped the same way between the Desktop and the Browser Clients.
- There is currently no option in the CSM browser applications to run a One-Step for a group unless an explicit group is associated with the One-Step.
- Interactive One-Steps used as part of Save Actions generally only execute the last performed interaction.
- Write file, read file, run program, and transfer Attachments (to or from a file system) One-Steps generally do not work for the CSM Browser Client, unless a One-Step is designed to write a file on the server, and then execute a program on the server using the contents of that file. However, this would require configuring IIS security rights specifically to handle this capability.

Browser Client E-mail

E-mails can be sent directly from the Browser Client using the E-mail menu located on the Browser Client menu bar.

The E-mail menu contains the following options:

- Send E-mail: Allows the User to send an e-mail from anywhere in the Browser Client (you select the recipients).
- E-mail Current Customer: Allows the User to send an e-mail from a Business Object record (the recipient is the active Customer on the Business Object Record).

E-mails can also be sent by running One-Steps that have e-mail Actions, either from the One-Step Manager or by clicking on a Customer's e-mail address in a Business Object record. When sending an e-mail, there are several options in the e-mail message window, including:

- Selecting e-mail recipients from the CSM Address Book. Select individual recipients, as well as Teams and Workgroups.
- Adding attachments to e-mail messages, including files from a computer and files attached to a record (if sending an e-mail from a record).
- Using Rich Text in the body of e-mails and select whether to send messages in Rich Text or plain text format. Images and hyperlinks can be inserted into messages.

Good to know:

- To send e-mail from within the Browser Client, an e-mail account must be configured. Refer to the E-mail Accounts Documentation for more information. E-mails are sent from a default account.
- The ability to send e-mail and access the Address Book depends upon security rights.
- Dragging and dropping of text or images from any other source is not supported.

> **Note:** If you drag and drop an image in Mozilla Firefox, it will appear to work; however, once you click away from the window or submit the form it will disappear. Use the Import Image button to add an image.

- Copying and pasting images from the clipboard is not supported.

Browser Client Dashboards

Browser Client Dashboards are very similar in appearance and functionality to Dashboards in the CSM Desktop Client.
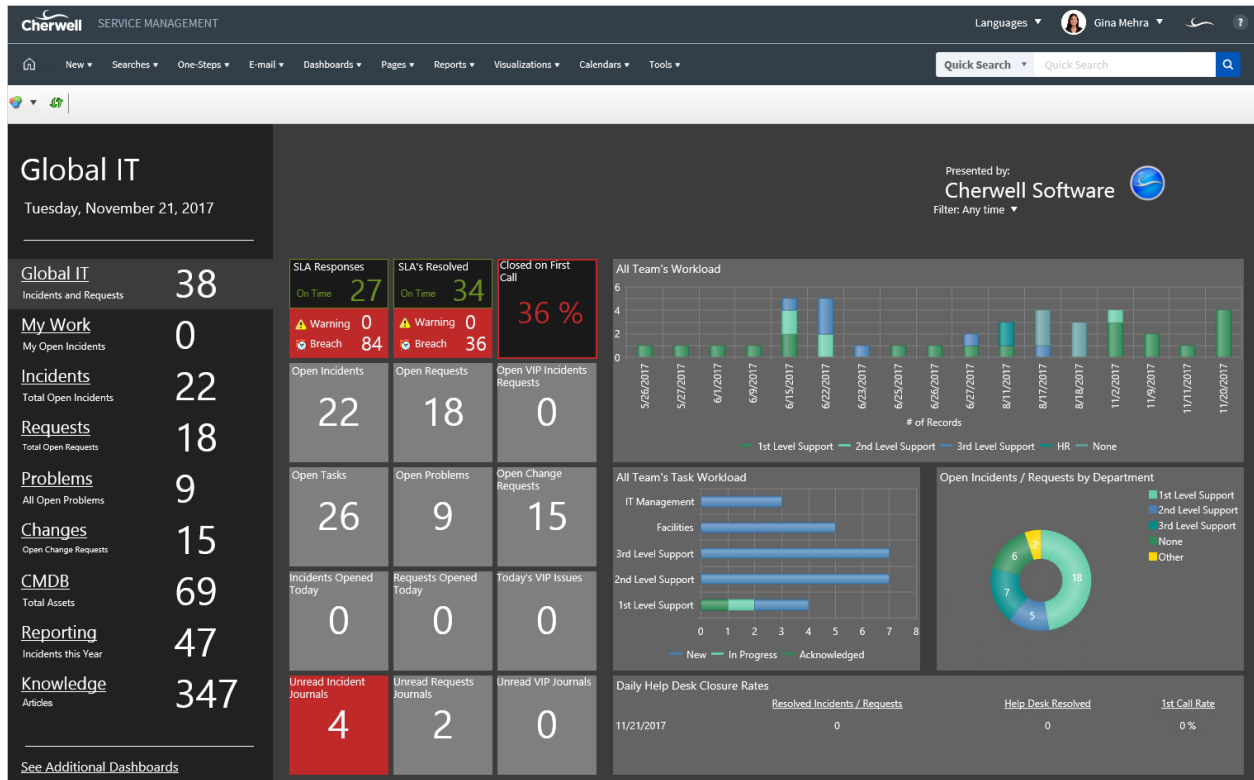
When working with Dashboards in the CSM Browser Client, Users can:

- View a Dashboard:
  - View your default Home Dashboard by clicking the Home button on the Browser Client menu bar.
  - View all your Dashboards Using the Dashboard Manager (Dashboards>Dashboard Manager).
- Manually refresh a Dashboard.
- Select a User Theme on a Dashboard.
- Set the current Dashboard to be the default.
- Drill down into Dashboard data.
- Initiate a One-Step/Action from a Dashboard (example: Run a report, run a search, etc.).

Good to know:

- Dashboards can be viewed and used in the Browser Client; however, Dashboards are managed (created, edited, deleted, etc.) and configured (security rights and defaults) only in the CSM Desktop Client and CSM Administrator.

- Browser Client Themes are accessed differently in the Browser Client than they are in the CSM Desktop Client. See Browser Client Dashboard Functions for more information.

- Browser Client Widgets behave differently in the Browser Client than they do in the CSM Desktop Client. See Browser Client Widgets for more information.

- The Dashboard Manager behaves differently in the Browser Client than it does in the CSM Desktop Client. See Browser Client Managers for more information.

Browser Client Widgets

Widgets behave similarly in both the Browser and CSM Desktop Clients. However:

- Users cannot create, edit, or delete Widgets from the Browser Client.
- Users can click a Widget to open records, reports, tables, or graphs relevant to the Widget's statistics.

Widgets in the Browser Client are evolving. The ability to refresh the Dashboard aids in generating new data more quickly in the Browser Client. The ability to set the priority of Widgets for refresh helps see the selected data faster, allowing one Widget to refresh before another in a decided order.

Browser Client Dashboard Functions

With the CSM Browser Client Dashboard Functions, Users can change the Dashboard Theme and refresh the Dashboard so your Browser Client Widgets display the latest data.

The Theme drop-down can change the Dashboard Theme. The Themes available in the drop-down are the Most Recently Used (MRU) Theme. Access more Themes by clicking More to open the Theme Manager. Refresh the Dashboard by clicking the Refresh button to the right of the Themes drop-down.

Note: The Dashboard refresh is separate from the web browser (example: Internet Explorer®, Firefox®, Chrome™, or Safari®) refresh. The Dashboard refresh only applies to the Dashboard and its Widgets, not the entire web browser.

Browser Client HTML Pages

Browser Client HTML Pages are used to display an external website (via a link) and an internal website (that you design and code).

In the Browser Client, HTML Pages functionality is accessed using the Pages drop-down on the Browser Client menu bar. From the Pages drop-down, Users can access the HTML Manager and most recently used (MRU) pages.

Good to know:

- HTML Pages can be viewed and used in the Browser Client; however, HTML Pages are managed (created, edited, deleted, etc.) and configured (security rights) only in the CSM Desktop Client and CSM Administrator.
- The HTML Manager behaves differently in the Browser Client than it does in the CSM Desktop Client. See Browser Client Managers for more information.

Browser Client Reports

Browser Client Reports look and behave similarly to Reports in the Desktop Client. Reports can be viewed and used in the Browser Client; however, Reports are managed (created, edited, deleted, etc.) and configured in the CSM Desktop Client and CSM Administrator.

Reports can be run from:

- The Browser Client menu bar (run from the Report Manager or the list of Most Recently Used (MRU) Reports).
- The Report Manager (accessed from the Browser Client menu bar).
- Specific links and Widgets in a Dashboard.

The Report Manager behaves differently in the Browser Client than it does in the CSM Desktop Client. See Browser Client Managers for more information.

Browser Client Visualizations

Browser Client Visualizations look and behave similarly to Visualizations in the Desktop Client.

In the Browser Client, Users can:

- View a Visualization when a specific record is open:
    - View all your Visualizations using the Visualization Manager (Visualizations>Visualization Manager).

    - View a record's Visualizations by clicking the Visualization icon (example: View impacted CIs on an Incident Record).

In the Browser Client, Visualization functionality is accessed using the Visualizations drop-down menu on the Browser Client menu bar. From the Visualizations drop-down, Users can access the Visualizations Manager and configure Visualizations.

Good to know:

- Visualizations can be viewed and used in the Browser Client; however, Visualizations are managed (created, edited, deleted, etc.) and configured (security rights and defaults) only in the CSM Desktop Client and CSM Administrator.

- The Browser Client Visualization window provides much of the same functionality as the Desktop Visualization window and includes the toolbar, Main pane, Aerial pane, and Legend; however, the Browser Client Visualization window does not include a menu bar.

- The Visualization Manager behaves differently in the Browser Client than it does in the CSM Desktop Client. See Browser Client Managers for more information.

Browser Client Calendars

The CSM Browser Client has Calendar capabilities that are nearly in parity with the Calendars in the Desktop Client. While there are some layout differences between the two (example: The three month navigator is located to the left of the main Calendar pane in the Browser Client), the Browser Client Calendar also appears very similar to the Calendar in the CSM Desktop Client.

When working with Calendars in the CSM Browser Client, Users can:

- View a Calendar:
  ◦ View the default Calendar by selecting a Calendar from the Calendars drop-down.
  ◦ View other Calendars using the Calendar Manager (Calendars>Calendar Manager).
- Change the Calendar View.

From the Calendars drop-down on the Browser Client menu bar, Users can access the default Calendar, the Calendar Manager, and most recently used (MRU) Calendars.

Good to know:

- Calendars can be viewed and used in the Browser Client; however, Calendars are managed (created, edited, deleted, etc.) and configured (security rights and defaults) only in the CSM Desktop Client and CSM Administrator.
- The Calendar Manager behaves differently in the Browser Client than it does in the CSM Desktop Client. See Browser Client Managers for more information.

Browser Client Knowledge

Browser Client Knowledge functions are limited to Knowledge Articles. Users can create Knowledge Articles and search for Knowledge Articles.

Managing and mapping Knowledge is currently unavailable in the CSM Browser Client.

Browser Client Search for Knowledge from a Record

Users have the ability to search Knowledge Articles from an open record and place found solutions within the record for future reference.

Note: To place the information from the Knowledge Article into the current record, Users must use the Browser Knowledge pane. Searching Knowledge from the CSM Search Control does not provide this option.

To search for Knowledge from an open record:

1. Open the record for which you want to find a solution.

2. Click the **Knowledge** button in the toolbar.

3. Select the **Source** of the Knowledge Article (example: Known Errors, Open Incidents, Knowledge Articles, or Attachments).

   Note: These are internal sources for the Browser Client, meaning the search is limited to Knowledge Articles within the system, whereas the Desktop Client can search outside sources such as Google or Yahoo.

4. Specify a **word** or **phrase** to search.

   Tip: Use terminology from the record (example: Description field) in your search.

5. Click **Search**.

6. Select a **Knowledge Article** to view.

7. Click the **Use Solution** button to place the Knowledge Article information into the record. The solution is placed in the defined Field.

Browser Client Contact Manager, Table Management, and CMDB

The Browser Client provides access to the following CSM tools:

- Contact Manager: Use this tool to view Customer records.
- Table Management interface: Use this tool to view Lookup Object values.
- CMDB interface: Use this tool to view Configuration Item (CI) records.

In the Browser Client, Tools are accessed using the Tools drop-down or from Related Item selectors on Business Object records.

Related Item Selectors are configurable, can be added to any Form, and include:

- The Customer Selector that provides access to the:
  - Contact Manager to quickly log who initiated a record.
  - Customer Record to quickly view detailed information about the Customer.
- The CMDB Selector that provides access to the:
  - CI database to quickly log the affected asset.
  - CI Record to quickly view detailed information about the affected asset.

Good to know:

- Lookup Object values can be viewed and used in the Browser Client; however, values are managed (created, edited, deleted, etc.) and configured only in the CSM Desktop Client.
- Customer records and CI records can be viewed in their respective interfaces; however, records are created and deleted using the options on the Browser Client menu bar.
- The Contact Manager, Table Management interface, and CMDB interface utilize a Grid interface. Use the Grid capabilities (example: Print, export, run an Action, sort, filter, size, move/reorder, and add/remove columns) to display only the data you want and in a way that is meaningful to you.

Browser Client Good to Know

- The CSM Browser Client consumes a CSM license. Licensing controls how many Users can log into CSM. CSM uses a concurrent or "floating" licensing model. This means that a fixed number of licenses are shared among a group of Users/Customers, and that a fixed number of people can simultaneously access the product. License codes determine the number of people who can log in at any given time.

- Some features behave differently in the Browser Client than they do in the Desktop Client. See Browser Client Features for more information.

- Browser Client Knowledge supports Knowledge Articles, Search, and Sources. However, Search and Sources are limited to internal sources only for the Browser Client.

- While Dashboards cannot be created or edited in the Browser Client, they can be viewed and Widgets can be drilled into to pull up Reports or metrics related to it. Browser Client Dashboards reflect personal settings made in the Desktop Client and in CSM Administrator.

- Some Forms have a special browser view. This means some information in a Form is displayed (such as client name), while other sensitive or secure information (such as social security number) is blocked out. While this is predominantly the case with the CSM Portal and Mobile Clients, the Browser Client can be configured to do this through the CSM Administrator.

Always consider the following:

- CSM is highly configurable. As a result, a User's system may vary from the Out-of-the-Box content in our documentation.

- Security rights control access to CSM functionality and are configured in the Security Group Manager in CSM Administrator (CSM Administrator>Security>Edit Security Groups). For more information, see Configure Browser and Mobile Device Security Rights.

Using the Browser Client

When working with the Browser Client, Users can:

- Log in to the Browser Client.
- Log a record.
- View and run Searches and access Queues.
- View and run One-Steps.
- Send E-mails.
- View Dashboards and Widgets.
- View HTML Pages.
- View and run Reports.
- View Visualizations.
- View Calendars.
- Access Knowledge Articles.
- Use tools: Contact Manager, Table Management interface, and CMDB interface.

Log in to the Browser Client

Before accessing the Browser Client, the appropriate credentials must be assigned. Credentials are managed on the User's Profile in CSM Administrator.

To log in to the Browser Client:

1. Provide the URL: **http://***server***/CherwellClient** where *server* is the location where CSM is installed (either locally on the machine or on a specific server outside the local machine).

2. Provide the login credentials (User ID and Password). These should have been assigned by the implementer or system administrator.

   Note: If Windows/LDAP login is enabled, provide the Windows credentials used to log in to the system.

3. Click **Login**.

   If assigned to more than one CSM Role (and have not previously selected the Automatically Use Selected Role check box), the Choose your Role window opens.

   Note: A Role is a User/Customer's current function/responsibility in CSM, and controls how data is presented in that person's CSM environment. For example, a Role determines which Home Dashboard is displayed and how the Incident form looks (example: Which fields are exposed, required, etc.). A Role is assigned to a Security Group and can be assigned to more than one Security Group at a time. A User/Customer can access any of the Roles in his Security Group, but can only log in using one Role at a time. Examples of Roles include Service Desk Manager and Portal Customer.

4. Select the login Role for the session:
   a. Role: Click the appropriate **Role**.

   b. Always Use Selected Role: Select this check box to automatically use the selected Role at the next log in. This bypasses the Role prompt.

5. Click **Submit**.

Log a Record in the Browser Client

Browser Client records are very similar in appearance and functionality to Desktop Client records. For more information, see Browser Client Forms.

To log a record in the CSM Browser Client:

1. Log in to the Browser Client.
2. On the Browser Client menu bar, click the **New** menu.
3. Select the **type of record** from the drop-down (example: New Incident). The record opens in the main pane.
4. Complete using the appropriate workflow and save the record.

Multi-Tab Browsing Support in the Browser Client

The Browser Client allows Users to operate in multiple web browser tabs, which enables them to work on multiple pages within CSM. This allows technicians and system administrators to work more efficiently.

Multi-tab browsing allows you to:

- Open multiple tabs running CSM in the same browser window (or multiple browser windows).
- Log in via the first tab and then load CSM in additional tabs without needing to log in again or consume additional licenses.
- Work with multiple CSM features at the same time. For example, a technician might log an Incident in one tab and view their default Dashboard in another.
- Open tabs in multiple languages (using the Culture Selector) and work in the tabs independently within the same session. If a User has multiple tabs open in different languages and the session expires or the User manually logs out, the User is logged out of all tabs. When the User logs back in to a tab, the language for that tab automatically resets to the default language for the User's Role; the other tabs reload using the language that was selected before the User logged out.

  Note: You must have Globalization enabled to use the Culture Selector.

Open a New Tab in the Browser Client

Use multi-tab browsing support to open a new tab in the Browser Client.

1. Open a web browser.
2. Navigate to the **Browser Client** (http://MyServer/CherwellClient).
3. **Optional:** Log in using the appropriate credentials.
4. Click the **User Information** section of the Application Bar and select **New Browser Window**.
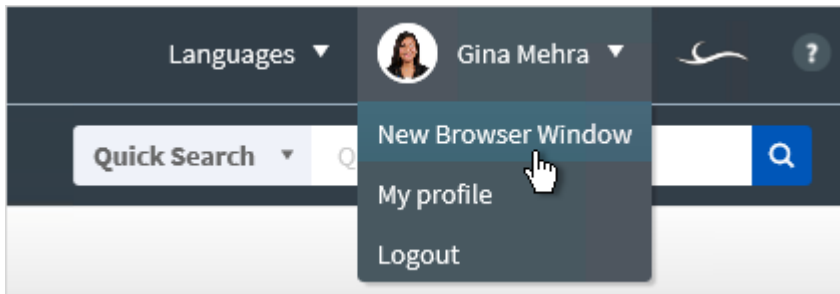
A new tab opens and displays the default Dashboard.

> **Note:** If you open a new tab outside of CSM, navigate to the configured URL. Do not copy the URL from the address bar in one tab and use it in another.

5. (Optional) Open additional tabs.
   When the session expires or the User manually logs out, the User is logged out of all tabs. Once the User logs back into one of the tabs, the other tabs become active so the User can continue their work.

CSM Web Applications and Accessibility

To support Users with disabilities, many Browser Client and Portal features are accessible using a keyword and screen reader.

For best results with keyboard navigation, use the Chrome web browser.

The Web Applications have been tested with NVDA (NonVisual Desktop Access), but other screen readers may provide full or partial capabilities with CSM.

Web Applications Keyboard Accessibility

Use the following keyboard commands to navigate the Browser Client and CSM Portal.

General Keyboard Commands

Key	Action
Tab	Move forward from one link or form control to the next.
SHIFT+Tab	Move backward through one link or form control.
Enter	Activate the selected link or control.
Spacebar	Select a record or option.
CTRL+Spacebar	Clear the current selection. For multi-selections, clears or selects while persisting previous selections.
Page Up and Page Down	Scroll the page up or down.
Arrows	Scroll through links and controls on a page.
ALT+Arrow-left	Move to the previous page.
ALT+Arrow-right	Move to the next page.

Form Keyboard Commands

Use the following keyboard commands when focus is on a record form or an element on that form.

Key	Action
Enter	Selects the highlighted item.
Home	Selects the first item in a drop-down.
End	Selects the last item in a drop-down.
Spacebar	Selects a highlighted radio button or check box.
ALT+down arrow	Opens a pop-up or a drop-down.
Esc or ALT+up arrow	Closes a pop-up or drop-down.

Grid Toolbar and Header Keyboard Commands

Use the following keyboard commands when focus is on the Grid column header.

Key	Action
Enter	Sort the column.
Spacebar	Select and clear items.

Key	Action
ALT+Down arrow	Opens the filter menu.
Esc	Closes the filter menu.
ALT+M	Toggles the Multi-column Sort option.

Grid Item List Commands

Use the following commands when focus is on the Grid item list.

Key	Action
ALT+W	Applies focus to the Grid item list.
Enter	Expand and collapse cells.
Space	Select and clear cells.
CTRL+Spacebar	Select cells, but persist previously selected cells.
Page Up and Page Down	Navigate through multiple Grid pages.

Accessibility Limitations

Cherwell Software strives to ensure that its applications are accessible to users with visual and auditory impairments. There are cases, however, where accessibility may be limited.

For example:

- Keyboard commands are supported for English installations. Some keyboard commands and shortcut keys may work in non-English languages, however.
- Accessibility capabilities may be limited when the Portal is presented in an external Web site using an iFrame window.

Configuring the Browser Client

Complete the following procedures to configure the CSM Browser Client. Configuration procedures are completed in CSM Administrator.

- Configure Browser Application Settings (URLs, Timeouts, RSS Feeds).
- Define the Default Domain and Anonymous Login Settings.
- (Optional) Specify a Default Domain.
- (Optional) Configure Login, Authentication, and Inactivity Settings.
- Configure Anonymous Login Settings.
- Configure Cherwell Credential Settings (User/Customer Password Rules).
- Configure User Login Credentials.
- Configure Miscellaneous Settings.
- Configure Browser and Mobile Security Devices.

Configure Browser Application Settings (URLs, Timeouts, RSS Feeds)

Use the Browser Settings window in CSM Administrator to configure the following Browser Application settings:

- URLs: To the Browser Client and Portal.
- Session Timeout.
- RSS Feeds: Enable Feeds/Anonymous Feeds from the Cherwell Service.
- Security: Enable or disable embedded frames, detailed error information, linked Attachments (Attachments via links instead of direct file attachment), and password auto-complete.

To configure Browser Application settings:

1. Open the Browser Settings window (CSM Administrator>Browser and Mobile>Browser Application Settings).

2. Configure URLS for the Cherwell Browser applications (Portal for Customers; Browser Client for Users).

   📝 **Note:** These are used when the application needs to generate a URL for launching one of the Browser applications (example: When sending out Approvals).

   a. Portal (Customer browser): Specify the **base URL** for the Cherwell Portal (example: http://MyServer/CherwellPortal).

   b. Browser Client (User browser): Specify the **base URL** for the Cherwell Browser Client (example: http://MyServer/CherwellClient).

3. Configure session timeouts:
   a. Session Timeout: Specify the **number of idle minutes** the system should wait before timing out inactive sessions.

Note: If you change this from the default of 20 minutes, you also need to configure the application pool in IIS to have a matching value (CSM cannot make this change directly because of IIS security).

4. Enable RSS Feeds:

Note: CSM RSS Feeds allow Customers of an RSS reader to subscribe to CSM data (such as newly created Incidents) based on a Search Group or other criteria. Note that for RSS Feeds to operate, the Cherwell Web Service must be installed. RSS Feeds are disabled by default because they could potentially provide inappropriate access to data.

   a. Enable RSS Feeds from Cherwell Service: Select this check box to allow RSS Feeds.

   b. Enable Anonymous RSS Feeds from Cherwell Service: Select this check box to allow anonymous RSS Feeds. If not selected, the URL requesting RSS data must contain User identification information. Anonymous Feeds allow data based on the rights of the CSM's Anonymous Security Group.

5. Configure browser application security settings:
   a. Do not allow the browser applications to be embedded in a frame: Select this check box to disable browser applications from being embedded in a frame (example: Embedding a CSM application within the frame of another web page).

   b. Do not send detailed error information to client: Select this check box to keep the browser applications from sending detailed error information when errors occur.

   c. Disable linked attachments in the browser applications: Select this check box to disable linked Attachments (Attachments created via links instead of direct attachment) in the browser applications.

   d. Disable password auto-complete on login page: Select this check box to disable auto-complete for passwords during login. This requires Users and Customers to type their full passwords every time they try to log in to the browser applications.

6. Click **OK**.

Define the Default Domain and Anonymous Login Settings

By default, if using Windows or Active Directory, Users must specify the domain as part of the login credentials (example: Applications\Bob). This is how CSM identifies the fact that Users are specifying Windows/LDAP Credentials vs. internal Cherwell Credentials. However, if all Cherwell Users are generally on the same domain, specify that as the default domain. The Cherwell Portal will automatically assume that any credentials detailed without a specific domain are Customers of the default domain.

> **Note:** This is the recommended and easiest way to specify a default domain for the CSM Browser Client and Portal. In the event that Users want to use the web.config files to specify the default domain, but the default domain has already been specified in CSM Administrator, the web.config files will override the settings in CSM Administrator.

Use the General page in the Security Settings window (in CSM Administrator) to define the following general system security settings for the Browser Client and Portal:

- Default domain.
- Anonymous login settings.

Configure the default domain and anonymous login settings:

1. In the CSM Administrator main window, click the **Security** category, and then click the **Edit Security Settings** task.
2. Click the **General** page.
3. Specify a default domain for the network:
   a. Default domain: Specify the **default domain name** for the network. This is used in any place where a domain is needed but not otherwise provided, such as automatically assigning credentials to Customers.

      Tip: Click the **Arrow** button to have CSM auto-populate the name.

4. Define anonymous login options (required to allow use of the Browser/Portal Clients):
   a. Allow Anonymous Login: Select this check box to allow Browser applications to operate.
   b. Anonymous Security Group: Select the **Security Group** that should be used by Cherwell Browser applications before any User/Customer has logged in. Cherwell Browser applications need to be able to read basic setup from the system before logging in, and this is the Security Group that will be used for such access. Also, for any Portal Sites that do not require login, this is the Security Group that will specify what Customers will be allowed to access before they log in.

      Note: CSM provides an Anonymous Security Group named *Anonymous Browser*.

5. Click **OK**.

Specify a Default Domain for the Portal and Browser Client in Web.config Files

The recommended way to specify a default domain for the Portal and CSM Browser Client is by using CSM Administrator. However, Users can specify a default domain using web.config files. Doing so in the web.config files will override any settings made in CSM Administrator.

To specify a default domain for either the Portal or Browser Client using web.config files, add the appropriate value in the web.config file located in your Cherwell directory under **Cherwell Browser Applications\Portal** for the Cherwell Portal and **Cherwell Browser Applications\Browser Client** for the Browser Client. There are two keys that can be added to specify the default domain:

```
<add key="ForceDefaultDomain" value="MyDomain"/>
<add key="CherwellAuthPrefix" value="Cherwell"/>
```

If the ForceDefaultDomain key is present, when the User/Customer types his login ID, one of the following things will happen:

- If the User/Customer types an ID with no domain, the default domain will be prefixed, so "Bob" will become "MyDomain\Bob"

- If the User/Customer types a domain\ID, the value will be left alone, so "TestDomain\Bob" will remain "TestDomain\Bob"

- If the User/Customer types in a domain\ID where the domain is the value specified in CherwellAuthPrefix, the domain will be removed, allowing the User/Customer to log in using Cherwell Internal credentials, so "Cherwell\Bob" will become "Bob"

  Note: CherwellAuthPrefix defaults to Cherwell if the domain is not set.

- If, for some reason, the ForceDefaultDomain and the CherwellAuthPrefix contain the same value, an alternate value of CherwellInternal can be used for the internal domain, so "CherwellInternal\Bob" will become "Bob."

  Note: To use internal login credentials on a default domain, you must type **CHERWELL** in front of the username (example: CHERWELL\Bob) in order to be able to log in.

Configure Login, Authentication, and Inactivity Settings for the Portal and Browser Client

By default, the Browser applications (Customer Portal and Browser Client) use the same login mode and authentication settings as those configured for the Desktop Client; however, Users can define different settings if needed.

To configure login, authentication, and inactivity settings for the Portal and Browser Client:

1. Open the Security Settings window (CSM Administrator>Security>Edit security settings).
2. Click the **Browser Client** or **Portal Client** page.
3. Clear the **Use Same Settings as Windows Client** check box.
4. Select the **login modes** to allow (Supported login modes area):

   Note: Users can enable multiple login types so that if one authentication fails or the User/Customer cancels the process, the next configured login method is invoked (SAML, then external authentication server, then LDAP, then Windows, then Internal). Not all of these options will necessarily appear in the system if they have not been configured.

   Note: When using a secure login configuration (SAML, LDAP, or Windows), Cherwell strongly recommends you activate the RedirectHttpToHttps flag in the Portal and Browser Client web.config files for better security. The flag forces requests sent over HTTP protocol to use HTTPS instead.

   ◦ Internal: Allows CSM authentication. CSM authenticates the CSM Login ID and Password defined in the User Profile (CSM Administrator>Security>Edit Users) or Customer Credentials (Customer>Portal Settings).

     Note: To use internal login credentials on a default domain, Users must type **CHERWELL** in front of the username (example: CHERWELL\Bob) in order to be able to log in.

   ◦ LDAP: Allows Directory Service authentication. CSM authenticates login credentials using a Directory Service such as LDAP or Active Directory. Depending on configuration, User/Customer data can be imported based on LDAP data. For more information, refer to the Configuring the Integration with Directory Services documentation.

   ◦ SAML: Allows Security Assertion Markup Language (SAML) authentication. For more information, refer to the SAML documentation.

   ◦ Windows: Allows Windows Authentication. CSM authenticates the Windows login credentials if set in the User Profile (CSM Administrator>Security>Edit Users) or Customer Credentials (Customer>Portal Settings). For more information about Windows Authentication, refer to the Windows Login documentation.

5. Configure general login options:
   a. Validate Windows/LDAP credentials on server: If this check box is not selected, Windows credentials are validated on the client, which is not as secure unless you have full control of your network. If selected, the system will not be able to automatically log in the User/Customer

without asking (that is, the person will have to type their credentials) but it is much more secure. For this feature to work, the server must have access to the Windows Domain or LDAP server.

Note: For best results, configure your server to use encrypted communication before enabling this feature so that credentials are not passed to the server in a potentially sniffable format.

b. Allow logging of authentication code (for troubleshooting): Select this check box to enable logging of authentication calls in order to troubleshoot configuration (example: When configuring LDAP setup). Then, use the Server Manager to enable logging in the Portal and Browser Clients.

6. Configure external authentication server option:

Note: This makes use of the Cherwell Authentication Server, which must be installed on your network such that it has access to your domain and is also callable by the Cherwell Application Server. This is distinct from SAML, although shares some concepts.

a. Validate credentials via external authentication server: Select this check box to validate User/ Customer credentials against an external authentication server.

b. Require user to enter credentials: Select this check box to require Users/Customers to enter their credentials each time they log in.

Note: If this check box is not selected, and Users/Customers are on the same domain as the Cherwell Authentication Server, then the User's/Customer's current Windows credentials will be used to determine the person's identity. Otherwise, the User/ Customer will need to provide his Windows domain/user ID and password into the login window.

c. Authentication server Uniform Resource Identifier (URI): Specify the URI (location) of the external authentication server.

Note: Both Client applications and the Cherwell Application Server must have access to this URL.

7. Click **OK**.

Prevent Browsing HTTP from HTTPS

Browse HTTP from HTTPS is a vulnerability allowing HTTPS pages to be accessed via HTTP, thus disclosing potentially sensitive information. We strongly suggest editing web.config files to enforce redirecting HTTP requests to HTTPS.

1. Edit the web.config file for the Portal and/or the WebClient.
   - For the Portal, edit the WebConfig file in C:\Program Files (x86)\Cherwell Browser Applications\Portal
   - For the Web Client, edit the WebConfig file inC:\Program Files (x86)\Cherwell Browser Applications\BrowserClient
2. Under the AppSetting section, uncomment the following Key:

```
 ·add key="RedirectHttpToHttps" value="True" ↗
```

3. Reset IIS.
4. Review the configuration of any applications you have installed to ensure proper permissions are in place to prohibit forceful browsing of HTTPS resources.

Configure Anonymous Login Settings for the Cherwell Browser Applications

Use the Security Settings General page to define the anonymous login settings for the Browser Clients.

To configure anonymous login settings:

1. Open the Security Settings window (CSM Administrator>Security>Edit security settings).
2. Click the **General** page.
3. Configure anonymous login options (required to allow the use of the Browser/Portal Clients and Mobile applications):
   a. Allow Anonymous Login: Select this check box to allow Browser applications to operate.

   b. Anonymous Security Group: Select the **Security Group** that should be used by CSM Browser applications before any User/Customer has logged in. CSM Browser applications need to be able to read basic setup from the system before logging in, and this is the Security Group that will be used for such access. Also, for any Portal Sites that do not require login, this is the Security Group that will specify what Customers will be allowed to access before they log in.

      Note: CSM provides an Anonymous Security Group named *Anonymous Browser*.

4. Click **OK**.

Configure Browser Client (User) Login Credentials

CSM uses a User's login credentials to log them into the Browser Client. Login credentials are stored in the User Profile. This must be configured through CSM Administrator and cannot be done from the Browser Client.

Configure Miscellaneous Browser/Portal Settings

The CSM Browser Client personal settings can be configured using web.config files. Web.config files are the main settings and configuration files for ASP.NET web applications, meaning they are the main settings and configuration files for dynamic websites, services, and applications, such as the CSM Browser Client and Portal. A web.config file is an XML document that stores information about how the web application behaves.

These web.config files can be found in your local Cherwell directory under **Cherwell Browser Applications** for the CSM Portal and **Cherwell Browser Applications\Browser Client** for the Browser Client. While it is not required, Users can edit the web.config files to personalize the way in which the Browser Client and Portal behave. The following are a few examples of how the CSM Browser Client and Portal can be edited:

- In-line Browser Display Extensions.
- Enable Lookup Button for Business Objects.
- Disable Label Resizing.
- Execute Embedded HTML and Script.

In-line Browser Display Extensions

To specify other in-line browser display extensions that should open inside of a browser window, add the following key to the web.config file under **<appsettings>** using the appropriate value(s):

```
<add key="InlineBrowserDisplayExtensions" value=".pdf,.xml"↗
```

Note: Browsers that are not Internet Explorer (ex: Chrome™, Mozilla Firefox®, etc.) handle in-line browser display extensions more automatically, but Internet Explorer requires this to be set. PDF and XML files are handled this way by default.

Enable Lookup Button for Business Objects

By default, the Lookup button will enable only on Fields that support lookups. To enable the Lookup button whenever editing a Business Object, add the following key to the web.config file under **<appsettings>**:

```
<add key="LookupAlwaysEnabled" value="True"↗
```

Disable Label Resizing

While not recommended, to disable the resizing of labels that are set to dynamically auto-size in the Browser Client, add the following key to the web.config file under **<appsettings>**:

```
<add key="AutoSizeLabels" value="False"↗
```

Execute Embedded HTML and Script

While not recommended, to allow HTML and script embedded in labels to be executed in the Browser Client, add the following keys to the web.config file under **<appsettings>**:

```
<add key = "AllowUnsafeLabels" value="True" ↗
```

```
<add key="AuthLogFile" value="c:\temp\webauthlog.log"↗
```

HTTPS-Only Cookies

In production environments, it is strongly recommended that sensitive cookies (like those used to maintain your session) be marked as "Secure," meaning they will only be transferred with requests that are made over HTTPS, and HTTP-only, meaning they will not be accessible to Javascript running in the browser.

In order to take advantage of this configuration, perform the following steps:

1. Ensure the web application is running on an IIS instance that listens on both :80 (HTTP) and :443 (HTTPS).

2. Ensure IIS (or a web.config file, or some other handler) is set up to automatically redirect http://hostname/path to https://hostname/path.

3. Add the following line to the web.config files:
    ◦ C:\Program Files (x86)\Cherwell Browser Applications\Portal

    ◦ C:\Program Files (x86)\Cherwell Browser Applications\CherwellClient

    ◦ C:\Program Files (x86)\Cherwell Browser Applications\CherwellService

```
<httpCookies
httpOnlyCookies="true"
requireSSL="true" ↗
```

For more details, see https://msdn.microsoft.com/en-us/library/ms228262(v=vs.100).aspx.

Troubleshoot the CSM Web Applications

If the CSM Web Applications (Browser Client, Portal, Web-Forms) are not working, use the following steps to troubleshoot:

1. Make sure web.config is pointing to the correct connection (the default is Cherwell Browser):
    a. Open the web.config file. By default, it is installed to: C:\Program Files\Cherwell Browser Applications\"App"\web.config).

    b. Make sure the value is "[Common]Cherwell Browser".
        ◦ For Portal and Browser Client, the XML is at the bottom and looks like this:

        <appSettings>

        <add key="TrebuchetDataSource" value="[Common]Cherwell Browser"/>

        </appSettings>

        ◦ For Web Forms, the XML is at the top and looks like this:

        <add key="TrebuchetDataSource" value="[Common]Cherwell Browser"/>

2. Make sure Cherwell Browser connection is using SQL Authentication or domain account permissions have been set up appropriately:
    a. If SQL is installed on same machine as IIS, Users can give the IUSR_<machineName> account rights to the SQL server database.

    b. If SQL is not installed on the same machine as IIS, Users have to create a domain account, give that account rights to the SQL server database and also set up the application in IIS to use that account. In addition, Users must give that account rights to the directory (and subdirectories) where the Browser applications are installed.

3. Make sure IIS is set up for Anonymous Access. If desired, enable Integrated Windows Authentication:
    a. Go into IIS. On the left is the Internet Information Services tree. Expand the Web Sites node and then the Default Web Site node underneath. Find the folder for the Browser application.
        ◦ In IIS-7 (Windows Server 2008), click the application in the left-hand pane, then double-click **Authentication** in the IIS section of the features view on the right. If Anonymous Authentication is not enabled, select it, then click **Enable** in the far right Actions pane. Do the same thing for Windows Authentication if desired. Note that, if Windows Authentication does not appear, you might need to go the Server Manager to install the feature.

4. Consider the Browser being used (only if you are using Windows Authentication):
    ◦ Firefox cannot pass Windows credentials properly unless you install their plug-in. Try Internet Explorer and see if this works.

5. Make sure the right version of ASP.NET is registered in the Windows Registry. The Portal and Browser Client both require .NET 4.x. Web Forms and the Web Service require .NET 3.5.

Troubleshoot Uploading Attachments

If Users are having trouble uploading attachments, make sure that they have rights to the Attachments directory.

1. Go into IIS and find the Attachments directory under the Self-Service virtual directory.

2. Right-click and select **Properties**.

3. Go to the **Directory Security** tab.

4. Press the **Edit** button in the Anonymous Access box. Ensure that User is set up.

Note: Users might also need rights to the actual directory on the hard drive.

Troubleshoot Grids in Internet Explorer

In some older versions fo Internet Explorer, Grids sometimes do not align properly after sorting the Grid columns. In order to correct this, Users must disable the Compatibility View setting in Internet Explorer.

To disable Compatibility View:

1. Open Internet Explorer.
2. Click **Tools** to open the Tools menu, and then click **Compatibility View Settings**.
3. If the CSM Browser Client is displayed in the list of sites to display in Compatibility mode, remove it.
4. Users can also disable Compatibility View by clicking the Compatibility View button in the web address bar.

Portal

The CSM Customer Portal is a highly configurable web application that enables Customers to securely and conveniently access their CSM data (example: Incidents, company news, documents, the Service Catalog, etc.) using a browser. A Portal supports multiple sites (for different types of Users), and also allows managers to access their Team's data.

About Customer Portals

3-Minute Video: Tour the New Out-of-the-Box Portal.

Using a Portal, Customers can:

- Access a Service Catalog.
- Log Incidents and Service Requests.
- Complete common self-service functions (ex: Reset a password).
- Access Knowledge Articles.
- Access a Document Repository, if configured.
- Monitor important metrics via a Dashboard.
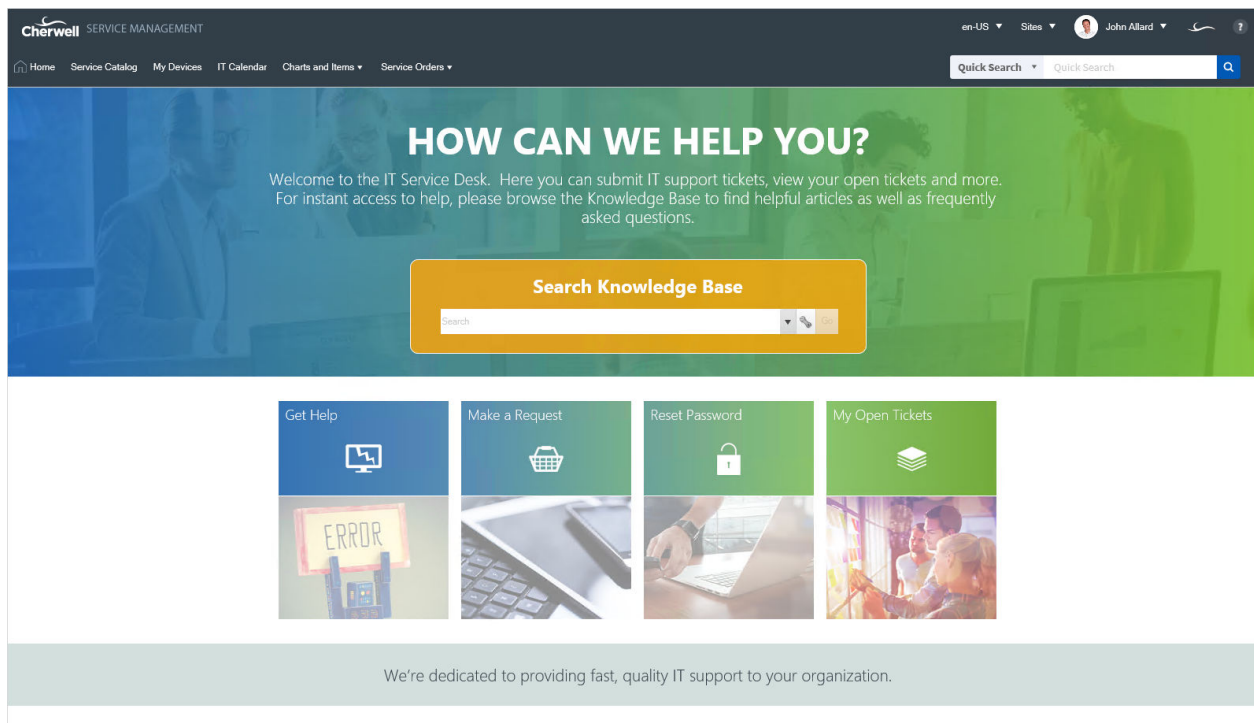
A Portal comprises one or more configurable Portal Sites, each of which can display completely different information. For example, there might be a primary IT Site, but also different Sites for other departments or functions. Any particular Site can be made up of a number of Site Items.

To help get your system started, CSM provides an OOTB IT Portal Site. The Site is built using OOTB Site Items, such as an OOTB Service Catalog, forms specific to the Portal, Dashboards specific to the service desk, and predefined properties (header/footer, menu bar, etc.). Implement and use the OOTB IT Portal Site as-is, modify it, or create new Sites to meet the needs of your organization.

Portal Sites

A Portal Site is a collection of self-service information in a CSM Portal that is dedicated to a topic or function. A Portal can display one or more Sites.

For example, it might display:

- A company support Site (single site Portal).
- A Site for each department (IT, HR, Support. etc.).
- A Site for each locale (US, Germany, Chile, etc.), although a single Site can be configured to be available in multiple languages.

A Portal Site is highly configurable and can be tailored to meet branding and layout needs. The Site can display an Application Bar (Login, Site Selector, etc.), an informative banner/footer, a menu bar, a Search Control, and a Startup Item (A Dashboard).
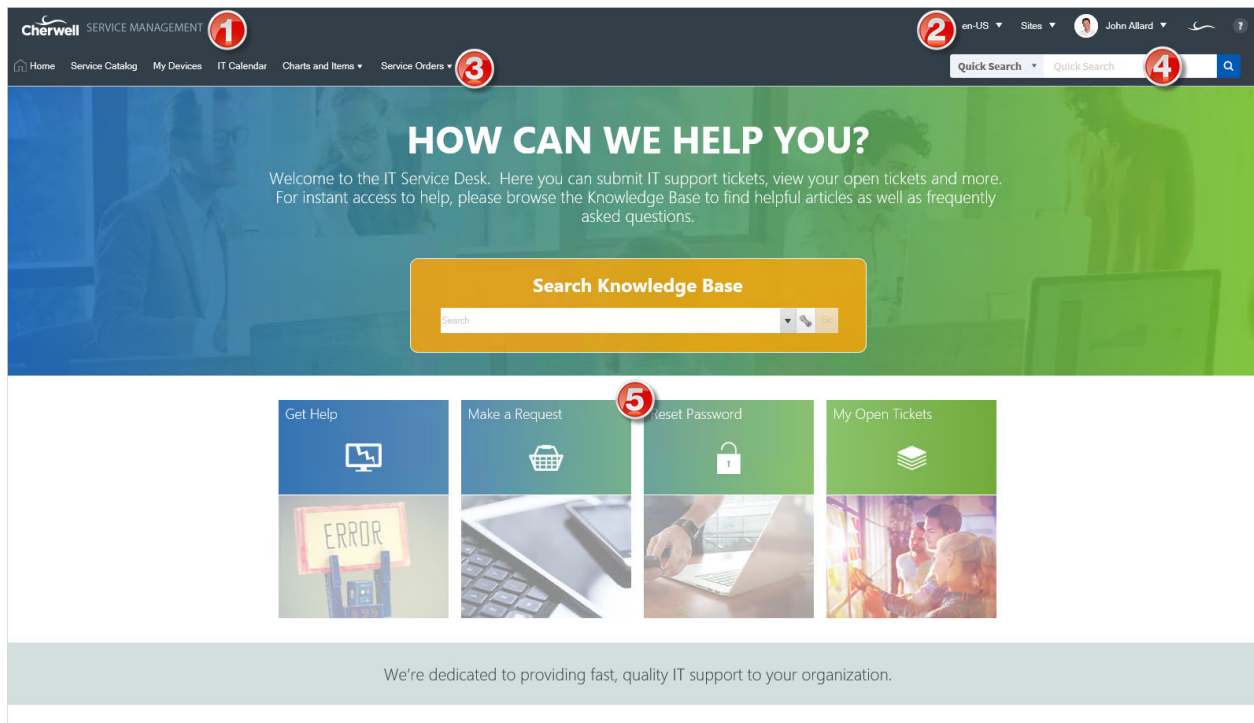
1. **Banner**: Displays Site and background image, title, subtitle, and baseline text.
2. **Application Bar**: Displays the Language Selector, Site Selector, login menu, and CSM logo (provides information about Cherwell Software when selected).
3. **Menu Bar**: Lists the Site Items and/or supporting Actions. Click a **Site Item** to display its contents in the main pane or its list of supporting Actions. The Portal menu bar collapses into a hamburger menu on mobile screens and browser windows sized below 768 pixels.
4. **Search Control**: Searches the Portal.

5. **Main Pane**: Displays the Startup Item, which could be a Dashboard, a Report, a list of records (Search Group), the record currently being edited, etc.

Site Items

The following items can be included on a Portal Site:

- **Actions** (including powerful create options and interactive One-Steps): Use on a Site's menu bar to support Site Items (Create Incident or Display Document Repository) and enhance navigation. Actions can also be used on Dashboards and HTML pages.

- **Action Catalogs**: Display a self-building and dynamic catalog of Actions that empower Customers to help themselves (example: Create a Service Catalog that displays all your services with Actions to create Incidents and Service Requests).

- **Calendars**: Displays time-sensitive Business Object data in a Calendar format.

- **Dashboards and Widgets**: Provide custom, insightful control panels capable of executing commands and providing real-time, at-a-glance information. For example, a Customer-specific Dashboard complete with a Twitter Feed, a list of announcements, and a list of Open/Closed Incidents.

- **Document Repositories**: Provide a collection of resourceful documents, such as Knowledge Articles, that encourage Customers to resolve their own issues.

- **Forms/records**: Allow Customers to expedite service by creating, viewing, and editing their own records, such as Incidents and Service Requests, and possibly other Customer's records.

- **Grids**: Allow Customers view CSM data from a Business Object in a format that can be sorted and exported.

- **HTML Pages**: Display a system administrator-designed HTML-coded page or host a web page from an external site.

- **Knowledge**: Search for Knowledge Articles (KAs) using a Portal Site's configured Search Control. When using a KA in the Portal, Customers can vote on Article popularity by clicking the Like button and add feedback by clicking the Add a Comment link.

- **Reports**: Provide metrics of your record data in a formatted and organized presentation.

- **Searching**: Offers searching so that Customers can easily locate information about the Portal. Use CSM's Out-of-the-Box (OOTB) Search Control or create your own Search Widget.

- **Service Cart**: Provides an e-commerce tool that Customers can use to add multiple Services to a single order, and then temporarily hold the Services until they are ready to submit their order.

- **Visualizations**: Display a visual map of linked records, Customers, vendors, etc.

  Note: HTML pages are unique to the Portal. The other items are commonly used throughout CSM.

When a Customer first accesses a Site, a default Startup Item is displayed; this can be an Action Catalog (special Widget), a Dashboard, a Document Repository, an HTML page, a Report, or a Search Group (used to display a list of records). A Customer can access other Site Items using the Site menu bar. The Startup Item can also be accessed when Users click the optional title logo/text or optional Home menu bar button.

Different Startup Items can be displayed upon login so information can be securely and appropriately filtered based on credentials. For example, display a Service Catalog to Customers who are not logged in and then display a Dashboard complete with a Customer's Open Incidents for a Customer who does log in.

To help build and manage the Portal and Sites, CSM provides the Site Manager (manage Sites at a high-level), the Site Wizard (create a cursory Site), and the Site Editor and Site Properties window (edit/refine the way the Site/Site Items look and behave). CSM also provides numerous CSM Item Managers that allow you to create Site Items, such as Dashboards, HTML pages, Document Repositories, etc.

About Portal Actions

An Action is an activity that can be initiated manually (from a button, link, menu bar item, or Widget) or automatically (from an Automation Process, One-Step™, or E-mail Monitor) to execute a command (example: Print) or display/run a CSM Item (example: Display a Dashboard or run a Search).

CSM provides several customizable Actions that can be added to/executed from the Portal menu bar, a Dashboard, or an HTML page.

Examples include:

- Display Create commands for the Business Objects used on the Portal Site (example: Create Incident).
- Display common Searches (example: Search My Open Incidents).
- Display a Home button on the Portal menu bar to take Customers back to the Startup Item.
- Display or run a CSM Item (example: Action Catalog, Report, Document Repository, etc.).

Some Actions are automatically added to the menu bar when creating a Site using the Site Wizard. For example, a menu bar Item can be added for each Business Object associated with the Site and a Document Repository Action is added if there is a Document Repository.

Manually add Actions or edit existing Actions by defining menu bar properties for a Site.

Manually add the following Actions:

- **One-Step**: Runs a One-Step Action, which runs one or more other Actions:
    ◦ Create/update/delete a Business Object.
    ◦ Excel merge.
    ◦ Execute a command.
    ◦ Go to a Field.
    ◦ Go to a record.
    ◦ Go to Action (branching).
    ◦ Launch a URL.
    ◦ Link/Unlink Business Objects.
    ◦ Print.
    ◦ Run another One-Step.
    ◦ Run a program.
    ◦ Run a Report.
    ◦ Send a Tweet.
    ◦ Send an e-mail.
    ◦ Show a Pop-Up.
    ◦ Step through children.

- Transfer Attachments.

- Transfer Related Business Objects.

- Update a Variable or Stored Value.

- Web service call.

- Write to a file.

- Work with a Queue.

- **Command:** Runs a system command applicable to the Portal. Categories include:
  - Managers: Adds a command to launch a CSM Item Manager so that a Customer can choose a CSM Item (Action Catalog, Dashboard, Document Repository, One-Step, HTML page, Report, or Search) to open/run (for example, Add the Report Manager to the Site menu bar so that Customers can choose to run an available Report). Note: Recent Items lists must be placed inside folders (they cannot be at the top level of the menu bar), and it is recommend that they be placed as the last item in the folder.

  - (Other) Business Object Search: Provides common Site Searches (for example, Business Object to search, how the results should be sorted, whether to limit to the current Customer, limit to Open or Closed records, etc.).

  - (Other) Create Business Object: Creates a new Business Object (record) but with several powerful options, such as a One-Step to run as part of the creation process and whether a custom Form should be displayed (which can be different than the Out-of-the-Box (OOTB) Form used for viewing a Business Object).

  - (Other) Home: Takes the Customer to the Startup Item (Dashboard, HTML page, etc.).

    Note: This command must be placed in a folder.

- **Dashboard:** Displays a Dashboard.

- **Report:** Runs a Report.

- **Search:** Runs a Search Group.

- **Page:** Displays an HTML page.

- **Doc Repository:** Displays a Document Repository.

- **Action Catalog:** Displays an Action Catalog (Widget).

About Portal Action Catalogs

An Action Catalog is a dynamic catalog of Actions that empowers Users and Customers to help themselves (example: Create a Service Catalog that displays all your Services with Actions to create Incidents and Service Requests).

When a Customer clicks a hyperlink, an Action executes (example: Request Account creates an Incident record and categorizes it as a Request). The Action Catalog's theme, such as Cherwell Next, controls the fonts, colors, block layout, etc.

> **Note:** A Service Catalog is built using the Action Catalog Widget, which can be used on a Dashboard or as a stand-alone Widget in the Portal.

About Portal Calendars

A Calendar allows you view time-sensitive Business Object data in a natural format that can be shared with Teams or an organization.

The CSM Portal has Calendar capabilities that are very similar to those in the Browser Client Calendar. Examples of Portal Calendars include the IT Calendar, Task Calendar, and Event Calendar.

When working with Calendars In the Portal, Users can:

- View a Calendar by clicking IT Calendar on the menu bar.
- Change the Calendar View.

In the Portal, Calendar functionality is accessed using the IT Calendars text on the Portal menu bar if you designed the Portal to include it.

About Portal Dashboards

A Portal Dashboard is a custom, interactive, and insightful console that is optimized to provide helpful at-a-glance self-service information and navigation for Customers accessing a Portal Site.

Like all CSM Dashboards, a Portal Dashboard uses configurable Widgets to display critical metrics, analyze and predict trends, drill down into data, initiate commands and Actions, facilitate navigation, or show a sampling of information relevant to Customers.

Examples of Portal Dashboards include:

- A not logged-in Portal Dashboard, intended for anonymous Customers, that presents general information and data, such as a welcome information, a community discussion board, and service desk hours.
- A logged-in Portal Dashboard, intended for logged-in Customers, that displays a list of open records (by Customer and organization), facilitates navigation, and helps Customers with self-service operations (ex: Logging Incidents, locating Knowledge Articles and FAQs, etc.).
- A department Dashboard, intended for Customers in a specific department (ex: HR, Facilities, Finance, etc.), that presents department-specific records and metrics, a discussion board, or a Twitter Feed.

CSM provides several Out-of-the-Box (OOTB) IT Portal Dashboards, which are used on the OOTB IT Portal Site. Use these OOTB Dashboards as-is, modify them, or create new Dashboards using the Dashboard Manager and Dashboard Editor.

Note: For more information about Dashboards and Widgets (including how to create them), refer to the Dashboards documentation and the Widgets documentation.

About Portal Widgets

A Widget is a mechanism that displays information about a Dashboard or Portal Site (ex: Chart, Gauge, Button, etc.). Examples of Portal Widgets include:

1. Search Results List Widget
2. Chart Widget
3. Action Widgets (links or commands)

CSM provides multiple of OOTB Widgets designed to display data on a Dashboard or Portal Site. Use these OOTB Widgets as-is, edit them, or create your own using the Widget Manager.

About Portal Forms

CSM allows you to create several different types of Forms for each Business Object, including:

- **Regular Forms:** Main Form or Forms for the Business Object. By default, each Business Object has one *Default* regular Form; however, you can create as many as you need (example: Create an alternate Form with only specific details, create a *specifics Form* to data relevant to a categorization such as Printer Incident, or create a Master container Form that toggles between two smaller Embedded Forms. Typically, a regular Form is intended for detailed logging activities in the Desktop and Browser Client. Example Forms include:
    - Incident
    - Problem
    - Change Request
    - Journal
    - Task
- **Portal Forms:** A Regular Form designed specifically for the Customer Portal to provide self-service record logging capabilities, such as an abbreviated Incident Form. Typically, Portal Forms are much simpler than the default Form used in the Desktop/Browser Client.

About Portal Grids

Grids in the Browser Client and Portal look very similar to Desktop Client Grids.

Portal Grids include the following features:

- **Grid Menu Bar:** Displays actions available for the Grid, including navigation, Actions, and available columns.
- **Title:** Grid title that might or might not match the name of the Business Object that the Grid represents. Also, a Business Object might have multiple Grids, so each might have its own name.
- **Sort icon:** Indicates the column currently sorting the Grid, and if it is in ascending or descending order. Click the icon to toggle sorting. Click another column heading to sort by that column.
- **Filter icon:** Indicates the column data can be filtered. Click the icon to show filtering options (possible filter values appear in the column's Filter drop-down).
- **Grid item:** Each item within a Grid contains its own line of information. Clicking the item opens the record in the Main Pane.

For more information on working with Grids in the Portal, refer to Browser Client Grids.

About HTML Pages

A CSM HTML Page is an HTML-coded web-like page used to display information on a CSM Customer Portal Site or in the CSM Browser Client.

HTML Pages can be:

- Internal HTML Pages: HTML pages that Users design and code. Users can insert CSM commands directly into the page, as well as CSM Images, Tokens, Stored Values, etc.
- External HTML Pages: Existing websites. Users supply the URL.

Use an HTML Page to display:

- A company website as Startup Item on a Portal Site.
- A hardware website or forum on a Portal Site (add an Action to a Site menu bar to display an HTML page).
- A hard-coded HTML Page that Users design directly in the Browser Client.

CSM provides several OOTB HTML Pages. Use these OOTB HTML Pages as-is, edit them, or create new HTML Pages using the HTML Page Manager. CSM also provides the HTML Page Editor to help design and code your own Internal HTML Page.

Note: The HTML Page Editor is useful for building pages. For more advanced options, it is assumed that Users have a working knowledge of HTML and possibly CSS.

About Portal Knowledge

CSM consolidates multiple Knowledge Sources into a single, powerful Knowledge Base so that Users can find relevant information quickly without the use of additional resources. Depending on the configuration of your system, Customers might also have access to Knowledge through the Portal so that they can independently solve issues.

CSM Knowledge can come from many different Knowledge Sources, including:

- **Knowledge Articles (KAs):** CSM Business Object dedicated to Knowledge. Use to share identified solutions with Users and Customers. Note that KAs can also be imported from third-party Knowledge providers (ex: KnowledgeBroker).
- **Business Object records:** Closed Incidents or Problems (Known Errors), or any other appropriate Business Objects.
- **Attachments:** Imported internal or external documentation.
- **Web:** Adobe®, Google®, Microsoft TechNet®, Twitter®, Yahoo!®, YouTube®, etc.

By default, only members of the Portal Workgroup Manager Security Group can create Knowledge Articles in the Portal.

In the Portal, Customers can search for Knowledge Articles using a Portal Site's configured Search Control or using the Knowledge Article Dashboard. When on a KA in the Portal, Customers can vote on Article popularity by clicking the Like this Article link, note whether or not it resolved their issue by clicking Yes or No, and add feedback by clicking the Add Comment link.

About Portal Reports

Portal Reports behave similarly to Reports in the Browser Client. In the Portal, Reports can be run from Specific links and Widgets in a Dashboard (if configured in CSM Administrator).

About Portal Searching

CSM provides multiple search tools to help efficiently and thoroughly search and filter CSM data, locating one record or a set or records. Searching tools for the Portal include:

1. Quick Search: A Quick Search is a simple query that quickly finds all records containing a specific word or phrase (ex: Show all records whose description contains the word "phone"). Search options, such as record type, status, etc., are typically predefined to simplify the search, and vary depending on the purpose and location of the search. Quick Search is a Full-Text Search, so it searches all fields that have Full-Text search enabled (even those that are not specified) and finds similar words, as well. In the Portal, run a Quick Search using the CSM Search Control.

2. Search Groups: A Search Group is a saved search that finds all records meeting commonly-defined criteria (ex: Find all My Open Incidents). Search Groups are meant to be reused and can be accessed from multiple places in CSM.

3. Knowledge Search: A Knowledge Search is a search that runs against the Cherwell Knowledge Base to quickly find solutions (ex: Find information relating to Account Management). Knowledge Searches can also treat existing records in CSM as Knowledge Sources. On the Out-of-the-Box (OOTB) IT Portal Site, the Find Help Dashboard contains an Action link that opens the OOTB IT Portal Site Knowledge Article Dashboard. This Dashboard displays a Knowledge Search bar as well as the Most Popular Knowledge Articles.

CSM provides an OOTB Quick Search, an OOTB Search Control, and a variety of OOTB Search Groups. Use these Search features as-is, or modify them to meet the needs of your organization.

About the Service Catalog

The OOTB Service Catalog displays Service Catalog items with an icon (optional), title, and description in card format. The number of columns adjust according to the size of the User's screen.

The following services are in the OOTB Service Catalog:

- **Account Management:** Pertains to network access and passwords.
- **Conferencing/Presentation:** Encompasses conference setup, web sharing, projectors, and more.
- **Desktop Management:** Covers end-user computer equipment and OS, anti-virus, and miscellaneous software.
- **E-mail/Calendaring:** Contains e-mail and calendaring software and account management.
- **Employee Support:** Used primarily by HR and hiring managers to set up new employees, update their information, or request an employee separation task.
- **Enterprise Apps:** Contains options for business software used by the organization.
- **IT Service Desk:** Used primarily by an IT department to manage technology systems in the organization.
- **Network Services:** Covers the network itself, both wired and wireless. It includes file sharing and backup/restore services.
- **Printing:** Covers local desktop and shared network printers. Users can request access to network resources, request toner/ink, or request a local printer of their own, pending approval.
- **Telephony/Fax:** Covers telephony equipment (desktop and mobile) and fax machines.
- **Web Services:** Includes external (Internet) and internal (Intranet) requests.
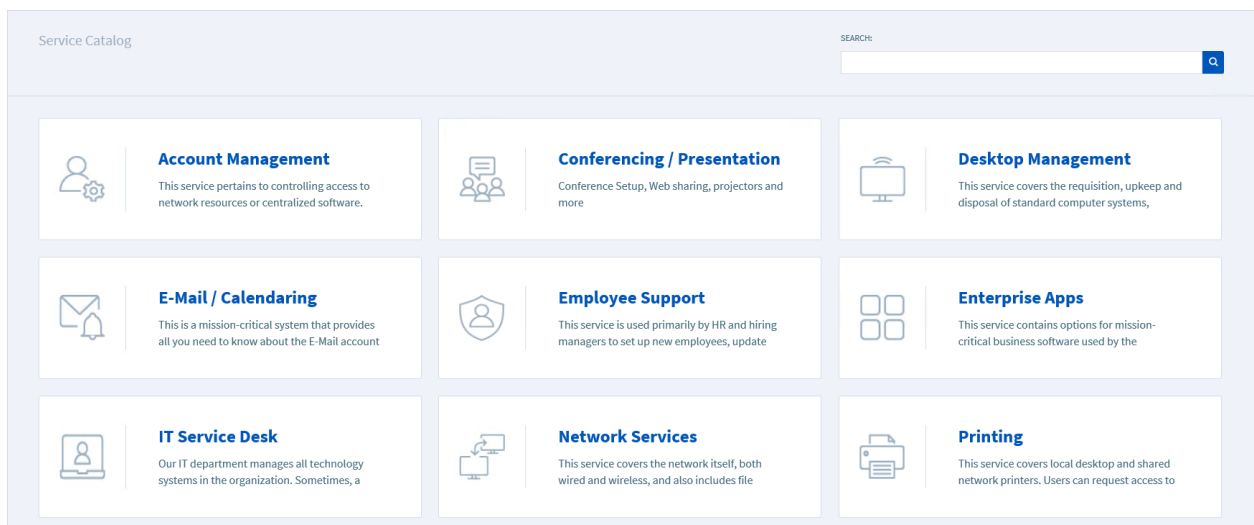
The OOTB Service Catalog has a search feature that produces a list of suggested matches after typing three characters into the search box. You can search on the title and description of Service Catalog items. The drop-down menu of suggested results will show up to five suggestions. Click the **More...** link to view additional suggestions. Select the **Search** button or hit the **Enter** key to view all search results.

The Cards with Search style was introduced to the OOTB Service Catalog in CSM 9.2.0. If you upgraded from a version of CSM than 9.2.0, you can implement the Cards with Search styling.

Note: When a user's screen size is small enough that only one column of cards is displayed, the card icon will be hidden.

Implementing the OOTB Service Catalog

The Cards with Search style was introduced to the OOTB Service Catalog in CSM 9.2.0. If you upgraded from a version of CSM piror to 9.2.0, you can implement the Cards with Search theme two ways:

- Edit the existing Service Catalog Widget
- Create a new Widget to act as your Service Catalog

Implementing the OOTB Service Catalog (Using an Existing Service Catalog Widget)

To update an existing Service Catalog to take advantage of the Cards with Search style introduced in the 9.2.0 OOTB Service Catalog, perform the following steps:

1. Go to the Widget Manager, right-click Service Catalog, and select **Edit**. In the Display page, select **Cards with Search** from the **Style** drop-down.

2. If necessary, add a description field in each lookup table, then add the field to the associated form.

3. **Optional for Advanced Users**: To edit primary and interactive text colors, use the Definition Editor. Select **WidgetActionCatalogStyleDef** from the **Def Type** drop-down list. Inside the <Css> element, the Primary (#0056B8) and Interactive (#034470) colors can be changed to any CSS color (hex code, RGB value, or a valid color name). There are multiple instances of the Primary and Interactive colors in the CSS block.

Note: The OOTB Service Catalog Widget is a stand-alone Widget; it does not work if embedded in a Dashboard.

Note: Images associated with catalog items should be sized to 64x64 pixels for best results. CSM will resize larger or smaller images to fit a 64x64 pixel container.

Note: If you preview the Cards with Search style, you will see a static example of the layout, rather than a true preview of your live data.

Implementing the OOTB Service Catalog (by Creating a New Service Catalog Widget)

To create new Service Catalog using the Cards with Search style introduced in the 9.2.0 OOTB Service Catalog, perform the following steps:

Create a New Service Catalog Widget

1. In CSM Administrator, create a new Blueprint.
2. Open the Widget Manager and create a new Action Catalog Widget.
3. In the Widget dialog, select the Display page. Choose **Cards with Search** from the **Style** drop-down menu.
4. The image on each parent-level card will show up as either custom images or pre-9.2.0 OOTB images. In the Groups page, select the **Display Options** button for the top-level Group.
5. Select the **Show image next to each item** checkbox.
6. Select the **Field with Image** radio button, then select Linked Image from the drop-down menu.
7. Complete the rest of the necessary fields to complete the Service Catalog Widget.

Map Description Fields

8.   **Important:** The Incident Category and Incident SubCategory lookup tables also need a description field to take advantage of the Cards with Search theme. The title and description text in each parent-level card are mapped to the description fields in the Service Major Business Object. The child-level cards are mapped to description fields in the Incident Category and Incident SubCategory Lookup Tables.

If your database does not have a description field in those Lookup Tables, perform these substeps:
a. Add description fields to the Incident Category and Incident SubCategory Lookup Tables.

b. Add the description field to the associated forms.

Add New Widget to the Portal menu

9. Open the Site Manager.

10. Right-click the Portal site you wish to add the new Service Catalog Widget to and select **Edit**.
    a. Select the **Menu** page.
    b. Click the **Add action** down arrow
    c. Select **Add Action Catalog action...**

    The Widget Manager opens.

11. Select the new Widget.

12. **Optional for Advanced Users**: To edit primary and interactive text colors, use the Definition Editor. Select **WidgetActionCatalogStyleDef** from the **Def Type** drop-down list. Inside the <Css> element, the Primary (#0056B8) and Interactive (#034470) colors can be changed to any CSS color (hex code, RGB value, or a valid color name). There are multiple instances of the Primary and Interactive colors in the CSS block.

Note: The OOTB Service Catalog Widget is a stand-alone Widget; it does not work if embedded in a Dashboard.

Note: Images associated with catalog items should be sized to 64x64 pixels for best results. CSM will resize larger or smaller images to fit a 64x64 pixel container.

Note: If you preview the Cards with Search style, you will see a static example of the layout, rather than a true preview of your live data.

About Service Carts

A Service Cart is an e-commerce tool that allows Customers to add multiple Service Requests to a single order, and then temporarily hold the items until they are ready to submit the full order. When the order is submitted, each Service Request automatically creates associated Tasks based on related Service Catalog Template Work Units. Technicians fulfill the Service Requests in CSM, and Customers view and track the Service Requests (and Service Request history) on the My Service Orders page of the Customer Portal.

CSM Provides an OOTB Service Cart as a Major Business Object for Customers to use in the OOTB IT Portal.

> 🖉 **Note:** Service Cart can be used to support Multi-Sourcing Service Integration (MSI) and Service Integration and Management (SIAM). For more information, see The Relationship between CSM and Multi-Sourcing Service Integration and Service Integration and Management.

About Portal Visualizations

A Visualization is an interactive graphical representation of related data, represented as a relationship chain with colored nodes (boxes) and links (arrows). Defined alerts can also be added to indicate potential risk. Portal Visualizations look and behave similarly to Visualizations in the Browser Client. Examples include:

- Configuration maps (records that are linked using a common factor).
- Organization charts.

In the Portal, Users can:

- View a Visualization using the Visualization button on the menu bar.

    Note: In order to open the Visualization in the Portal, the Visualization feature must be added to the Out-of-the-Box (OOTB) IT Portal Site menu bar.

Good to know:

- Actions, Dashboards, Visualizations, Calendars, Widgets, and Searches can be viewed, accessed, or run in the Portal; however, they are managed (created, edited, deleted, etc.) and configured (security rights and defaults) only in the CSM Desktop Client and CSM Administrator.
- The Portal Visualization window provides much of the same functionality as the Desktop Visualization window and includes the toolbar, Main pane, Aerial pane, and Legend; however, the Portal Visualization window does not include a menu bar.

OOTB IT Portal Sites

CSM provides an Out-of-the-Box (OOTB) IT Portal Site to get started. The Site is built using OOTB Site Items and predefined properties (below). We recommend that you implement the OOTB Site so that you can explore the features, and then modify it or create new Sites to meet the needs of your organization. OOTB Site Items include:

- **Home Dashboard:** Directs Customers to log and/or view Incidents and Service Requests, find help by browsing Knowledge Articles and FAQs, and manage their devices through Service Requests. Also displays live metrics (global and personal) and a live Discussion Board.

  > **Note:** CSM also provides a not logged-in Dashboard for anonymous Customers. This Dashboard is simple and provides access to only a few self-service operations (ex: Resetting a password).

- **Service Catalog:** Displays all available Services in a dynamic card format. See more information about the OOTB Service Catalog.
- **Metrics:** Displays detailed metrics for the Customer (My Items), department (Department Items), and records (Status and Problems). Metrics are displayed via Dashboards.
- **Portal-specific Incident, Change Request, and Knowledge Article Forms:** Simple Forms help Customers log and manage their own records.

OOTB IT Portal Site properties include:

- **General properties:** Defines the name (*IT*) and associated Document Repository (*Default Portal Documents*).
- **Display properties:** Defines the Startup Item to display when first accessed (a Dashboard named *Portal (not logged in)*) and the alternate Startup Dashboard to display upon login (*Portal Default*). Also defines the Theme and Search Control (both are OOTB).
- **Banner properties:** Defines the title and subtitle, as well as the colors.
- **Footer properties:** No footer is used.
- **Menu bar properties:** Defines which items to display on the menu bar (Home, Service Catalog, My Devices, IT Calendar, Charts and Items, and Service Orders). Reset Password is a conditional menu bar item, and displays only when the Portal (not logged in) Dashboard is active. The Bomgar Chat Request menu item is also conditional and displays only when Bomgar is enabled.
- **Localization properties:** For the localized content czar, localize sites are available for Spanish, French, German, and Brazilian Portuguese.

Portal Good to Know

- A Portal Site is a collection of self-service information in a CSM Portal that is dedicated to a topic or function.

- The Portal is personal (you can display different Views for different Customers).

- The Portal allows Anonymous access (Customer is not required to log in), though access to data is limited.

- If a Portal Site requires a log in, Customers must have Portal login credentials, which means they must have a Customer Record with defined credentials and security rights.

- Content can be real-time or static and is organized using a set of highly configurable Sites that you create for your Customers.

- A Portal Site can contain any number of Site Items, including Business Objects/records (Customers can create and edit records), Actions (including powerful create options and interactive One-Steps), Action Catalogs, Dashboard and Widgets, Document Repositories, HTML pages, Reports, Search Groups, and Searching.

- When a Customer first accesses a Site, a default Startup Item is displayed; this can be an Action Catalog (special Widget), a Dashboard, a Document Repository, an HTML page, a Report, or a Search Group (used to display a list of records). A Customer can access other Site Items using the Site menu bar.

- To help getting the system started, CSM provides an OOTB IT Portal Site. This OOTB IT Portal Site is built using OOTB Site Items (example: An OOTB Service Catalog, Portal-specific forms, service desk-specific Dashboards, an OOTB Document Repository, etc.) and predefined properties (Startup Item, alternate Startup Item, header/footer, menu bar, etc.). Implement and use this OOTB IT Portal Site as-is, tailor it, or create new Sites to meet the needs of your organization.

Always consider the following:

- CSM is highly configurable. As a result, a User's system may vary from the Out-of-the-Box content in our documentation.

- Security rights control access to CSM functionality and are configured in the Security Group Manager in CSM Administrator (CSM Administrator>Security>Edit Security Groups). For more information, see Configure Portal Security Rights.

Using a Portal

When working with Portals, Users and Customers can:

Log in to a Portal

While Users and Customers can reach the Portal without logging in if allowed, functionality is limited until a login is complete.

To log in to a Portal:

1. Provide: **http://server/CherwellPortal** where *server* is the location where CSM Browser applications are installed.

   This opens the default Site chosen by the system administrator.

   Tip: To navigate to a specific Site, specify the Site in the URL (ex: http://server/CherwellPortal/ Marketing).

2. Depending on the design of the Portal, the User might need to click the **Login** link to log in to the Portal Site. Consider that not all Portals and Sites require login.

3. Provide **login credentials** (User Name and Password).

   Note: If Windows/LDAP login was enabled, provide the Windows credentials.

4. Click **Login**.

Navigate to a Site

If a Portal contains multiple Sites, site options display in the Site Selector, which is located in the Portal application bar. The list of Sites varies depending on whether or not you are logged in, which Sites the system administrator has chosen to expose using the Site Selector, and your security rights.

You can also navigate to a Site directly by name using the URL http://server/CherwellPortal/SiteName where *server* is the server where the CSM Browser Applications are installed and *SiteName* is the name of the Site you want to visit. If you enter an invalid value or you omit the SiteName, you are taken to the default Site.

Log a Portal Record

The CSM Portal allows you to easily log Incidents and Requests using the Service Catalog. There are two types of records you can log using the CSM Portal:

- Incident: An Incident is an unplanned interruption to a Service or a reduction in the quality of a Service (ex: Something is not working).
- Request: A Service Request is a request for information, advice, a Standard Change, or access to a Service (ex: Installation of new software). The Request form in the Portal will contain different fields depending upon the type of service requested (ex: New Device vs. Network Request).

In the Portal, Incidents and Service Requests (often called Requests) are stored together in the Incident Business Object. The Categorization (Service/Category/Subcategory) identifies the record as either an Incident or Request and is decided by the Service chosen in the Service Catalog. You can also log an Incident or Request using the Affects Me Too link on a Problem logged by another Customer or User.

Log a Portal Incident

Customers can log an Incident from either the Service Catalog or a Configuration Item Form and they can log a Service Request directly from the Service Catalog.

To log an Incident or Request from the Service Catalog:

1. In the **Service Catalog**, click **Submit Incident** or **Request** in the appropriate tile.

2. Complete the Incident Form.

   Note: There is a Rich Text Editor available for this section.

3. Click the **Submit** button.

   A window opens to notify you of the Incident ID number.

4. View the new Incident or Request by doing one of the following:
   - Click the **My Open Tickets** tile to view the open Incident or Request in the My Incidents and Open Requests section.
   - Click the **number** next to Incident Tickets or Service Requests in the My Items section.

Affects Me Too

Affects Me Too functionality is a way to log an Incident or Request that links to a similar, pre-existing Problem in the Portal. When the Affects Me Too link displays on a Problem, a new Incident or Request can be created with a unique ID number simply by clicking on the link.

Navigate the Portal Site Discussion Board

The Portal Discussion Board (called Announcements from the Service Desk) provides a collaborative environment for Customers (either internal or external employees) to share information in real-time. As a Widget called, the Discussion Board can be customized using the Widget Manager.

On the Portal Discussion Board, Users can View a Discussion Topic.

View a Discussion Topic

To view a discussion in the Discussion Board:

1. On the home page, click a **discussion** link in the Announcements from the Service Desk section.

   The Discussion topic opens.

On the Discussion topic page, Users can:

- View the Message (a more detailed explanation of the problem/concern/announcement).
- Read the responses from other Customers and Users.
- Add a Comment.
- See who posted the discussion.
- Like the topic by clicking the**Like this Discussion** link to let other Customers and Users know if the discussion was helpful or informative.

Create a New Discussion Topic

To create a new discussion in the Discussion Board:

1. Click **Charts and Items** and then select **My Items** to open the My Items Dashboard.

2. Click the **New Discussion** link in the My Discussion Topics section. The Discussion Topic page opens.

3. Specify the **Subject**.

4. Detail the question or concern in the Message field.

5. Click the **Save** button.

Add a Comment

To add a comment from the Discussion Topic page:

1. Open an existing Discussion topic.

2. Click the **Add a Comment** link.

   The Comment prompt opens.

3. Provide a comment.

4. Click **OK**.

Navigate Portal Knowledge Articles

Customers and technicians can access Knowledge Articles (How To Articles) to help solve issues without having to log Incidents. Find Knowledge Articles in the Portal:

- Using the Search Control.

- Using the Search Knowledge Base search bar on the Out-of-the-Box (OOTB) Portal home page.

- Using the OOTB Knowledge Article Dashboard. Open the Dashboard by clicking Charts and Items>Knowledge Articles on the menu bar.

From a Knowledge Article, Users can:

- Read through the Article Content.

- Allow technicians and other Customers to know if an Article resolved your issue:
  - Click **Yes** if the Article helped.

  - Click **No** if the Article did not help. The Incident is logged and a new window opens with the Incident ID.

- Add a Comment by clicking the Add Comment link.

  Customers can view or hide comments using the vertical splitter bar.

- Vote on the Knowledge Article by clicking the Like this Article link to let other Customers and Users know that the Article was helpful or informative.

Create a Knowledge Article in the Portal

Only members of the Portal Workgroup Manager Security Group have the rights to create new Knowledge Articles in the Portal by default.

To create a new Knowledge Article in the Portal:

1. In the OOTB IT Portal Site, open the Knowledge Article Dashboard by clicking Charts and Items>Knowledge Articles on the menu bar.

2. Click the **Create a Knowledge Article** link in the Search Knowledge Articles section. If the link is not visible, review your Security Rights.

3. Select an **Article Type**.

4. Provide a **Title** and the **Article Content**.

5. Click **Save**.

Multi-Tab Browsing Support in the Portal

The Customer Portal allows Users to operate in multiple web browser tabs, which enables them to work on multiple pages within CSM. This allows customers to work more efficiently.

Multi-tab browsing allows you to:

- Open multiple tabs running CSM in the same browser window (or multiple browser windows).
- Log in via the first tab and then load CSM in additional tabs without needing to log in again or consume additional licenses.
- Work with multiple CSM features at the same time. For example, a customer might log an Incident in one tab and view their default home page in another.
- Open tabs in multiple languages (using the Culture Selector) and work in the tabs independently within the same session. If a User has multiple tabs open in different languages and the session expires or the User manually logs out, the User is logged out of all tabs. When the User logs back in to a tab, the language for that tab automatically resets to the default language for the User's Role; the other tabs reload using the language that was selected before the User logged out.

    Note: You must have Globalization enabled to use the Culture Selector.

Open a New Tab in the Portal

Use multi-tab browsing support to open a new tab in the Portal.

1. Open a web browser.
2. Navigate to the **Portal** (http://MyServer/CherwellPortal/SiteName).
3. **Optional:** Log in using the appropriate credentials.
4. Click the **User Information** section of the Application Bar and select **New Browser Window**.
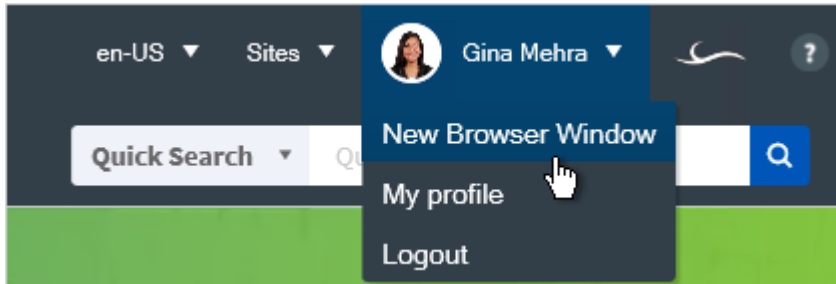
A new tab opens and displays the default home page.

> **Note:** If you open a new tab outside of CSM, navigate to the configured URL. Do not copy the URL from the address bar in one tab and use it in another.

5. (Optional) Open additional tabs.
   When the session expires or the User manually logs out, the User is logged out of all tabs. Once the User logs back into one of the tabs, the other tabs become active so the User can continue their work.

Implementing a Portal

Complete the following steps to implement the OOTB IT Portal Site:

1. Review the OOTB IT Portal Site. Understand the OOTB Site Items (Dashboards, the Service Catalog, the Discussion Board, the Document Repository, etc.) and the OOTB properties (header/footer, menu bar, etc.).

2. Configure required Portal settings:
   a. Configure the Portal URL.

   b. Set the default domain in CSM Administrator.

   c. Create Portal login credentials (for a Customer). Typically, this is done as part of the Security setup.

   > **Note:** CSM provides other default settings (ex: Anonymous login, password enforcement rules, etc.); you can change these, if needed, but it is not required.

3. (Optional) Explore Portal Site design ideas.

4. (Optional) Create a custom Portal.

Steps to Implement the OOTB IT Portal

Complete the following steps to implement the OOTB IT Portal Site:

1. Review the OOTB IT Portal Site. Understand the OOTB Site Items (Dashboards, the Service Catalog, the Discussion Board, the Document Repository, etc.) and the OOTB properties (header/ footer, menu bar, etc.).

2. Configure required Portal settings:
   a. Configure the Portal URL.

   b. Set the default domain in CSM Administrator.

   c. Create Portal login credentials (for a Customer). Typically, this is done as part of the Security setup.

   > **Note:** CSM provides other default settings (example: Anonymous login, password enforcements rules, etc.); you can change these, if needed, but it is not required.

   > **Note:** If you want to use internal credentials on a default domain, you must type **CHERWELL** in front of the username (example: CHERWELL\Bob) in order to log in.

3. (Optional) Explore Portal Site design ideas.

Create a Custom Portal

CSM is shipped with an Out-of-the-Box (OOTB) IT Portal Site, complete with Portal-specific Forms, Dashboards, etc. We recommend starting with this design, and then tailor it. However, Users can create a Portal from scratch, if needed.

To create a custom Portal:

1. Design the Portal (Site items, navigation, security, etc.)

2. Create the Site Items to include on each Site. Users can include the following:
   ◦ Business Objects/records

   ◦ Actions

   ◦ Action Catalogs

   ◦ Dashboards and Widgets

   ◦ Document Repositories

   ◦ HTML Pages

   ◦ Reports

   ◦ Search Groups

   ◦ Searching (rich searching, combined searches and results)

   Note: For more information about how to create each item, see their perspective documentation.

3. Run the Site Wizard to create one or more cursory Sites: Create cursory layout and characteristics for the Site (title, Business Object associations, display, and Document Repository association).

4. Refine/edit Sites using the Site Editor and Site Properties window: Refine the way the Site/Site Items look and behave.

5. Configure the Portal (settings, login credentials, password enforcement rules, etc.).

Designing a Portal

Portal design is important. Before creating a Portal:

- Answer some questions about audience, scope, and purpose.
- Review some Portal design tips.
- Consider how CSM features, such as Security and Site Items play into design.
- Start with the OOTB IT Portal Site for design ideas.

Portal Design Worksheet

Before creating a Portal, you should ask yourself some basic questions to help drive the design.

	Question	Consideration
	Question	**Consideration**
1.	**Who is your audience (in other words, who are your Customers)?**	
a.	Are your Customers internal employees? External? Both?	• Portal login credentials. • Anonymous login/Security Groups.
b.	Are your Customers experienced? IT personnel who can complete tasks by themselves? Novice Customers who need guidance? Both?	• Number of Sites (single Site or one for each expertise level). • Site Item and navigation design (simple or sophisticated). • Portal Views (personalize and secure what Customers see). • Automation (Add One-Steps/Actions to simplify tasks).
c.	Do your Customers have different interests (different Teams/different responsibilities (ex: General Status for Managers, Requesters of IT, etc.)	**Tip:** Expose Customers only to the information they need.
d.	Are your Customers International?	• Localization.
2.	**What will your Customers need to do in the Portal?**	
a.	Will your Customers view/monitor data (Reports, Dashboards)? Interact with data (Action Catalog/create Incident or Service Request)? Both?	• Add data-driven Site Items (Reports, Dashboards, Document Repositories, etc.) or action-driven Site Items (Actions to create/edit records, run One-Steps, launch CSM Managers, etc.). • Security Groups/security rights (View, Create, Delete). • record ownership. • License consumption.
b	What activities do your Customers need on a Site (ex: run a Report, create an Incident, access documents (Doc Repository), etc.?	• Create Site Items that deliver what Customers need most. • Make information easy to find (Startup Item should be informative).

	Question	Consideration
c.	Will your Customers need searching capabilities?	• Display a Search Control. • Display Search Groups to automate Common searches. • Add an Action to display the Search Manager (allows custom Searches).
d.	Will your Customers need to access documents?	• Display a Document Repository.
e.	Will your Customers need to access other websites?	• Display an External HTML page or an External Site.
3.	**Will your Customers need access to data other than their own?**	
a.	Will your Customers need to view/edit other Customers' records?	• Record ownership. • License consumption.
4.	**Will different Customers need different Security?**	
a.	Will you allow Customers to access data without logging in?	• Anonymous login/Security Groups. • Different Startup Items for logged-in/anonymous Customers.
b.	Will you *require* a login?	• Customers will need Portal login credentials.
c.	Will some Customers need view-only rights? Will some need edit rights?	• Anonymous login/Security Groups. **Note:** For more information about considerations and some helpful design tips, see Portal Design Considerations and Portal Design Tips. For more information about Security (Security Groups, license consumption, scope, etc.) refer to the Security documentation. For more information about Site Items (including how to create each), see their respective documentation.

Portal Design Tips

The following are some tips to help design a Portal that meets the needs of your Service Desk and your Customers:

- **Make it easy to find:** Layout and navigation are important. Strategically place important information or commonly-accessed Services in obvious places. Use tables, bullets, columns, and headings to elegantly organize information into logical and clearly-labeled groupings. Enhance navigation by using an intuitive menu bar, Actions, links, etc.

- **Make it easy to use:** Keep it simple. Simplify Forms and Service Catalogs so that Customers are only exposed to the information they need. Use Customer-friendly language so that Customers feel comfortable with the content. Automate common tasks using One-Steps/Actions and templates.

- **Make it personal:** The Portal is highly customizable so make each Customer's experience relevant and personal. Create custom Dashboards and Forms, expose only relevant Services and Knowledge Articles, dazzle Customers with meaningful graphics, colors, logos, etc.

- **Make it enticing:** Do not underestimate the visual experience. Employ visual elements, such as graphics, symbols, and colors, to convey information and embellish the aesthetic. Use consistent, browser-friendly fonts and colors (or themes) to ensure stability and cohesion.

- **Make the Startup Items count:** Your Startup Items set the tone for your Portal and Sites. Select an Out-of-the-Box (OOTB) IT Portal Site that effectively introduces your Portal. Designate a Site Startup Item that immediately communicates the purpose of your Site and provides clear access to common Actions. For example, select an Action Catalog that clearly communicate your Service offerings or a Dashboard that provides status, common Actions, and links.

- **Proactively share:** Post Advisories and Bulletins (Known Errors, outages, solutions, etc.) to help avoid potential issues. Set expectations by communicating your Services and policies to avoid confusion and misunderstandings.

Portal Design Considerations

Consider the following when designing your Portal:

- CSM is highly configurable. As a result, a User's system may vary from the Out-of-the-Box content in our documentation.

- **Customer Security Groups:** Users (Service Desk professionals working in CSM) and Customers (End-Users using the CSM Portal to conduct self-service activities) perform different functions in CSM and, therefore, require different security. For more information, see User and Customer Security Groups.

- **Security rights:** Security rights control access to CSM *functionality* and *data*. For example, to create a Dashboard, you must have security rights to access the Dashboard Manager (functionality). To view, add, edit, or delete the Description Field in an Incident record, you must have security rights to access the Incident Business Object and the Description field (data). For more information, refer to Security Rights in the Security documentation.

- **Anonymous Access (allow Customers to access Portal data without logging in):** CSM provides an Anonymous Security Group for Customers who need to access the Portal without logging in. The Portal Client uses this Anonymous Security Group to define security rights for those anonymous Customers. For more information, refer to Anonymous Security Group in the Security documentation.

- **Portal Views:** Use a Portal Form View to create Customer-specific versions of your Forms. A Portal View allows you to expose data to Customers in a more secure and Customer-friendly way. For more information, refer to Form Views in the Forms documentation.

- **Record ownership:** Access to records is controlled through record ownership. Typically, a Customer owns and can access her own records. However, record ownership rights can be extended to managers, Workgroups, and Workgroup managers so that Customers can update records that are owned by another Customer. For more information, refer to Record Ownership in the Security documentation.

- **License consumption:** A Customer can view, create, and edit her own records without consuming a license. With security rights, a Customer can also view, and in some cases, edit (through a One-Step) another Customer's records without consuming a license. For more information, see Portal License Consumption.

- **Site scope:** CSM provides a Site scope, which allows you to limit CSM Items (Dashboards, Reports, One-Steps, etc.) to a specific Portal Site. For more information, refer to Scope in the Security documentation.

- **Startup Site Items:** Each Site has a designated Startup Item (ex: a Dashboard) which is displayed by default when the Site is first accessed. If desired, a different Startup Item can be displayed upon login so that information can be more securely or appropriately filtered based on credentials. For more information, see Site Items.

- **External Sites:** The Portal can link to external websites using a simple link to a URL. For more information, see External Portal Sites.

Portal License Consumption

A Customer can view, create, and edit their own records without consuming a license. With security rights, a Customer can also view, and in some cases, use a One-Step to edit another Customer's records without consuming a license.

CSM notifies the Customer when a concurrent license is necessary. If the Customer does not have rights to consume a license, they will be told that they cannot edit the record.

Note: A Site can be configured to always use a license. This might be done for a management-focused Site where it is assumed that all work is done against other Customer's records).

Portal License consumption rules:

- A Customer logging in to CSM through the Portal to view/edit their own records (they are the Customer Record owner, meaning they are the Requester/Initiator and is associated with the record) *does not* consume one of the concurrent licenses.

- A Customer logging in to CSM through the Portal to access someone else's records (they are not the Requester but has been granted access rights) *does not* consume a license *to view* the record but *does* consume a license *to edit* a record.

- A Customer can run some One-Steps without consuming a license:
    - One-Steps Actions that do not alter data can be run without consuming a license (ex: Send an e-mail).

    - One-Steps Actions that do alter data can be run against records owned by the Requester without consuming a license.

    - One-Steps Actions that alter data generally consume a license when run against a record owned by someone other than the Requester. However, there are a handful of situations where a One-Step is allowed to change another Requester's record without consuming a license:
        - Creating a journal entry: For example, allowing a Customer to provide feedback on an Incident or Knowledge Article even if they are not an owner/requester.

        - Rating a record: Toggling a logical field or incrementing the count in a numeric field (ex: Allowing a Customer to vote on whether or not they liked a Knowledge Article). The Field must be appropriately configured by the administrator to hold a rating value.

            Note: For more information about licensing, refer to License Consumption in the Security documentation.

External Portal Sites

The Portal can link to external websites using a simple link to a URL. This helps make all of your Customer-facing Sites feel more integrated because CSM and non-CSM Sites show up next to one-another. For example, incorporate your organization's website or a department's website into the Portal, or add a website that supports your hardware.

Portal Site Design Ideas

CSM provides an OOTB IT Portal Site to get started. This OOTB IT Portal Site is built using OOTB Site Items (Dashboards, Forms, etc.) and predefined properties (Startup item, header/footer, menu bar, etc.). You can use this OOTB IT Portal Site as-is, or tailor it to meet the needs of your organization. Design ideas include:

- Edit the site display for logged-in and not logged-in modes.
- Edit the banner.
- Edit display options for the footer.
- Display your organization logo in the banner and/or footer.
- Display organization Business Hours.

Building/Managing a Portal

Portals are highly configurable. When you create your Portal, you decide how many Sites to create, which Site displays by default, how each Site looks, which Site Items are displayed on each Site, and who can access each Site/Item.

To help create/manage your Portal, CSM provides the:

- Site Manager: Helps manage Sites.

- Site Wizard: Walks through the steps to create a cursory Site.

- Site Editor and Site Properties window: Help edit/refine the way Site/Site Items look and behave. They can also help localize your Site or Enable Custom Portal Documentation.

- CSM Item Managers: Help manage Site Items, such as Dashboards, HTML pages, Document Repositories, etc.

    Note: Good design is important. Before creating a Portal, see Designing a Portal.

Site Manager

Use the Site Manager to complete general CSM Item Manager operations for Sites. You can also mark a Site as the default Site for the Portal.
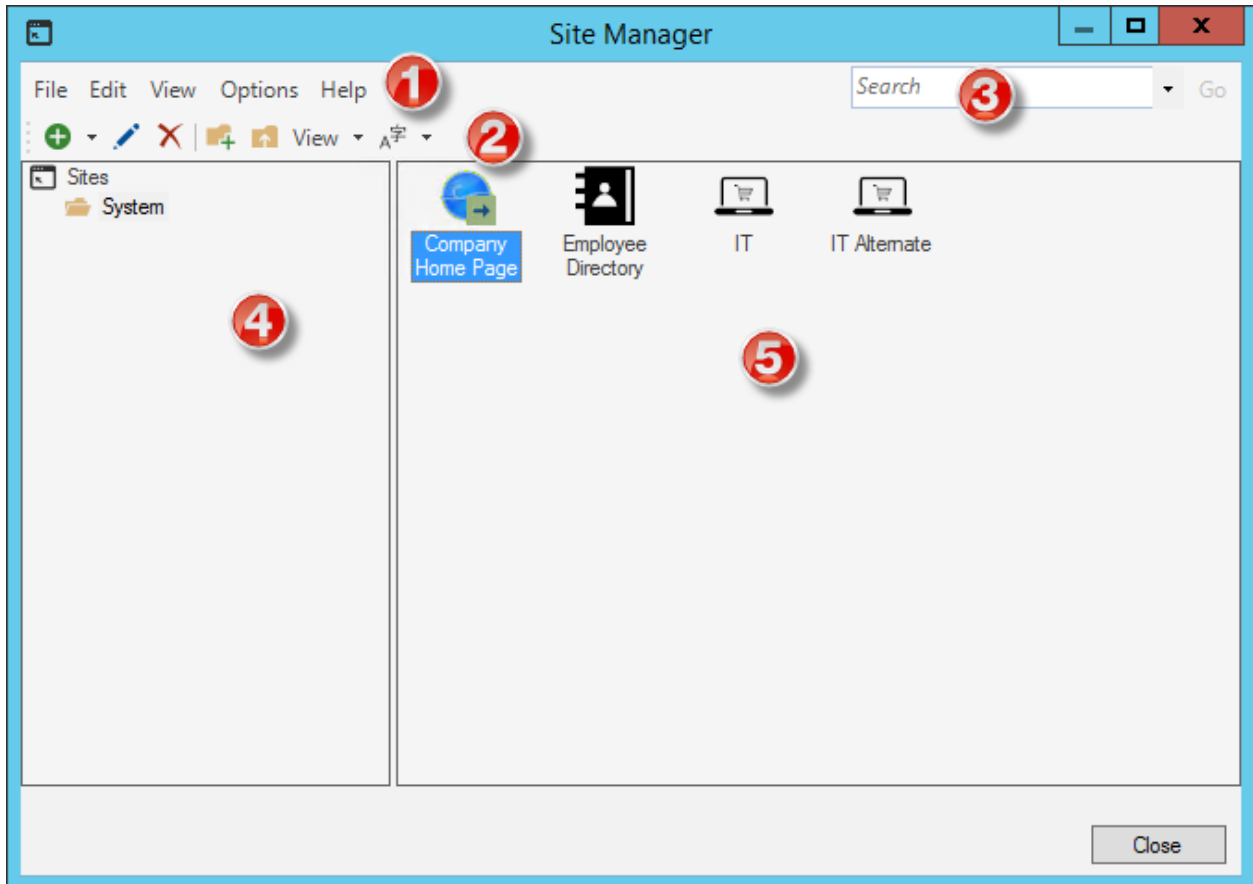
1. **Menu bar**:

   Displays a row of drop-down menus available in the Manager.

2. **Toolbar**:

   Displays a row of buttons for operations available in the Manager.

3. **Search Control**:

   Displays a search box to find specific words or phrases in the Manager.

4. **Manager tree**:

   Displays items in a hierarchical tree, organized by scope, and subfolder if applicable. Also lists any Searches run during the session.

5. **Main Pane**:

   Displays items by View (Icon, List, or Details (Grid) and lists search results when a Search is run.

Open the Site Manager

To open the Site Manager:

- From the Blueprint Editor menu bar in CSM Administrator, click **Managers>Site Manager**.
- In the CSM Administrator main window, click the **Browser and Mobile** category, and then click the **Site Manager** task.

Create a Site

The Site Wizard helps you create a basic working Portal. The Site Editor/Site Properties window helps you add refinement. You can forgo refinement, if needed, or you can click Finish at any time in the Wizard and go straight to refining.

To create a Site:

1. Run the Site Wizard to create a cursory Site: Create cursory layout and characteristics for your Site (title, Business Object associations, display, and Document Repository association).

2. Refine/edit your Site using the Site Editor and Site Properties window: Refine the way your Site/Site Items look and behave.
    a. Define general properties for the Site: Define the name and title, login requirements, record ownership, the Business Object/record associations (which Business Objects/records the Customers can interact with), and the Document Repository association.

    b. Define display properties for the Site: Define appearance (color/theme), Startup Site Items, and search capabilities.

    c. Define Banner properties for the Site: Define what the Site Banner looks like (background color and image, and Banner image) and what text displays on it (title, subtitle, and baseline).

    d. Define Footer properties for the Site: Define what the Site Footer looks like (background color and image, and Footer image) and what text displays on it (title, subtitle, and baseline).

    e. Define menu properties for the Site: Define which Site Items display on the Site menu bar, and which Actions a Customer can initiate from each.

    f. Define Localization properties for the Site: Define translation options.

Create a Site Using the Site Wizard

To create a Site using the Site Wizard:

1. Open the Site Manager.

2. Click the **Create New** button, and then select **Site**.

   > **Note:** To create an External Site, one that simply displays an existing website, select External Site. The External Site window opens to provide the URL and other options.

   Click **Next**.

3. Define basic properties for the Site:

   a. Specify a title for the Site that displays in the Banner.

      The Name and Description initially include text that you can refine later. The Name becomes part of the URL for referencing this Site in a browser. The Description is shown in the Site Selector when Customers switch between Sites.

   b. Select a Theme (set of fonts, colors, and options) to be used by different elements. Using a Theme simplifies the cohesive look. You can change the Theme at any time, which automatically updates the various elements.

      If the Theme is changed, refresh the browser to view the changes.

   c. Click **Banner image** to launch the Image Manager, and then select an image to display on the Site Banner. You can select an existing image or import a new image.

4. Click **Next**.

5. Select the **Business Objects/records** to include on the Site:

   > **Note:** These are the Business Objects with which you want your Customers to interact. For example, if you want Customers to be able to view or create Incident records, select the Incident Business Object.

   a. Click **Add** to include Business Objects/records on the Site.

      > **Tip:** Use the up and down arrows to order the Business Objects on the Site menu bar and to indicate the relative importance of a Business Object on the Site. Click **Remove** to remove a selected Business Object from the Site.

   b. Select the **Add newly associated objects to site menu** check box to automatically add the associated Business Object to the Site's menu bar.

      > **Note:** When you add a Business Object to the Site's menu bar, CSM adds a Business Object menu option and some Out-of-the-Box (OOTB) Business Object Actions. For

example, if you add Incident to the menu bar, CSM adds an Action to create a new Incident, as well as Actions to launch some Incident searches (My Open, Closed, and Recent Incidents). You can use these Actions, modify them, or create your own when you define the menu properties.

6. Click **Next**.

7. Select the Document Repository to include on the Site:

> **Tip:** You can use multiple Document Repositories on a single Site. Within the Site Editor, you can add an Action to display another Document Repository on the Site menu bar.

- ◦ Select **Create new document repository named** to create a new Document Repository for this Site. Then, name the Document Repository (or leave the auto-generated name).
- ◦ Select **Associate an existing document repository** to use an existing Document Repository for the Site. Click the **Ellipses** to open the Document Repository Manager, and then select an existing Document Repository or create a new Document Repository.
- ◦ Select **Do not associate a document repository** to forgo using a Document Repository on the Site.

Click **Next**.

8. Select a Startup Site Item from the following:

  a. Select **Dashboard** to display a Dashboard on startup. Click the **Ellipses** to open the Dashboard Manager, and then select an existing Dashboard or create a new Dashboard.

  b. Select **Page** to display an HTML page on startup. Click the **Ellipses** to open the HTML Page Manager, and then select an existing HTML page or create a new internal or external HTML page.

  c. Select **Other** to display an Action Catalog Widget, a Document Repository, a Report, or a Search Group on startup. Click the item's **Ellipses** to open the Action Manager, and then select an existing item.

  d. Select **The site requires the user to log** check box to require Customers to log into the Site. If you do not require a login, you can specify a different Startup Item for when the Customer finally does log in.

  > **Note:** A license is consumed when a Customer logs in.

9. Click **Finish**.

Refine/Edit a Site

Use the Site Editor and Site Properties window (both accessed from within the Site Manager) to hone/edit a Portal Site and its Site Items.

To refine/edit a Site:

1. Open the Site Manager.

2. Click the **Site** to edit/refine.

3. Click the **Edit** button   .

4. Define general properties for the Site: Name and title, login requirements, record ownership, the Business Object/record associations (which Business Objects/records the Customers can interact with), and the Document Repository association.

5. Define display properties for the Site: Appearance (color/theme), Startup Site Items (including login options), and search capabilities.

6. Define Banner properties for the Site: What the Site Banner looks like (background color and image, and Banner image) and what text displays on it (title, subtitle, and baseline).

7. Define Footer properties for the Site: What the Site Footer looks like (background color and image, and Footer image) and what text displays on it (title, subtitle, and baseline).

8. Define menu bar properties for the Site: Which Site Items are on the Site menu bar, and which Actions a Customer can initiate from each.

9. Define Localization properties for the Site: Translation options.

10. Click **OK**.

Define General Properties for a Site

Use a Site's General Properties page to define the:

- Basic properties: Title, Name, and Description.
- Access options: Login requirements and Record ownership.
- Business Object/record association: Which Business Objects/records the Customers can interact with.
- Document Repository association: Document Repository to include on the Site.

  Note: Some of these properties were initially set when you created the Site using the Site Wizard.

To define General properties for a Site:

1. Open a Site in the Site Editor.

   The Site Editor opens and displays a preview of the Site. The Site Properties window opens within the Site Editor and displays the Site's current properties.

2. Click the **General** page.

3. Edit/refine the basic properties for the Site:
   a. Title: Provide a **title** to display in the Portal UI. This was initially defined in the Site Wizard but you can change it if needed.

      Note: The Banner title was also initially auto-filled with the title from the Wizard but it can be changed as well; the Banner title can also be different than the Site title.

   b. Description: Provide a **description** to display in the Portal UI. This was initially defined in the Site Wizard but you can change it if needed.

4. Define access options for the Site:
   a. Show in Site Selectors: Select this check box to include the Site in the Site Selector drop-down (on the Site Application Bar in the Portal Main Page).

   b. Require login for access to site: Select this check box to require Customers to log in with credentials to access the Site.

      Note: If Customers are not required to log in, they will be able to anonymously view data, but certain operations (ex: edit a specific Business Object record) will require the Customer to log in. A license is consumed when a Customer logs in.

   c. Acquire a license at login (so editing other User's records will not require a prompt): Select this check box to acquire a license for the Customer upon login.

   d. Acquire a license on edit (suppress prompt): Select this check box to acquire a license for the Customer upon editing another Customer's record while suppressing the prompt to acquire the license.

Note: When checked, a license is consumed at login and the Customer will not be prompted to acquire a license when attempting to edit another Customer's records. Non-owners must also have rights for the particular Business Object they are trying to edit. For more information, refer to Record Ownership in the Security documentation.

Tip: This would generally be used when creating a Site where the most common operations are related to editing other Customer's records (such as a Site targeted at managers).

5. Select the **Business Objects/records** to include on the Site (Associated Business Objects area).

   Note: These are the Business Objects with which you want your Customers to interact (ex: If you want Customers to be able to view or create Incident records, select the Incident Business Object). The Business Objects listed here are the Business Objects associated with the Site; however, it is possible to add Actions related to other Business Objects.

6. Add newly associated objects to site menu: Leave this check box checked to automatically add the associated Business Object to the Site's menu bar.

   Note: When you add a Business Object to the Site's menu bar, CSM adds a Business Object menu item, which includes some OOTB Business Object Actions. For example, if you add Incident to the Site menu bar, CSM adds an Action to create a new Incident, as well as Actions to launch some Incident Searches (My Open, Closed, and Recent Incidents). You can use these Actions, modify them, or create your own when you define the menu bar properties.

   a. Add button: Click to include Business Objects/records on the Site (clicking Add displays a list of Business Objects; click a Business Object to add it to the list).

   Tip: Use the up/down arrows ▲ ▼ to indicate the relative importance of a Business Object on the Site (it does not reorder the items on the Site menu bar). Click the **Remove** button to remove a selected Business Object from the Site.

7. Select the Document Repository to include on the Site:
   a. Associate an existing document repository: Click to select an existing Document Repository for the Site. Click the **Ellipses** button ⬚ to launch the Document Repository Manager, and then select an existing Document Repository or create a new Document Repository.

   Tip: To add an additional repository, add an Action to display another Document Repository to the Site menu bar.

8. Click **OK**.

Define Display Properties for a Site

Use a Site's Display Properties page to define:

- Appearance: Theme, site selector options, and scrolling rules. For more information about Themes, refer to Portal Themes.

- Startup Site items: What to display when a Customer first accesses the site (anonymously and logged-in), default View, and login options.

- Search capabilities: Which Search Control to use and whether or not anonymous Customers can search.

Note: Some of these properties were initially set when you created the Site using the Site Wizard.

To define Display properties of a Site:

1. Open a Site in the Site Editor.

   The Site Editor opens and displays a preview of the Site. The Site Properties window opens within the Site Editor and displays the Site's current properties.

2. Click the **Display** page.

3. Define general appearance properties (Appearance area):
   a. Theme: Select a **Theme** (set of colors, styles, and fonts) to be used by the different elements on the Site.

   b. Background: Select a **color** for the Site's background (From Theme is recommended).

   c. Show Site Selector on application bar: Select this check box to display the Site Selector (drop-down) on the Portal Application Bar.

   d. Keep menu visible when scrolling: Select whether to lock the Site menu bar at the top of the window so that when a Customer scrolls down a long form, the Site menu bar is still visible. You can select:
      ◦ Yes: Locks Site menu bar for all Customers.

      ◦ No: Does not lock Site menu bar.

      ◦ Mobile devices only: Locks Site menu bar for only Tablet-based Customers.

4. Select a Startup Site Item (Startup area):

   Notes: This is the Site Item that displays when a Customer initially accesses a Site. If the Site requires a Customer to log in, there is no need to specify both a *Show on startup* and a *Show on login* because there will be only one Startup Site.

   a. Show on startup: Select the **Site Item** to display when a Customer initially accesses the Site. The Site Item can be an Action Catalog (special Widget), a Dashboard, a Document Repository, an HTML page, a Report, or a Search Group (used to display a list of records).

   b. Show on login: Select this check box to display a different Site Item if/when the Customer logs in. Then, select the **Site Item** to display.

    c. Enable Custom Portal Documentation

    d. View: Select the **View** to use on the Site. The View controls the behavior and look-and-feel (Forms, etc.) of Business Objects within the Site. Options include:

        ◦ Role-based: View will be the one associated with the default Role tied to the Customer's Security Group. Different Customers see different Business Object Forms based on security.

        ◦ Default: *Default* system View will be used on the Site. Because this is the same View used by Users, it is unlikely that this is desirable, but the option is included for completeness.

        ◦ A Named View: Select this option to force the Site to always use a specified View.

5. Define login options for the Site:

    a. Click the **Login Options** button.

    The Login Options window opens.

    b. Define the following:

        i. Text to display on login dialog: Specify the message to display to the Customer on login.

        ii. Show privacy link in login dialog: Select this check box to display a link to a Privacy statement, then provide text for the link and the URL to the Privacy document.

        iii. Custom avatar image: Click the **Image** button to open the Image Manager, then select default images to display for a non-logged-in Customer and a Customer without an assigned avatar.

        iv. Redirect User on Logout: Select this check box to automatically redirect Customers to a specified URL when they log out of the Portal. Then, type the **URL** where you want them to be redirected (example: http://www.cherwell.com), or click the **Browse** button and select a website where Customers will be redirected after logging out of the Portal.

        v. Click **OK**.

6. Define options for the Site's Search Control (Search area):

    Note: The Search Control is located below the Site menu bar.

    a. Use default: Select this radio button to use the OOTB CSM Search Control (search options are based on the list of Associated Business Objects from the General page).

    b. Use search widget: Select this radio button to use a custom Search Widget. Then, select an existing **Search Widget** or create a new Search Widget on-the-fly.

    c. No search: Select this radio button to omit searching from this Site (no Search Control).

    Tip: You can still create Search Widgets and put them on Dashboards to allow for targeted searching.

    d. Require login before showing search results (excluding Dashboards): Select this check box to require that the Customer log in in order for them to search.

> **Note:** If a Search is run without requiring login, the Search will be run based on the security rights of the Anonymous Security Group unless the Customer logs in. For more information, refer to Security Groups in the Security documentation.

7. Click **OK**.

Enable Custom Portal Documentation

By default, the Portal links Users to the default Cherwell online documentation system. Due to the highly configurable nature of the Portal, a customer may wish to disable this feature, or link to a custom online documentation system.

Disable Default Portal Documentation

To disable default Portal documentation:

1. In the CSM Administrator Client, click **Browser and Mobile > Site Manager**.
2. Select the desired Portal (example: IT Service Desk).
3. Click the **Edit** button. The Site Properties page opens.
4. Select the **Display** category.
5. Uncheck the **Show help button** checkbox to remove the default help button from the Portal.
6. Click **OK**.

Enable Custom Portal Documentation

To enable custom Portal documentation:

1. In the CSM Administrator Client, click **Browser and Mobile > Site Manager**.
2. Select the desired Portal (example: IT Service Desk).
3. Click the **Edit** button. The Site Properties page opens.
4. Select the **Display** category.
5. Select the **Use custom URL** radio button.
6. Provide an alternate URL in the **Help URL** field (example: a link to an internal documentation system or training documents). This URL replaces the default Cherwell online documentation system URL.

   Important: The URL must be a full URL (example: https://www.sample.com) and not a partial URL (example: sample.com).

7. Click **OK**.

Define Banner Properties for a Site

The Site Banner displays at the top of the Site and usually identifies the Site (ex: company name and logo). Use a Site's Banner Properties page to define:

- What the Banner looks like (background color and image, and Banner image).
- What and how text displays on the Banner (title, subtitle, and baseline text, fonts, and colors).
- The Banner's height and position (relative to a margin).

> **Note:** Some of these properties were initially set when you created the Site using the Site Wizard.

To define Banner properties for a Site:

1. Open a Site in the Site Editor.

   The Site Editor opens and displays a preview of the Site. The Site Properties window opens within the Site Editor and displays the Site's current properties.

2. Click the **Banner page**.

3. Edit the Banner properties:
   a. Show Header: Select this check box to display a Banner at the top of the Site. Then, define how the Banner looks.

   b. Background: Select the **color**, **image**, and **image alignment** to display behind the Banner text.

   Notes: Use the Image Manager to select an existing image or import a new image. Images used for backgrounds are usually subtle, such as a grayed, partially transparent logo. However, a background image can also be a complex image (ex: a custom image that incorporates the name of the Site). The background color can be a solid color or a gradient.

   c. Image button: Select the **image**, **image size** (in pixels), and **image alignment** to display on top of the background.

   Tip: This image displays on top of the background image so either align the images differently or design them to work in layers.

   d. Title (Banner): Specify a **title** to display on the Banner, and then select its **color**, **alignment**, and **font**. This title was initially autofilled by the Site title you defined in the Wizard but it can be changed and it can be different than the Site title.

   e. Subtitle: Specify a **subtitle** to display under the title on the Banner, and then select its **color**, **alignment**, and **font**.

   f. Baseline Text: Specify any **additional text** to display on the Banner, and then select its **color**, **alignment**, and **font**.

   Tip: Use this for copyright notices or creation information.

g. Fixed height: Select this check box to make the Banner a fixed height that you specify, in pixels. If not checked, the Banner resizes to accommodate its text, images, and margins.

h. Extend banner for application bar: Select this check box to automatically resize the Banner to take into account the height of the Site's Application Bar. If not checked, text might overlap the Application Bar, because it will overlap the Banner.

i. Margins: Click this button to define top, bottom, right, and left margins (in pixels) around text. If not checked, the Banner uses defaults of zero (0).

4. Click **OK**.

Define Footer Properties for a Site

The Site Footer is located at the bottom of the Site, and can provide additional general information (such as a copyright notice) or aesthetic value. Use a Site's Footer Properties page to define:

- What the Footer looks like (background color and image, and Footer image).
- What and how text displays on the Footer (title, subtitle, and baseline text, fonts, and colors).
- The Footer's height and position (relative to a margin).

To define Footer properties for a Site:

1. Open a Site in the Site Editor (Go to Browser and Mobile Settings>Site Manager, then select a site and click **Edit**).

   The Site Editor opens and displays a preview of the Site. The Site Properties window opens within the Site Editor and displays the Site's current properties.

2. In the Properties window, click the **Footer** page.

3. Edit the Footer properties:
   a. Show Footer: Select this check box to display a Footer at the bottom of the Site. Then, define how the Footer looks.

   b. Background: Select the **color**, **image**, and **image alignment** to display behind the Footer text.

      Note: Use the Image Manager to select an existing image or import a new image. Images used for backgrounds are usually subtle, such as a grayed, partially transparent logo. However, a background image can also be a complex image (ex: a custom image that incorporates the name of the Site). The background color can be a solid color or a gradient.

   c. Image button: Select the **image**, **image size** (in pixels), and **image alignment** to display on top of the background.

      Tip: This image displays on top of the background image so either align the images differently or design them to work in layers.

   d. Title (Footer): Specify a **title** to display on the Footer, and then select its color, alignment, and font.

   e. Subtitle: Specify a **subtitle** to display under the title on the Footer, and then select its color, alignment, and font.

   f. Baseline Text: Specify any **additional text** to display on the Footer, and then select its color, alignment, and font.

      Tip: Use this for copyright notices or creation information.

   g. Fixed height: Select this check box to make the Footer a fixed height that you specify. If not checked, the Footer resizes to accommodate its text, images, and margins.

   h. Margins: Click this button to define top, bottom, right, and left margins (in pixels) around text. If not checked, the Footer uses defaults of zero (0).

4. Click **OK**.

Define Menu Bar Properties for a Portal Site

The Site menu bar is located below the Banner and lists the Site Items, as well as any Actions that support the items. Actions might include displaying a Dashboard, launching a One-Step™, running a Report, creating a record, etc. Use a Site's Menu Properties page to define:

- Which Site Items display (as menu items) on the Site menu bar.

- Which Action the menu item initiates: Displays a Dashboard, Service Catalog, or Document Repository; runs a report, display a record, etc.

- The Help text that displays on the menu item's tooltip.

- Expressions for showing/hiding and enabling/disabling menu items: For example, only show the Bomgar™ menu item if Bomgar is enabled and configured.

- Security options for showing/hiding and enabling/disabling menu items: For example, Always show, show only for Anonymous (not logged-in Customers), or show only for Logged-in Customers.

- Display options (separators) for groups of menu items.

> **Note:** If selected, Business Object and Document Repository menu items were initially added to the Site menu bar when you created the Site using the Site Wizard. You can accept their defaults or modify them to meet your own needs. You can also add additional Associated Business Objects (General page), which optionally creates new default menu items.

To define Menu Bar properties for a Portal Site:

1. Open a Site in the Site Editor.

    The Site Editor opens and displays a preview of the Site. The Site Properties window opens within the Site Editor and displays the Site's current properties.

2. Click the **Menu** page.

3. Enable/disable your Site menu bar:
    a. Show menu: Select this check box to display a menu bar on the Site. Clear this check box to remove the menu bar from the Site.

        Tip: You might not want to include on menu bar on Sites that shows only a single item, or on Sites that manage navigation in another way, such as from a Dashboard or HTML Page.

4. Add one or more menu items to your Site menu bar:
    a. Click the **Add action** button ⊕, and then select the **Action** to add to the Site menu bar. You can choose from the following Actions:
        ◦ One-Step: Runs a One-Step. You can choose to run an existing One-Step or create a new One-Step.

        ◦ Command: Runs a system command applicable to the Portal. Categories include:

- Managers: Adds a command to launch a CSM Item Manager so that a Customer can choose an item to open/run (ex: Add the Report Manager to the Site menu bar so that Customers can choose to run an available Report).
- Recent Items: Provides a Recent Items list that displays the last five (5) items of the specified type selected by the Customer (ex: the last five Reports run by the Customer). This makes sense if you have made the Manager available.

  Note: Recent Items lists must be placed inside folders (they cannot be at the top level of the Site menu bar), and it is recommend that they be placed as the last item in the folder.

- Chat: Includes commands related to remote support services (ex: Bomgar) (only available if you have Chat and Remote Support Connector Settings enabled in CSM Administrator).
- (Other) Business Object Search: Provides common Site searches (ex: Business Object to search, how the results should be sorted, whether to limit to the current Customer, limit to Open or Closed records, etc.).
- (Other) Create Business Object: Creates a new Business Object (record) but with several powerful options, such as a One-Step to run as part of the creation process and whether a custom Form should be displayed (which can be different than the OOTB Form used for viewing a Business Object).
- (Other) Go to Edit Mode: Puts a Business Object record into edit mode so that a Customer or User can immediately edit it. This command is designed to be used in an Execute Command One-Step Action, which is the automated equivalent of a Customer or User clicking the Edit button in the Portal.
- (Other) Home: Takes the Customer to the Startup Item (Dashboard, HTML page, etc.).
- (Other) New Bus Ob Drop-down: Automatic command that displays a default list of create commands for all Associated Business Objects for the Site.

  Note: This command must be placed in a folder.

- Dashboard: Displays a Dashboard. You can display an existing Dashboard or create a new Dashboard.
- Report: Runs a Report. You can run an existing Report or create a new Report.
- Search: Runs a Search Group. You can run an existing Search Group or create a new Search Group.
- Page: Displays an HTML page. You can display an existing HTML page or create a new HTML page.
- Document Repository: You can display an existing Document Repository or create a new Document Repository.
- Action Catalog: Displays an Action Catalog. You can display an existing Action Catalog or create a new Action Catalog.
- Folder: Adds a folder to the toolbar so that you can organize Actions into another level.

> **Note:** Some Actions also allow you to limit scope and Associated Business Object (click the activated Options button). We recommend that you limit Customers to just the Site scope and make items available in just that scope.

b. Define **general properties** for your new menu item:
    i. Action: Displays the name of the menu item as it is recognized by CSM (ex: the name of the Dashboard being displayed). This cannot be changed.

    ii. Display text: Specify the **text** to display on the menu item.

    iii. Image button: Click the **Image** button to open the Image Manager, then select an image to represent the menu item on the menu bar (ex: a house icon for Home). You can select an existing image or import a new image.

    iv. Help text: Specify a **tooltip** to display when the cursor is on the menu item.

c. (Optional) Define Expressions for displaying and enabling the menu item on the menu bar:
    i. Visible: Select this check box to make show/hide the menu item based on an Expression. Then, define the Expression using one of the following options:

        ◦ Stored Expression: Click the **Ellipses** button ⬚ to open the Expression Manager, and then select an existing stored Expression or create a new stored Expression. Stored Expressions can be reused in numerous places in CSM.

        ◦ Custom Expression: Click the **Custom Expression** button 🔲 to open the Custom Expression Builder, and then create a custom Expression specifically for this scenario.

    ii. Enabled: Select this check box to enable/disable the menu item based on an Expression. Then, define the Expression using one of the following options:

        ◦ Stored Expression: Click the **Ellipses** button ⬚ to open the Expression Manager, and then select an existing stored Expression or create a new stored Expression. Stored Expressions can be reused in numerous places in CSM.

        ◦ Custom Expression: Click the **Custom Expression** button 🔲 to open the Custom Expression Builder, and then create a custom Expression specifically for this scenario.

d. Define Security Options for displaying and enabling/disabling the menu item:
    ◦ Visible: Select whether menu items are visible for all Portal Customers (Always), only Logged-In Portal Customers (Logged-in Only), or only Portal Customers who are not logged in (Anonymous Only).

    ◦ Enabled: Select whether menu items are enabled for all Portal Customers (Always), only Logged-In Portal Customers (Logged-in Only), or only Portal Customers who are not logged in (Anonymous Only).

    ◦ Rights: Assign Portal rights to make menu items visible/enabled for a Customer Security Group.

    > **Note:** These rights are named Portal Right 1, Portal Right 2, etc., and have no special meaning until you assign meaning to them. For example, you can

consider Portal Right 1 to indicate a manager, and then only allow a particular item to be shown on the menu if the current Customer is a manager.

Note: For a Portal menu item to be visible/enabled based on assigned Portal rights, you must configure those rights in CSM Administrator (Security>Edit Security Groups). Select a Customer Security Group (ex: Portal Customer), and then select the Browser and Mobile Device Rights category in the Rights tab. Select **Allow** on the Portal right that you chose for the menu item visibility/enable setting so the setting is functional for the Security Group. If you do not allow the right for the Security Group, the menu item will never be visible or enabled for that particular Security Group.

 e. Define group display options:
   i. Begin group: Select this check box to display a horizontal line before the menu item on sub-menus, separating it from other menu items. On the top level menu, an extra space will be displayed to the left of the menu item.

5. Continue to add menu items to the Site menu bar.

Tip: Click the **Delete** button to delete a menu item from the Site menu bar; Use the **up/down** arrows to change the order of the menu items on the Site menu bar. You can also drag items between folders.

6. Click **OK**.

Define Localization Properties for a Site

The Portal can be easily translated into other languages, even languages into which the main CSM product has not been translated. To do so, you must:

- Translate platform strings that are used throughout the Portal. This includes error messages and general display items.
- Translate each Site in the Portal. This includes the text for menu items and other commands.
- Specify custom options for each language, such as a custom Startup Item.

There are two methods for translating Portals into multiple languages:

1. Use Language Packs to translate string used by Sites. When you apply a Language Pack that contains Portal strings, a Site Localization is automatically added to the Sites contained in the Language Pack. See Translating Strings for Portal Sites.

2. Use a Site's Localization page to export the Sites and Portal strings to an XML file that can be translated, and then import the translated strings. The XML file will contain referenced values for each string that can be displayed in the particular Portal, for example:

   `<Property Name="Header_TitleText">IT Self-Service‹Property>`

   If this is edited to be in German:

   `<Property Name="Header_TitleText">Informationstechnologie‹Property>`

Defining Localization Properties for a Site

To define Localization properties for a Site:

1. Open a Site in the Site Editor.
   The Site Editor opens and displays a preview of the Site. The Site Properties window opens within the Site Editor and displays the Site's current properties.

2. Click the **Localization** page.

   Note: If you have already defined translation properties for the culture, you can select it in the list and click **Export**; otherwise move to the next step.

3. Define translation properties for the culture to which you want to translate:
   a. Click the **Add** button.
      The Site Localization Properties window opens, alphabetically listing the available cultures (both the language/country and culture code are displayed to make it easy to find the correct culture).

   b. Language/country or culture code: Select a **culture** to which to translate using either drop-down. The Name field automatically defaults to the language/country.

   c. Flag/icon: The image identifies the culture by flag. This will be displayed next to the language in the Language Selector on the Site Application Bar. Click the **icon** to change it, if needed.

d. View: If you have a custom View defined for the language, select the view here. If the option is left as Role-based, then if there is a view associated with a selected view that has an appropriately assigned language, that Role/View will automatically be used:

e. Site Overrides: Select Startup Site Items for the translated Site if you have a custom-translated item (such as a translated Dashboard or HTML Page). If you do not select anything here, the Startup Item will be the same as for the OOTB Site.

> **Note:** This is the Site Item that displays when a Customer initially accesses a Site.

   i. Customer startup action: Select the **Site Item** to display when a Customer initially accesses the Site. The Site Item can be an Action Catalog (special Widget), a Dashboard, a Document Repository, an HTML page, a Report, or a Search Group (used to display a list of records).

   ii. Customer login action: Select this check box to display a different Site Item if/when the Customer logs in. Then, select the **Site Item** to display.

f. Define login options for the translated Site. If you want to have alternative text or a Privacy Link on the login window, you can enter it by clicking the **Login Options** button:

g. Click **OK**.

The culture is added to the list and OOTB language options now display in the window.

4. Export all the Portal strings into an XML file that can be translated:
   a. Select the **Localization/culture** to export.

   b. Click the **Export** button.
   The Export window opens.

   c. Click the **Browse** button to select a destination for the exported strings file (Cherwell Localization Definitions go into files with the .cld extension).

   > **Note:** The following check boxes are only relevant when exporting a previously-translated Localization.

   d. Include all portal strings: Select this check box to delete any strings that were removed from the Site since the last translation (for example, if you have removed items from the Site menu bar, checking this check box would remove them from your Localization file).

   e. Remove strings that are no longer used: Select this check box to delete any strings that were removed from the Portal since the last translation. For example, in the next version of the Portal there might be a couple of messages that are no longer used. Checking this check box would remove them from your Localization file.
   Tip: After the export you will be given a chance to view the file. The first time, you will most likely have to pick a file association before the file can be opened. The export file holds XML so it is best to associate an XML Editor with the .cld extension. You can also use Windows Explorer to set up the file association.

5. Translate the exported XML file using an XML Editor, your favorite translation tool, or even Notepad.

6. When you have finished translating the file, click the **Import** button to import the file back into CSM.

7. Associate a culture with the default Site: This allows for the default language to display in the Language Selector on the Site Application Bar.

a. Language name/Language: Select a **culture** using either drop-down. The Name field automatically defaults to the language/country.

b. Flag/icon: The image identifies the culture by flag. Click the **icon** to change it, if needed.

c. Show language selector on application bar: Select this check box to give Customers a choice to display either the translated or default Site.

8. Click **OK**.

Select a Startup Portal Site

If you have more than one Site on your Portal, you can choose a Site to first display if the Customer goes to the main (or an invalid URL):

http://MyServer/CherwellPortal

Customers can also go directly to a particular Portal Site by specifying it as part of the URL:

http://MyServer/CherwellPortal/IT

To select a Startup Portal Site:

1. Open the Site Manager.
2. Right-click and **Site**, and then select **Set as Default**.
3. Click **OK**.

Troubleshoot a Portal Site

Use the following table to troubleshoot Portal issues.

Problem	Solution
Cannot access tools to create a Portal or Site	Check your functionality rights (CSM Administrator>Security>Edit security groups>User Security Group>Rights tab).
Customer cannot access a Portal or Site	Check the Customer's functionality rights (CSM Administrator>Security>Edit security groups>Customer Security Group>Rights tab).
Customer cannot access data on a Portal or Site	Check the Customer Security Group's data rights(CSM Administrator>Security>Edit security groups>Customer Security Group>Business Objects tab).
Portal does not display correct form	Make sure the forms where designed in the Portal View not in the Default View.
Query does not work	Make sure the query is set up correctly (that is, not limited to a particular group, etc.). Also, check security; records might not show up if the Customer does not have appropriate rights.
Automatic Actions not working	Make sure automatic Actions are run from the Portal View not the Default View.
Customer can edit another Customer's record	Change the record ownership rights.
Windows Account not registered message	Create login credentials for the Customer.

Configuring a Portal

Before Customers can access a Portal, you must:

- Configure Portal security rights.
- Configure Client Application settings (URL, timeout, and access to RSS Feeds).
- (Optional) Specify a default domain for the Portal.
- (Optional) Configure login, authentication, and inactivity settings for the Portal (only if you want them to be different than the Desktop Client).
- Configure anonymous login settings.
- Configure Cherwell credential settings (User/Customer password rules).
- Configure Miscellaneous Browser/Portal Settings.
- Create Portal login credentials (for a Customer).

Note: The majority of the configuration is conducted from the Browser and Mobile Settings page in CSM Administrator.

Configure Portal Security Rights

Because Portal access must be set differently for Anonymous Browsers as well as logged-in Customers, there are several places that Portal security rights must be set in CSM Administrator before Users and Customers can access the Portal. The following are all the rights that must be configured for Anonymous Browser and Portal Customers:

- Application rights
- Browser and Mobile device rights
- Calendar rights
- Chat Service Integration rights (Bomgar)
- Command Manager rights
- Dashboard rights
- Document Repository rights
- HTML Page rights
- Knowledge rights
- Record locking rights
- One-Step rights
- Report rights
- Searches rights
- Security features rights
- Sites rights
- Sites Manager rights
- Users rights
- Visualization rights
- Web Service One-Step rights

Config Management Page

Use the Browser and Mobile Settings page (**CSM Administrator>Browser and Mobile**) to access many of the Portal and Browser Client management and configuration tasks, including:

- Site Manager: Use to manage Portal Sites.
- Browser Application Settings: Use to configure URLs, session timeouts, and RSS Feeds.
- HTML Page Manager: Use to manage HTML Pages.
- Document Repository Manager: Use to manage Document Repositories.
- Twitter Account Manager: Use to manage Twitter Accounts.
- Web Services Manager: Use to configure web services used for One-Steps.
- Edit Mobile Configuration: Use to set defaults (Dashboards, Business Objects, and Actions) for the entire system or for each Role for Cherwell Mobile™.
- Open Mobile Dashboard Editor: Use to manage Mobile Dashboards specifically designed for use on mobile devices.

CSM Administrator

Cherwell® Service Management Administrator (CSM Administrator) is CSM's administrative tool, which is used to configure, manage, secure, integrate, and automate your CSM system.

About CSM Administrator

Administrative features include:

- **Automation Processes:** Pause/resume the Business Process Server, enable/disable Automation Processes, manage automation rules, and define Business Hours.

- **Blueprints:** Configure and manage system definitions (example: Business Objects, Fields, Forms, Grids, etc.) and CSM Items (example: Dashboards, Search Groups, etc.), and to access definition-driven tools/functionality (example: Directory Service settings, Schemas, etc.).

- **Browser and Mobile Settings**: Edit Browser and Mobile options (HTML Page Manager, Twitter Account Manager, etc.).

- **Database:** Import and export data, and perform system maintenance.

- **E-mail and Event Monitoring:** Pause/resume the E-mail and Event Monitor Server, configure Outlook® Integration, and configure/manage e-mail accounts and settings.

- **Globalization**: Translate text, referred to as "strings," into one or more single-byte languages so Users can use a single CSM installation to view the same data in multiple languages.

- **mApps:** Transfer bundles of CSM functionality between CSM systems.

- **Performance**: Run the Health Check tool to monitor and optimize system configurations that impact performance.

- **Scheduling:** Pause/resume the Scheduler and manage scheduled items.

- **Browser and Mobile:** Build/manage Customer Portals, manage Browser App settings, manage browser tools, and manage Mobile configurations/Dashboards.

- **Security:** Use Security Groups, Roles, Teams/Workgroups, and User/Customer profiles to control people, functionality, data, environment, and sharing.

- **Settings:** Configure Global/Role System settings, such as General settings (example: Search, display, etc.), User Interface settings (example: Task Pane, toolbar, etc.), Table Management settings, etc.

- **Trusted Agents**: Connect to the Trusted Agents Hub and create Trusted Agents service groups.

Log in to the CSM Desktop Client or CSM Administrator

To log in to the CSM Desktop Client:

1. Double-click the blue **Cherwell Service Management icon** or orange **CSM Administrator** icon on the desktop, or click **Start>All Programs>Cherwell Service Management** or **Cherwell Administrator**.

   > **Note:** If the Automatically Use Connection Without Asking check box was previously selected or if the system administrator already set up a permanent database connection, the database connection window will not open.

2. Select a database connection:

   > **Note:** Typically, Users connect using an Application Server (3-tier connection), identified by the Application Server icon.

   a. Click the **All Users** tab to view database connections available to All Users or the User tab to view database connections available to only to the User logging in.

   b. Click a **database connection**.

   Note: To create a database connection, click **Add** to launch the Connection Wizard. To modify an existing database connection, click the **database connection**, then click **Edit**. To delete an existing database connection, click the **database connection**, then click **Delete**.

   c. Select the **Automatically Use Connection Without Asking** check box to automatically use this database connection each time CSM is launched. Afterward, the prompt is no longer available to select a connection.

   d. Click **OK.**

3. Provide the CSM login credentials:
   a. User ID: Provide the **CSM login ID** (this could be domain name/network Username or just Username).

   b. Password: Provide the **CSM password**. Passwords are case-sensitive.

   Tip: By default, there is a User ID called CSDAdmin with a password of CSDAdmin in the Demo and Starter databases.

   c. Automatically Login Without Asking: Select this check box to automatically use the above information at the next log in. This avoids a login prompt.

   d. Click **OK**.

   e. If a User is assigned to more than one CSM Role (and have not previously selected the Automatically Use Selected Role check box), the Choose Role window opens.

4. Select the login Role for the session:
    a. Click the appropriate **Role**.

    b. Always Use Selected Role: Select this check box to automatically use the selected Role at the next log in. This avoids the Role prompt.

Tour the CSM Administrator User Interface

The CSM Administrator User Interface (UI) is dynamic and changes to show helpful and appropriate options for the administrative tasks being performed. Generally, the Main window shows the following items:

- Menu bar: Access general administrative tasks.
- Task Pane: Access common administrative tasks, and administrative tasks organized by category.
- Main Pane: View data and to perform the majority of your administrative tasks.

When you first log in to CSM Administrator, the Main Pane displays a Getting Started page to help initially configure the system. After initial configuration, the Main Pane automatically displays the Home page

, which lists the administrative task categories.

When working in a Blueprint, the entire UI (menu bar, Task Pane, and Main Pane) dramatically changes to accommodate the Blueprint Editor, which is required to perform Blueprint operations.

> **Note:** For more information about the Blueprints and the Blueprint Editor, see the Blueprint documentation.

The following figure shows two sample Main windows:

- The Home view that appears when logging in to CSM Administrator (or click the **Home** button) and includes categories of functionality.
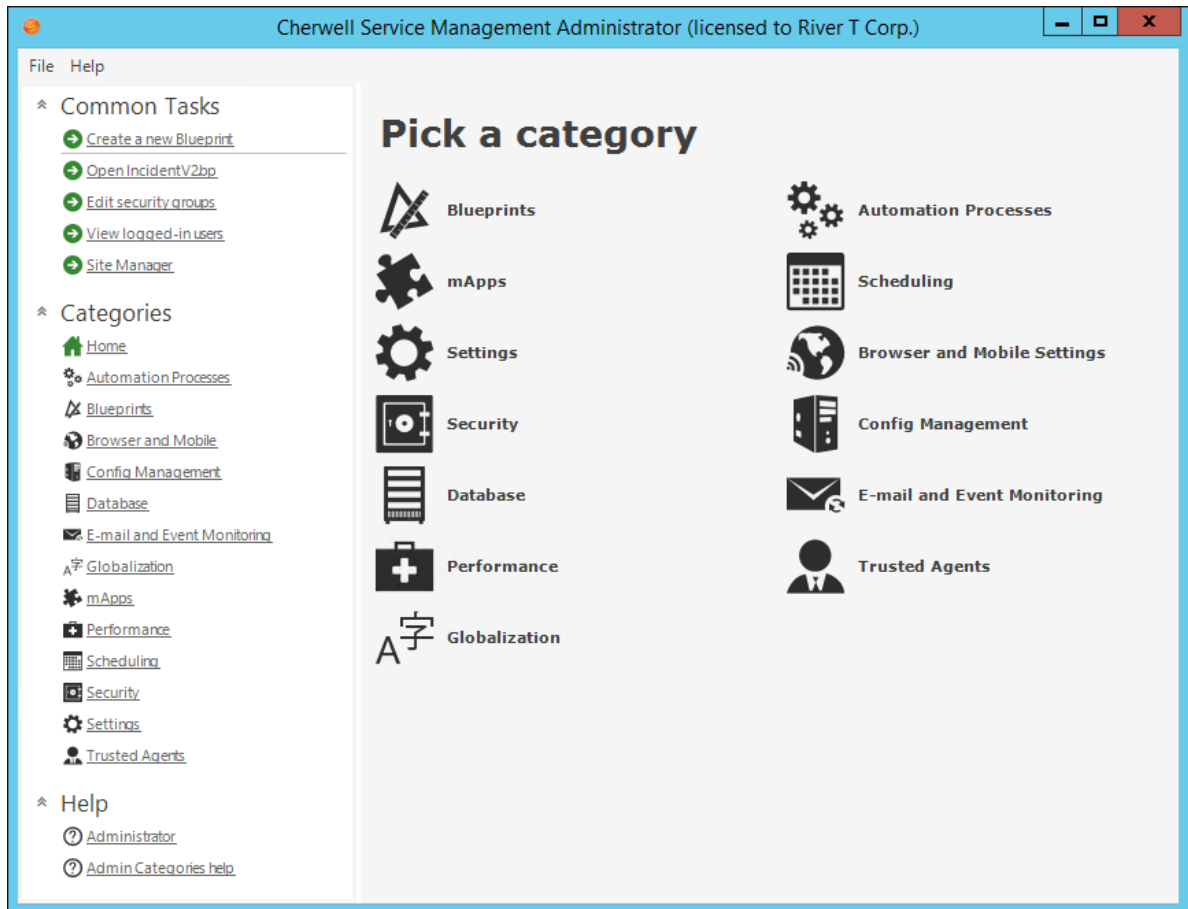
- The Blueprint Editor, which appears when creating a Blueprint. Notice that the Menu bar and Task Pane change to accommodate whatever item is active in the Main Pane. A toolbar shows when the Blueprint Editor is active.
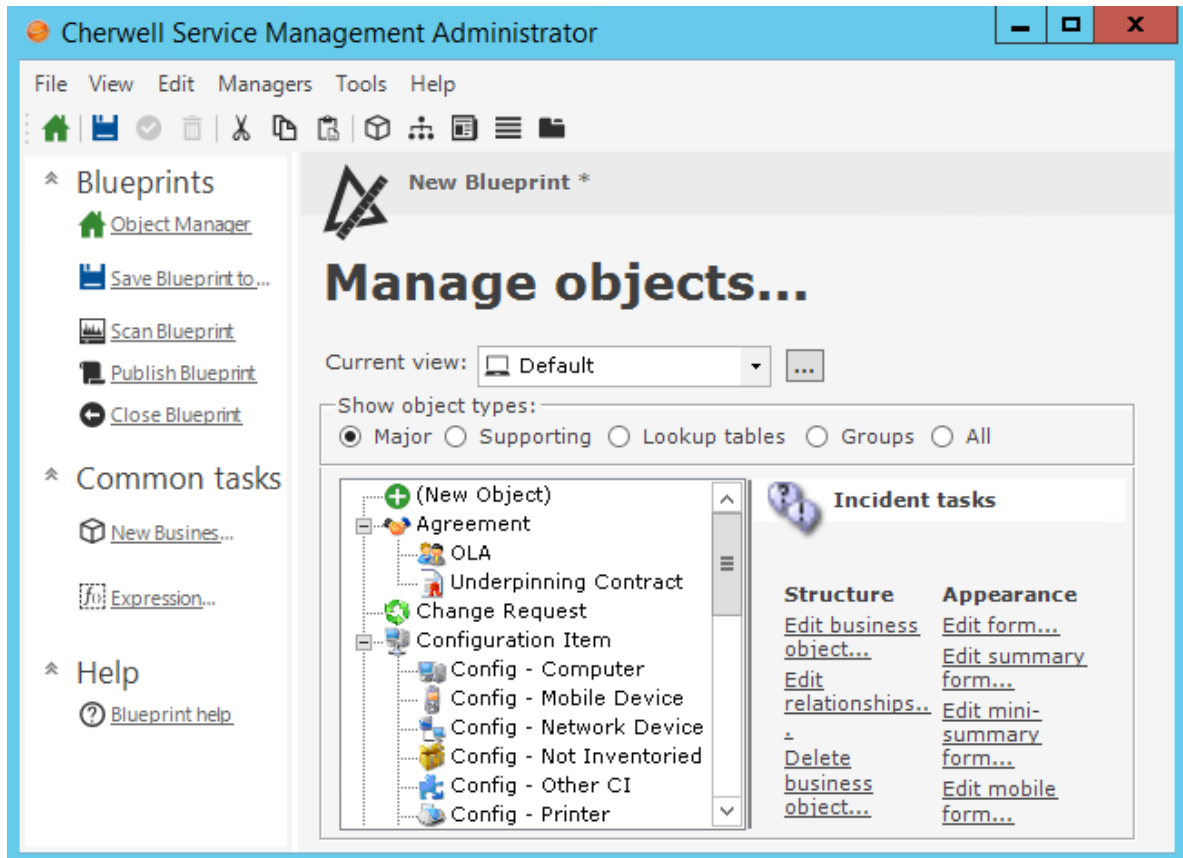
CSM Administrator Getting Started Page

By default, CSM Administrator opens a Getting Started page to help set up the CSM system.

Note: Also access the Getting Started page by selecting **Help>Go to Getting Started Page**.

To use the Getting Started page, click the task to complete. Available options include:

- **Organization Info:** Edit the name, the logo, and a theme that represents the organization.
- **E-mail:** Select e-mail addresses to be used in Automation Processes and for various notifications. Edit the e-mail signature in this location.
- **Active Directory/LDAP:** Edit the LDAP settings used to access information in a Directory Service (a directory stored on a server).
- **Escalations:** Select which escalations and notification Automation Processes to enable or disable.

After you complete a task, a green check mark appears over the number of the task. When finished setting up the CSM system and the Getting Started page is no longer needed, clear the check box at the bottom of the window.

☐ Show getting started page on startup
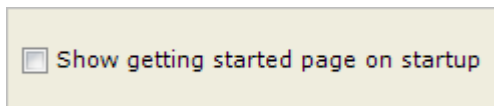
Note: The Menu bar is limited to File and Help and no toolbar exists. All options are accessed in the panes.

Configuring Global/Role Settings

Complete the following procedures to configure Global/Role settings. Configuration procedures are completed in CSM Administrator.

To configure Global/Role settings:

1. Configure System Settings security rights: Configure who can access system settings functionality and data.

2. Configure System Settings: Configure Search, Display, Dashboards/Calendar/Visualization, Catalog, Rich Text, Locking (record locking), Help, and Advanced (Refresh, notifications, and Web Services) settings. Most of these settings can be configured Globally, by Role, and by User.

3. Configure Global User Queue Settings: Configure options for creating History Records to track Queue operations and for transferring record ownership to a User when a record is placed in a User Queue.

4. Configure Global/Role Task Pane and Search Control Settings: Configure Task Panes and Search Controls globally or for particular Roles.

5. Configure Custom Global/Role toolbars: Configure custom toolbars globally or for particular Roles.

Configure Global System Settings

Global System settings/defaults control how CSM looks and behaves by default for all CSM Users. Use the System Settings window in CSM Administrator (Settings>Edit System Settings) to configure the Global System settings.

To Configure the Global System Settings:

1. In the CSM Administrator main window, click the **Settings** category, and then click the **Edit System Settings** task.

2. Click the Search page and configure the Global Search settings: Full Text Search, Quick Search, and Knowledge Search settings.

3. Click the Display page and configure the Global Display settings: DPI/Scaling settings, Multiple Monitor settings, and an OOTB theme.

4. Click the Dahsboards page and configure the Global Dashboard, Calendar, and Visualization settings: OOTB Dashboard, HUD, Calendar, and Visualization.

5. Click the Catalog page and configure the Global Catalog settings: Whether or not to store primary system definitions in a local catalog file on a User's machine, to allow Users to decide whether or not use a definition catalog, and to force catalog files to be rebuilt each time a User restarts a CSM Application.

6. Click the Rich Text page and configure the Global Rich Text settings: Determines how images are stored and shown in Rich Text Fields and the default font for Rich Text.

7. Click the Locking page and configure the Global Record Locking settings: General Record Locking settings, OOTB Record Locking settings for all Major Business Objects, and Portal Record Locking settings.

8. Click the Globalization page and configure the Global Globalization settings: Determines culture settings for your system. You can override these settings for Roles or for individual Users. This page is only enabled when globalization is enabled for your system. For more information, see Enable Globalization.

9. Click the Help page and configure the Global Help settings: Help system settings, and whether or not to globally enable/display Process and Terminology Help for Business Objects and Fields.

10. Click the Advanced page and configure the Global Advanced settings: Dashboard Widget refresh, system notifications, and web service call settings.

System Settings

Search Settings

Settings used by Quick Search and Knowledge Search

Text Search

- ○ All search words should exist in same field
- ● Search words can be found in different fields
- ☑ Search for different forms of word (plural, different verb tenses, etc.)

Quick Search should default to using

- ● All words   ○ Any words

Knowledge Search should default to using

- ● All words   ○ Any words

Sidebar navigation:
- Search
- Display
- Dashboards, etc.
- Catalog
- Rich Text
- Locking
- Globalization
- Help
- Advanced

OK   Cancel

Configure Global Search Settings

Use the Search page in the CSM Administrator System Settings window to define Global Search settings for:

- Full-Text Search: Select how to search in Fields and if other forms of words can be used (example: Plural).
- Quick Search: Select **all words** or **any words**.
- Knowledge Search: Select **all words** or **any words**.

To configure Global Search settings:

Text Search	Define how string searches (example: CSM Software) are conducted, either: • All Search Words Should Exist in the Same Field: Returns records only when both words are found in a single Field (example: *CSM* and *Software* are found in the same Field). • Search Words Can Be Found in Different Fields: Returns records if both words are found in different Fields in the same Business Object (example: CSM is found in one Field and Software is found in another Field). Search For Different Forms of the Word: Returns records that have plural and past tense forms of the word and different verb tenses. For example, if the search is for find, the records found will be those with find, finds, found, etc.
Quick Search	All Words: Search uses all words (AND is used to separate words in search). Any Words: Search uses any of the words (OR is used to separate words in search).
Knowledge Search	All Words: Search uses all words (AND is used to separate words in search). Any Words: Search uses any of the words (OR is used to separate words in search).

Configure Global Display Settings

Use the Display page in the CSM Administrator System Settings window to configure the following Global Display settings:

- Scaling Settings
- Multiple Monitors
- Application Skin
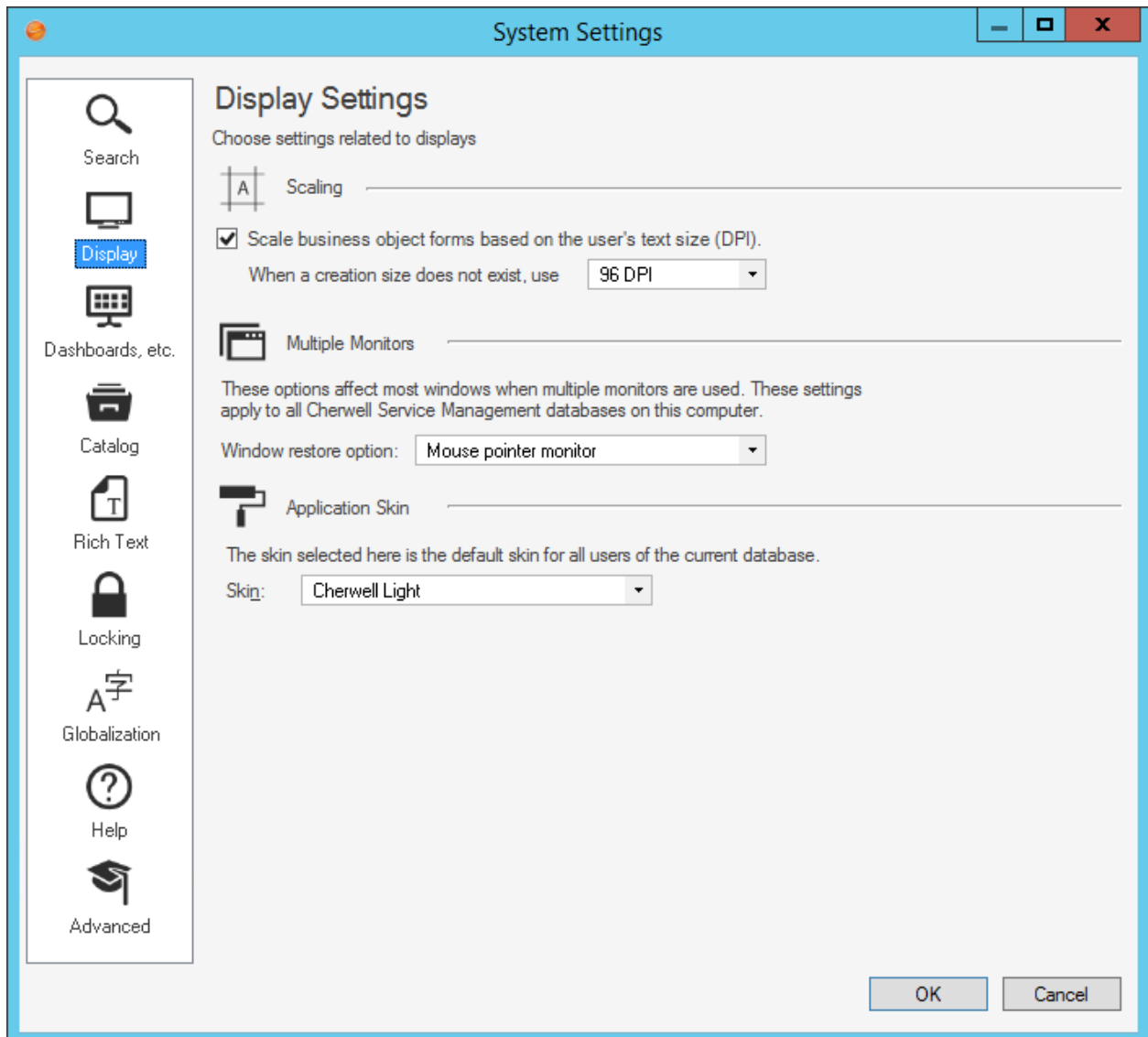
Scaling Settings

Scaling settings ensure that Business Object Forms are automatically scaled on systems running at DPI (dots per inch) settings above the normal 96 DPI (100% scale level) (large font option in Windows).

CSM supports Windows DPI settings up to 120 (125% scale level). To support correct scaling in CSM, the Windows screen resolution should be set to a minimum of 1024 x 768 (minimum effective resolution) for DPI levels up to 120 on HDMI monitors. This ensures that text and other items in CSM windows are scaled appropriately at higher DPI levels, although some windows themselves may be too large for the specific computer screen. If selecting a Windows DPI level above 120 (example: 144 or 150% scale level), windows and other items in CSM may not fit on the screen.

These settings do not control scaling of other visual elements in CSM. These items (controls, windows, etc.) are automatically scaled based on Windows settings.

- **Scale business object forms based on the User's Text size (DPI)**
  Select this check box to ensure that when Business Object Forms are created, edited, and viewed in CSM, they are automatically scaled according to the User's Windows DPI settings and DPI property values cached in CSM. The default DPI level for most Windows computers is 96 (100% scale level). Increase the scale level to 120 DPI (125%) or 144 DPI (150%) so that text and other items appear larger on the computer screen. Users can also set custom scale levels that fall between the typical Windows options or are above 144 DPI.

  If this box is cleared, Business Object Forms appear smaller when run at higher DPI values, although CSM does its best to make fonts and other items show proportionally to the smaller size.

- **When a creation size does not exist, use**
  Select an option to determine whether Business Object Forms are scaled from a specific DPI value if there are no cached DPI property values in CSM.

  The default value is 96 DPI, as this is the most commonly used setting at which content is created.

  - **Specific DPI value**: Use to scale Business Object Forms from a certain DPI level when a creation size does not exist.

  - **None**: Use to not have items be scaled from a certain DPI level when a creation size does not exist. In this case, CSM does not attempt to scale Forms that have not been edited in version 4.60 or later. Forms are likely be skewed and hard to read at higher DPI values.

  - **Custom**: Set the specific DPI.

  If a Business Object Form contains content that has not been edited since CSM version 4.60 or later, it does not have any cached DPI property values and does not have DPI values to use for automatic scaling. This setting allows the system to assume that the Forms were created at the specified DPI.

Multiple Monitors

Specify where to open/restore CSM Application windows after they are closed (if there are multiple monitors):

- **Original Monitor**
  Window opens in the same location on the same monitor where it was last closed.

- **Application Main Window Monitor**
  Window opens in the same location on the same monitor as the application Main window (the upper-left of the main application is the control point if the application straddles multiple monitors).

- **Mouse Pointer Monitor**
  Window opens in the same location on the same monitor as the mouse pointer. This option only differs from the Application Main Window Monitor option when the User uses the keyboard to open windows in CSM, and the mouse pointer is located on a different monitor from the one where the application Main window is located. For example, if you have the CSM Main application on monitor 2, but bring up the One-Step Manager and drag it to monitor 1, when you edit an existing One-Step, the Manager will appear on monitor 1, even though the main application is still on monitor 2.

> **Note:** This setting applies to all CSM databases (example: CSM Administrator) on your current computer. Windows that always open fully on the screen are not governed by these changes. If a window is too large to physically fit on the monitor, it will be snapped to the left and/or top edges depending on if it is too big in just one or both dimensions. You might notice this if you consistently drags windows partially off of the screen and expect them to open that way the next time.

Application Skin

Select a default application skin from the **Skin** list to control the appearance of the Desktop Client and Administrator Client shells. Options are Cherwell Light (default), Cherwell Blue, or Cherwell Dark.

The skin selected affects all Users by default. However, Users can change the application skin in the Desktop Client, which only affects their personal interface.

> **Note:** Users may need to close and reopen the Administrator Client for this change to take effect in that client.

Configure Global Dashboard, Calendar, and Visualization Settings

Use the Dashboards, etc. page in the CSM Administrator System Settings window to configure a Global default:

- Dashboard (Home Dashboard)
- Heads Up Display (HUD)
- Calendar
- Visualization

To configure Global Dashboard, Calendar, and Visualization settings:

Default Dashboard	Click the **Dashboard** button to open the Dashboard Manager, and then select an existing Dashboard or create a new Dashboard to use as the system default.
Default Heads-up Display	Click the **Dashboard** button to open the Dashboard Manager, and then select an existing Dashboard or create a new Dashboard to use as the OOTB HUD.
Default Dashboard Theme	In the drop-down, select a Dashboard Theme to apply to all Dashboards in the system.
Default Calendar	Click the **Calendar** button to open the Calendar Manager, and then select an existing Calendar or create a new Calendar to use as the default.
Default config visualization	Click the **Visualization** button to open the Visualization Manager, and then select an existing Visualization or create a new Visualization to use as the default.

Dashboards, Calendars and Visualizations

Choose default dashboards, calendar and visualization

Dashboards

Default dashboard: Global IT

Default Heads-up Display: Heads Up Display

Default dashboard theme: Use Dashboard Theme

Calendars

Default calendar: My Tasks

Visualizations

Default config visualization: Configuration Items

OK   Cancel
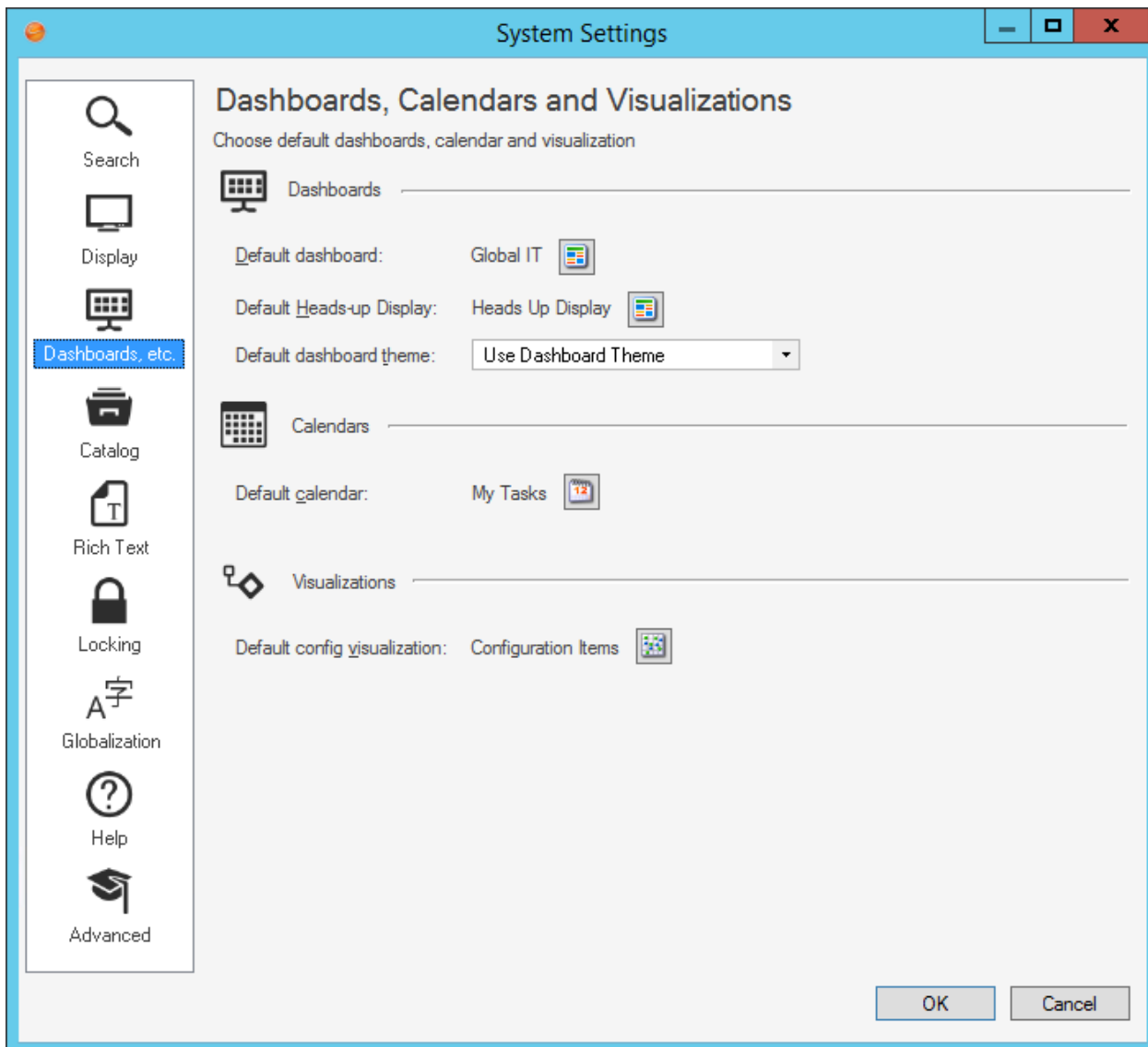
Configure Global Catalog Settings

When the Desktop Client is initially launched, core system definitions are retrieved from the server and stored in a local catalog file. Definitions do not need to be retrieved again unless a Blueprint is published. Use the Catalog page in the CSM Administrator System Settings window to define Global setting for the catalog, such as whether or not to:

- Store primary system definitions in a local catalog file on a User's machine.
- Allow Users to decide whether or not use a definition catalog.
- Force catalog files to be rebuilt each time a User restarts a CSM Application.

To configure Global Catalog settings:

Store Primary System Definition in a Local Catalog File on Users' Machines	Retrieves core system definitions from the server when the Desktop Client is initially launched, and then stores them in a local Definition Catalog file. Definitions do not need to be retrieved again unless a Blueprint is published.
Allow Users to Decide Whether or Not to Use a Definition Catalog	Allows Users to override the above default and set their own personal Catalog defaults in the CSM Desktop Client (Tools>Options>General page).
Invalidate all Current Catalogs	Forces all local Catalog Files to be built the next time each User starts a CSM Application.

Catalog Settings

Control whether definitions should be stored in a local definition catalog

Catalog

☑ Store primary system definitions in a local catalog file on users' machines

☐ Allow users to decide whether or not to use a definition catalog

☐ Invalidate all current catalogs. Check this option to force all local catalogs to be rebuilt the next time each user starts a Cherwell application.

Search

Display

Dashboards, etc.

Catalog

Rich Text

Locking

Globalization

Help

Advanced

System Settings

OK   Cancel

Configure Global Rich Text Settings

Use the Rich Text page in the CSM Administrator System Settings window to:

- Determine how images (example: Embedded screenshots) are stored and shown in Rich Text Fields, including file type (JPEG or PNG), display mode (thumbnail or full), and size limits (in KB or MB).
- Set default font for text.

To configure Global Rich Text settings:

Image Format	Select either JPEG or PNG. Images not in a default format are converted to the default image format (either JPEG or PNG).
Default Display Mode	
Form Images Are Displayed As	Determines how embedded images are shown in the Rich Text Field: • No Image Support: No image is shown. • Small Thumbnails: A small thumbnail of the image is shown. • Medium Thumbnails (default): A medium thumbnail of the image is shown. • Large Thumbnails: A large thumbnail of the image is shown. • Full Images: A full-sized version of the image is shown.
Zoomed Images Are Displayed As	Select an option (No Image Support, Small/Medium/Large Thumbnails, Full Images (default)) to determine how embedded images in Rich Text Fields are shown in the Rich Text Zoom window.
Size limits	• Maximum size per image (default is 500 kilobytes) • Maximum total size for images (default is 3 megabytes)
Custom Default Font	Uses a default font for all Rich Text Fields. Click the **Ellipses** button to open the Font window. Select a **Font**, **Font style**, and **Size**. **Note:** The default font selected here applies to all Rich Text Fields that do not have a default font specified in Field Properties. It overrides any font selections made in the Form Editor during Form design. However, if a default font was selected in the Field Properties for a specific Field in a Business Object (example: Resolution Fields in Problems), it overrides the default font selected here.

System Settings

Rich Text Settings

Choose default settings for rich text fields

Rich Text Fields

Image format: JPEG format ▾

Default Display Mode

Form images are displayed as: medium thumbnails ▾

Zoomed images are displayed as: full images ▾

Size Limits

Maximum size per image: 500 ⬍ ◉ kilobytes ○ megabytes

Maximum total size for images: 3 ⬍ ○ kilobytes ◉ megabytes

☑ Custom Default Font Microsoft Sans Serif 7.8 ...

OK   Cancel

Search
Display
Dashboards, etc.
Catalog
Rich Text
Locking
Globalization
Help
Advanced

Global Record Locking Setting Options

Define the options below for Record Locking Settings.

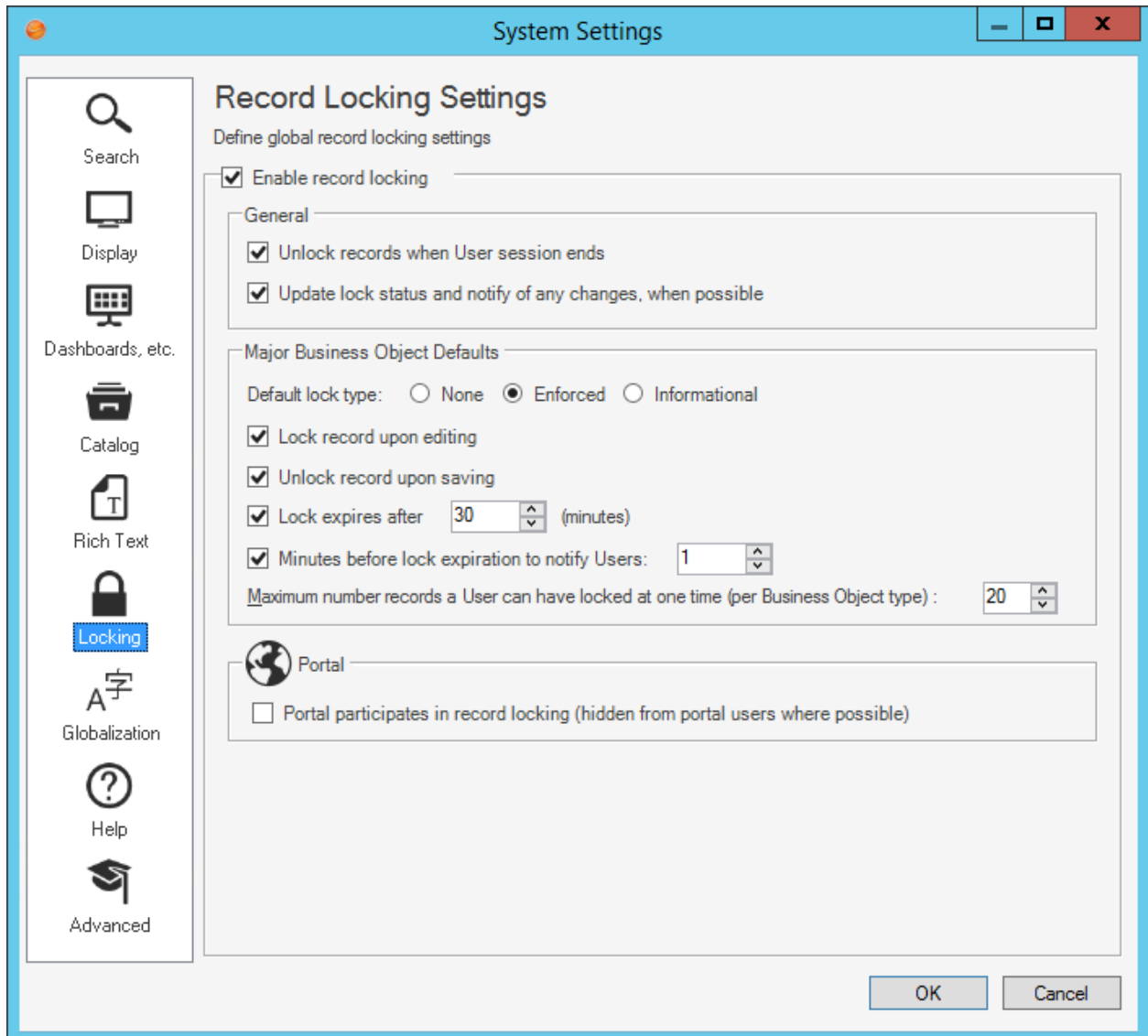| Enable Record Locking	Enables Record Locking
Unlock Records when User session ends (Recommended)	Automatically unlocks all of a User's records when the User logs out of a session. If cleared, the record remains locked until the record is saved (if configured), until the lock expires (if configured), or until the record is manually unlocked.
Update Lock Status and Notify of Any Changes, When Possible	Automatically shows status and change notifications (example: Reload and Merge) to the lock holder and any other User who might be viewing a locked record. If not selected, Users are notified only if they attempt to edit a record. **Note:** Automatic notifications are not available in the Browser Client.
Configure OOTB Record Locking settings for all Major Business Objects	These OOTB settings can be overridden on a per Business Object basis by configuring Record Locking settings for a Business Object. Default Lock Type: Select one lock type. • **None:** Does *not* enforce or inform record locking even though it is enabled for the system. **Tip:** Use this option to enable record locking for the system but not use it for most Business Objects, then enable/configure Record Locking settings on a per Business Object basis. • **Enforced:** Prevents Users from editing a record when it is locked by another User (the lock holder). • **Informational:** Warns Users when a record is currently locked by another User so that Users do not attempt to edit the same record. If two Users do edit the same record, CSM gives Users the option to merge the edits.
Default Lock Type	• **None:** Does *not* enforce or inform record locking even though it is enabled for the system. **Tip:** Use this option to enable record locking for the system but not use it for most Business Objects, then enable/configure Record Locking settings on a per Business Object basis. • **Enforced:** Prevents Users from editing a record when it is locked by another User (the lock holder). • **Informational:** Warns Users when a record is currently locked by another User so that Users do not attempt to edit the same record. If two Users do edit the same record, CSM gives Users the option to merge the edits.
Lock Record Upon Editing	Automatically locks the record when a User attempts to edit the record. If cleared, Users must manually lock records.

Unlock Record Upon Saving	Automatically unlocks the record when a User saves the record. If cleared, the record remains locked until the User ends his session (if configured), until the lock expires (if configured), or until the record is manually unlocked.
Lock Expires After	Enables lock expiration and specifying the **time limit** in minutes (example: 30). If cleared, the record remains locked until the User ends his session (if configured), until the record is saved (if configured), or until the record is manually unlocked.
Minutes Before Lock Expiration to Notify Users	Notifies Users of impending expiration and allow renewal before expiration. Users can specify the **number of minutes** before expiration to notify Users (example: 3 minutes).
Maximum Number of Records a User Can Have Locked at One Time (Per Business Object Type)	Specify the **maximum number of records** a User can have locked at one time, per Business Object (example: Each User can lock only ten Incidents at a time).
Customer Portal Settings	Portal Participates in Record Locking (applicable only for enforced locking): Allows Customers working in the Portal to lock records and see locks on records. **Note:** When a Customer attempts to edit a record, the record is automatically locked; and, when the Customer saves the record, the record is automatically unlocked. This prevents Users from editing records at the same time as Customers. However, the Customer does not see messages about locks unless they attempt to edit a record that is locked by another User or Customer. **Note:** If the Portal does not participate in record locking (or record locks are Informational), the Customer is able to edit records even if a User has the record locked. The User is given the option to merge the Customer's edits.

System Settings

Record Locking Settings

Define global record locking settings

☑ Enable record locking

General

☑ Unlock records when User session ends

☑ Update lock status and notify of any changes, when possible

Major Business Object Defaults

Default lock type: ○ None ⦿ Enforced ○ Informational

☑ Lock record upon editing

☑ Unlock record upon saving

☑ Lock expires after 30 (minutes)

☑ Minutes before lock expiration to notify Users: 1

Maximum number records a User can have locked at one time (per Business Object type) : 20

Portal

☐ Portal participates in record locking (hidden from portal users where possible)

[OK] [Cancel]

Sidebar navigation:
- Search
- Display
- Dashboards, etc.
- Catalog
- Rich Text
- Locking
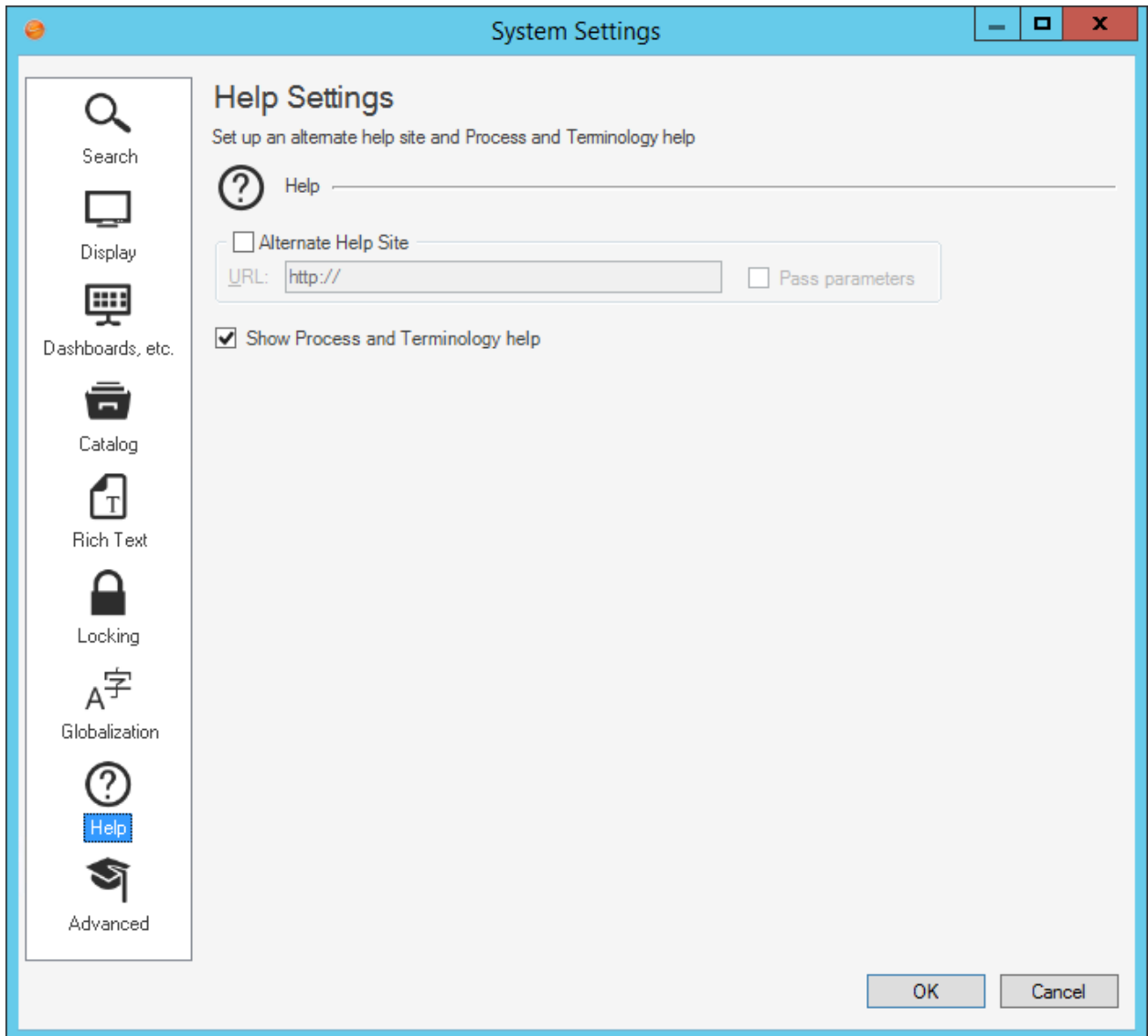- Globalization
- Help
- Advanced

Configure Global Help Settings

Use the Help page in the CSM Administrator System Settings window to configure the following Global Help settings:

- If and where to access an alternative Help System rather than the context-sensitive CSM Help System.
- Whether or not to globally enable/display Process and Terminology Help for Business Objects and Fields: Process and Terminology Help text/Help Systems/sites are defined for each Business Object/Field in the Process and Terminology pages in the Business Object/Field Properties windows.

To configure Global Help settings:

Alternate Help Site	Accesses a defined Help System/site rather than the OOTB CSM Help System. Then define which Help System/site to use (in the URL field).
URL	Specify the **URL** to where the alternative Help System/site is stored.
Pass Parameters	Enables passing parameters.
Show Process and Terminology Help	Enables/shows Process and Terminology Help in CSM. Process and Terminology Help text is defined in the Process and Terminology pages in the Business Object/Field Properties windows.

System Settings

Help Settings

Set up an alternate help site and Process and Terminology help

Help

☐ Alternate Help Site

URL: http://   ☐ Pass parameters

☑ Show Process and Terminology help

Search
Display
Dashboards, etc.
Catalog
Rich Text
Locking
Globalization
Help
Advanced

OK   Cancel

Configure Global Advanced Settings

Use the Advanced page in the CSM Administrator System Settings window to configure the following Global Advanced settings:

- How many Dashboard Widgets to refresh simultaneously.

- How long to wait between notification checks.

- How to handle web service calls.

> **Note:** No Role or User Advanced settings are available.

About configuring the Global Advanced settings:

Max simultaneous Widget refresh	Define the maximum number of Widgets that can be refreshed simultaneously (default is 5). Use the up/down arrows to increase/decrease the number. **Note:** When a Dashboard is set to reload its data, it will combine refresh requests. Increasing this number might make Dashboards update more smoothly, but might also increase network traffic and slow down other Users/operations.
Configure Notification Settings	The Cherwell Application Server sends messages to clients regarding updates (example: Definitions need to be reloaded, Queues need to be updated, or records have been locked, etc.). This information is attached to regular requests from the client to the server. However, if the client has not communicated with the server within the maximum notification time, the client checks for updates. **Note:** Decreasing these values can make clients get updated data more frequently, but also increase network traffic.
Max time between client notification checks	
Max time between server notification checks	
Web Service Settings	The settings defined here might override some of the settings defined when you set up a web service.

Calling Web Services from Client	Select an option for allowing web service calls from a client. • Allow: Select this option to allow web services to be called from a client. • Don't Allow: Select this option to prevent web services from being called by clients. Users who try calling a web service from a client will receive an error. • Force to Server: Select this option to force client web service calls to the server. • Based on Security: Select this option to determine whether a client can call a web service based on security rights (Allow calling web services from client machine).
Unsecured Calls (HTTP)	Select an option for unsecured web service calls. • Allow: Select this option to allow unsecured (HTTP) web service calls. • Don't Allow: Select this option to prevent unsecured web service calls. Users who try making unsecured calls receive an error. • Force to HTTPS: Select this option to have all unsecured web service calls forced to HTTPS.
Allow self-signed certificates (HTTPS)	Select this check box to allow calls to web services with self-signed certificates (certificates not signed through a signing authority such as VeriSign). If this box is cleared, Users receive an error whenever they try to call a self-signed web service.
Auditing	Select an option for determining what to audit (log). • None: Select this option to audit nothing. • Based on Service Settings: Select this option to audit based on the web service's auditing setting. • All Web Service Calls: Select this option to audit all web service calls. • Server-Based Calls: Select this option to only audit web service calls made from the server. **Note:** Web service calls are audited by writing an entry into the Cherwell Application Server log (which can write to a file, to the event log, or to an external logging tool such as Splunk). The log must be configured for web service calls to be captured.
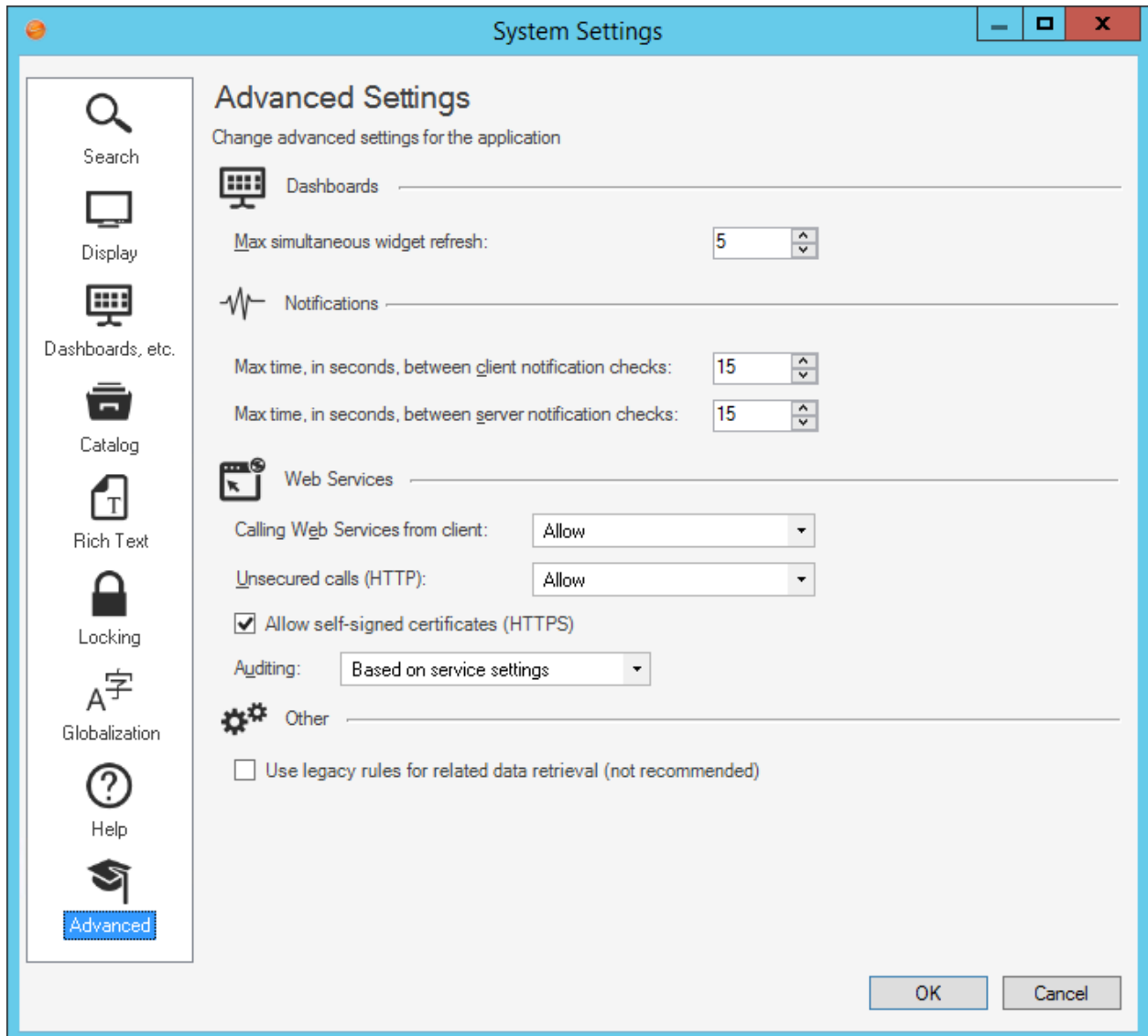
Warning: Using the **Use legacy rules for related data retrieval** check box is not recommended. It allows the system to emulate legacy behavior. Doing so loads Relationships beyond the second level and can severely degrade system performance or cause recursion problems.

Configure Cherwell Mobile Settings

Cherwell Mobile settings define which:

- Mobile Dashboard (Home) to display by default.
- Mobile Dashboard (Alert) to display by default.
- Business Objects to make available. Associated Search Groups will also be available.
- Actions/One-Steps to allow for each Business Object.

The default Cherwell Mobile settings (either Global or Role) are initially configured in CSM Administrator. If a User has security rights, she can configure her User (personal) Cherwell Mobile settings.
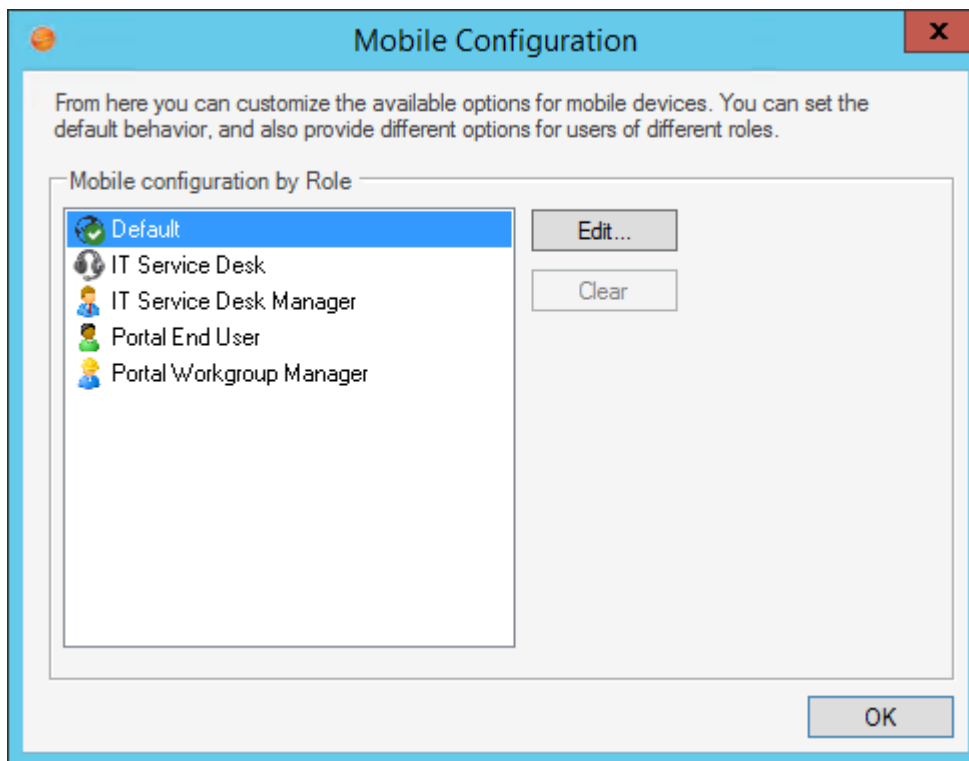
Configure Global/Role Cherwell Mobile Settings

Use the Mobile Configuration window in CSM Administrator to configure how Cherwell Mobile looks and behaves on mobile devices, Globally or by Role. You can configure which:

- Mobile Home Dashboard to display by default.
- Mobile Alert Dashboard to display by default.
- Business Objects to make available. Associated Search Groups will also be available.
- Actions/One-Steps to make available for each Business Object.

To configure Global/Role Cherwell Mobile settings:

1. In the CSM Administrator main window, click the **Browser and Mobile** category, and then click the **Edit Mobile Configuration** task.

   The Mobile Configuration window opens, listing the available Roles (*Default* is a global default, is always defined, and applies for all Users/Roles unless overridden). The small green check mark indicates that settings have been configured for a particular Role.
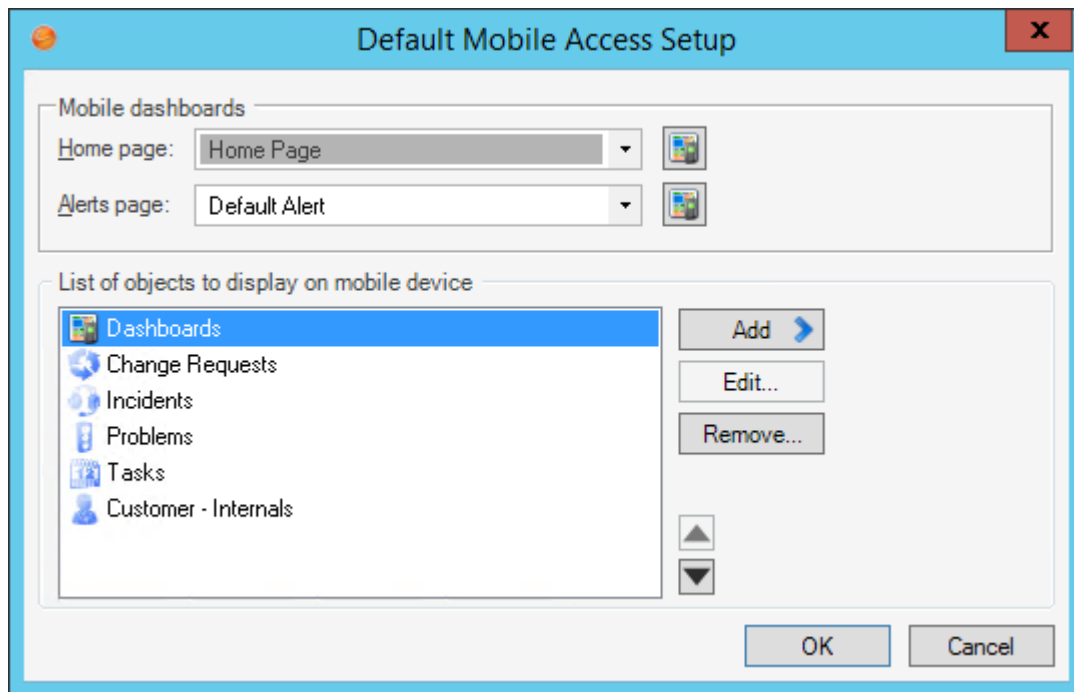

2. Click **Default** (Global) or a **Role**, and then click the **Edit** button.

   🖉 **Note:** Our example uses Global. If you select a Role, you have the option to override the Global default and configure Cherwell Mobile settings from scratch.

Tip: Click the **Clear** button to clear configured settings for a selected Role. If no defaults are configured for a Role, members of that Role see the Global default settings (which cannot be cleared).

The Mobile Access Setup window opens, listing the objects (Dashboards and Business Objects) currently being displayed on mobile devices.

3. Select default Mobile Dashboards (Home and Alert):

Tip: If you do not want to display any Dashboards, remove the Dashboard item from the *List of Objects to Display on Mobile Device* list.

   a. Home Page: Select a default Mobile Home Dashboard.
      ◦ Click the drop-down to select from a list of recently used Mobile Dashboards.

      ◦ Click the **Mobile Dashboard** button to open the Mobile Dashboard Manager, and then select an existing Mobile Dashboard or create a new Mobile Dashboard.
   b. Alerts Page: Select a default Mobile Alert Dashboard.
      ◦ Click the drop-down to select from a list of recently used Mobile Dashboards

      ◦ Click the **Mobile Dashboard** button to open the Mobile Dashboard Manager, and then select an existing Mobile Alert Dashboard or create a new Mobile Alert Dashboard.
4. Select the Business Objects to make available in Cherwell Mobile:

⭐ **Important:** In order for a Business Object to be available, it must have the *Show in Search Manager* property set (in the Business Object properties within a Blueprint).

a. Override List of Objects to Display on Mobile Device: Select this check box to override the current Global default list of Business Objects. This check box does not appear when configuring Global defaults because there is nothing above them to override.

b. Click **Add**, and then select the **Business Object** to make available on mobile devices.

   Tip: Click **Edit** to edit a selected item. Click **Remove** to remove the selected item from the list.
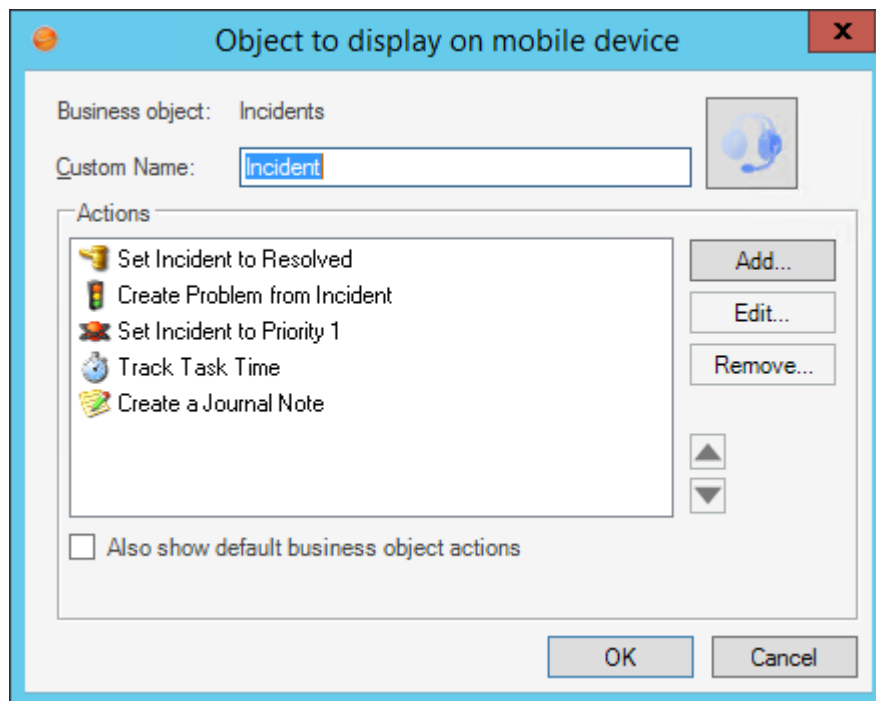
c. Define how to display the Business Object in Cherwell Mobile:
   ◦ Custom Name: Provide a **display name** to use in Cherwell Mobile. If blank, the Business Object name is displayed.

   ◦ Custom Image:

   Click the **Image** button to open the Image Manager, and then select an existing image or import a new image to represent the item in the UI.

   If no image (None) is selected, the default image for the Business Object is displayed.

   Android: Android devices use standard color images. For the best results, use the images in the BusObs>32x32 folder in the Image Manager. If you are setting up a mobile configuration for use on both Android and iOS devices, use the iPhone-specific images. They will be automatically mapped to equivalent standard images for non-iOS devices.

d. Select the Actions/One-Steps to make available in Cherwell Mobile:

    i. Click **Add** to add a new Action/One-Step to the list.

       Tip: Click **Edit** to edit a selected item. Click **Remove** to remove the selected item from the list. Use the **Up/Down** arrows ▼ ▲ to change the order of the Actions/One-Steps when displayed in Cherwell Mobile (ex: In the Actions list).

    ii. Define additional options for the list of Actions:

      ◦ Also Show Default Business Object Actions: Select this check box to also make available any default Actions for the Business Object. This option is only available if the Business Object has default Actions available (ex: Approvals have built-in functionality to approve, deny, and abstain).

      ◦ Also Show Global Actions: Select this check box to make available any Actions that were defined for the Business Object as part of the Global default settings.

       Note: This option is available only if you are configuring settings for a Role.

5. Configure the order of the Actions when displayed in Cherwell Mobile (ex: On the Actions popup list):

    a. Use the **Up/Down arrows** ▼ ▲ to order the Actions.

6. Click **OK**.

Configure Global/Role Task Pane and Search Control Settings

Use the Configure Task Panes and Search window to edit/define Task Pane and Search Control settings globally or for particular Roles. These settings affect:

- Which default items appear in the Task Pane.
- Which Search Control is used on the CSM Menu bar.

To configure Global/Role Task Pane and Search Control settings:

1. In the CSM Administrator main window, click the **Settings** category, and then click the **Edit Default Task Panes and Menu Search** task.

   Note: *Default* is a Global default and applies for all Users/Roles unless overridden. The small green check mark indicates that Task Pane and Search Settings have been defined for a particular Role. If no defaults are defined for a Role, members of that Role see the Task Pane and Search Settings for the Global default, if defined.
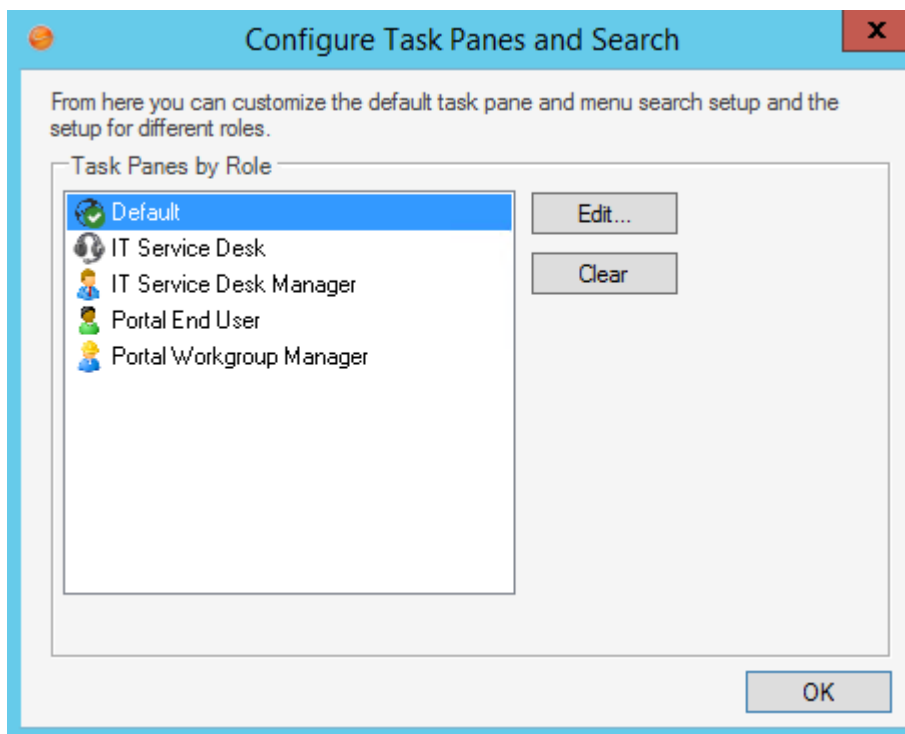
2. Click **Default** (Global) or a **Role**, and then click the **Edit** button.

The Global or Role Task Pane and Search Settings window opens (our example shows how to edit the OOTB task pane and search settings, which applies to all Users and becomes the *Default Task Pane Setup*).
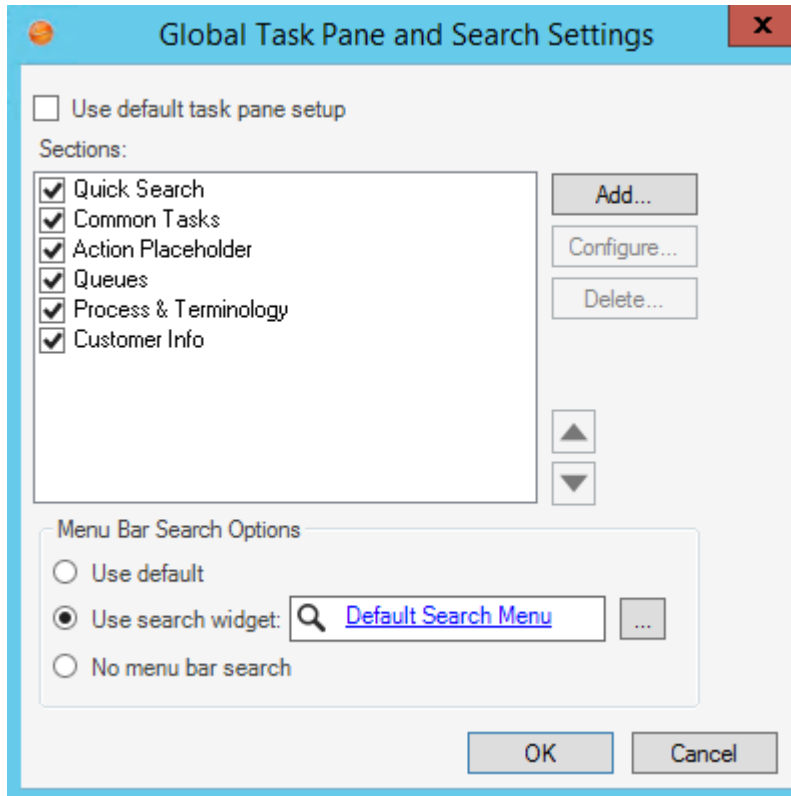
3. Configure Task Pane settings:
   ◦ View or hide sections.

   ◦ Add new sections.

   ◦ Configure sections (only applicable to new sections).

   ◦ Delete sections (only applicable to new sections).

   ◦ Organize sections.

4. View or hide the following sections in the Task Pane (select or clear the corresponding box):
   ◦ Quick Search

   ◦ Common Tasks

   ◦ Actions

   ◦ Queues

   ◦ Process and Terminology

   ◦ Customer Information

5. Add Sections to the Task Pane:

Note: Any items added to the Global Task Pane become part of the Global default task pane setup. If editing the Task Pane and Search settings for a Role, select the **Use default task pane setup** check box to use the settings defined for the Global default. This check box must be cleared to add items to a Role Task Pane.

    a. Click **Add**.

    b. Provide a **title** for the Task Pane section.

    c. Click **Add** to open the Action Manager.

    d. Select the CSM Items to show in the Task Pane (Calendars, Commands, Dashboards, Document Repositories, One-Steps, Reports, Searches, or Visualizations).

    e. Click **OK**.

    Tip: Click **Configure** to edit the title and list of Actions for a newly added section. Click **Delete** to delete a newly added Task Pane section. Use the up/down arrows to change the order of Task Pane sections.

6. Customize the CSM Search Control in the Menu bar Search Options:
   - Use Default: Uses the OOTB Search Menu Search Widget, which allows Users to run a Quick Search on multiple Business Objects simultaneously (example: Knowledge Article, Incident, Problem, and Change Request). Users can also select a Business Object in the drop-down to search one item at a time (example: Specific Search).

   - Use Search Widget: Uses a specific Search Widget. Click the **Ellipses** button to open the Widget Manager, and then select an existing Search Widget or create a new Search Widget.

   - No Menu Bar Search: Removes the Search Control from the menu bar.

Configure Custom Global/Role Toolbars

Use the Configure toolbars window in CSM Administrator to create custom toolbars for all Users or for Users in particular Roles. The CSM Desktop toolbar allows quick access to common CSM operations. In addition to the toolbars in the default system, custom toolbars can be created.

To configure a custom Global/Role toolbar:

1. In the CSM Administrator main window, click the **Settings** category, and then click the **Edit Custom Toolbars** task.

   The Configure Toolbars window opens.

    Note: *Default* is a Global default and applies for all Users/Roles unless overridden. The small green check mark indicates that a custom toolbar has been defined for a particular Role. If no defaults are defined for a Role, members of that Role see the custom toolbar for the Global default, if defined.
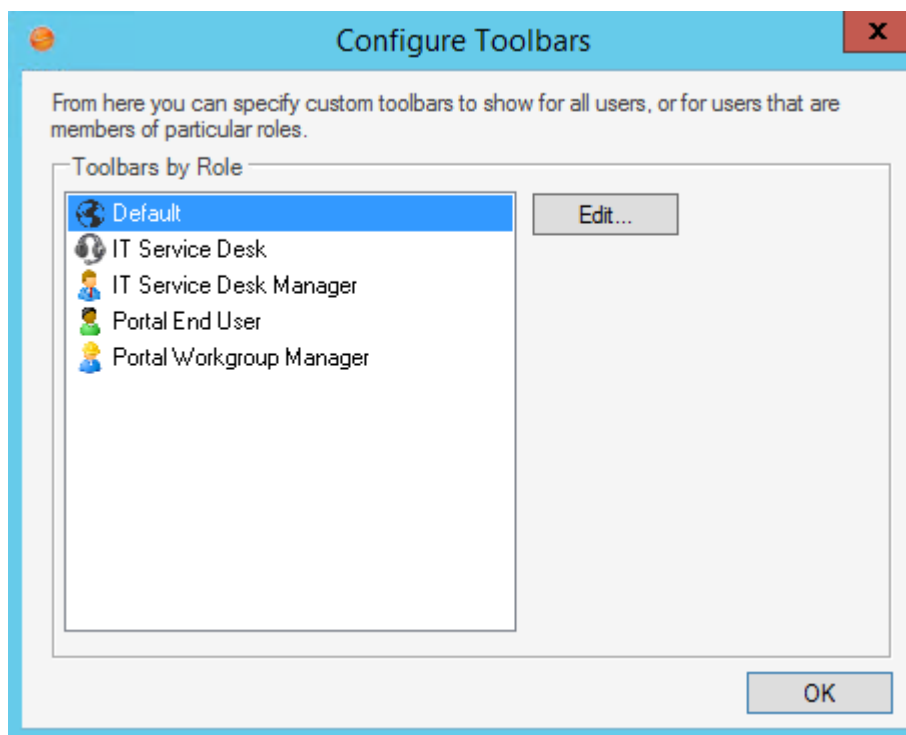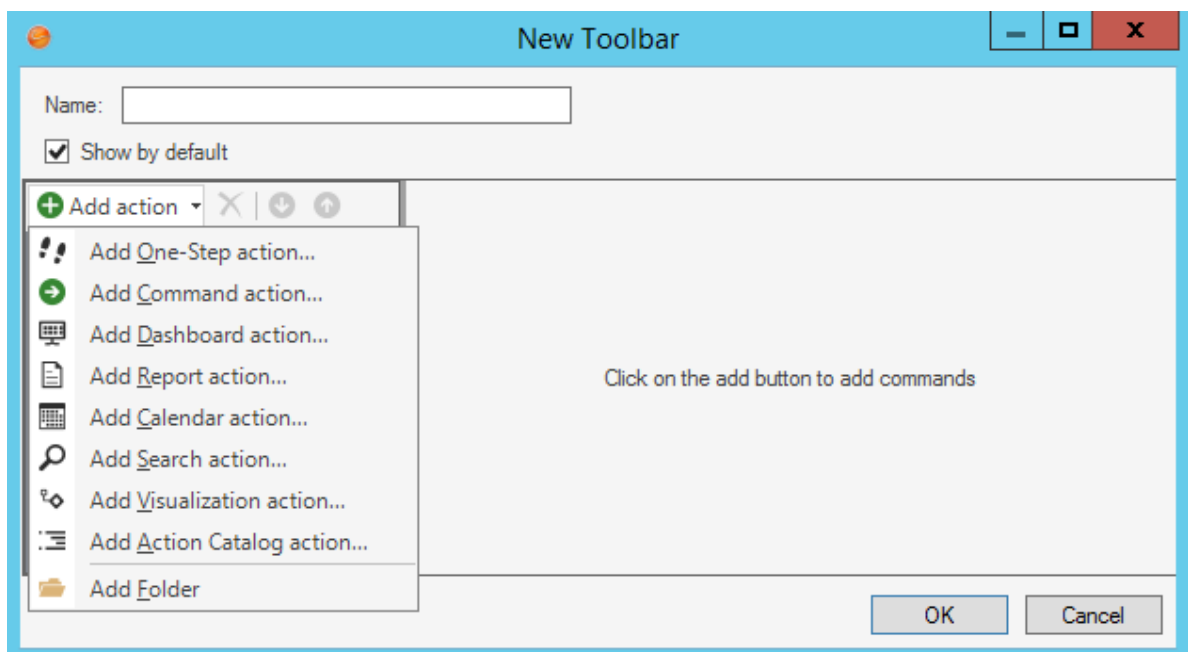

2. Click **Default** (Global) or a **Role**, and then click the **Edit** button.

    The toolbars for <Global/Role> opens (our example shows how to create an OOTB custom toolbar, which applies to all Users).
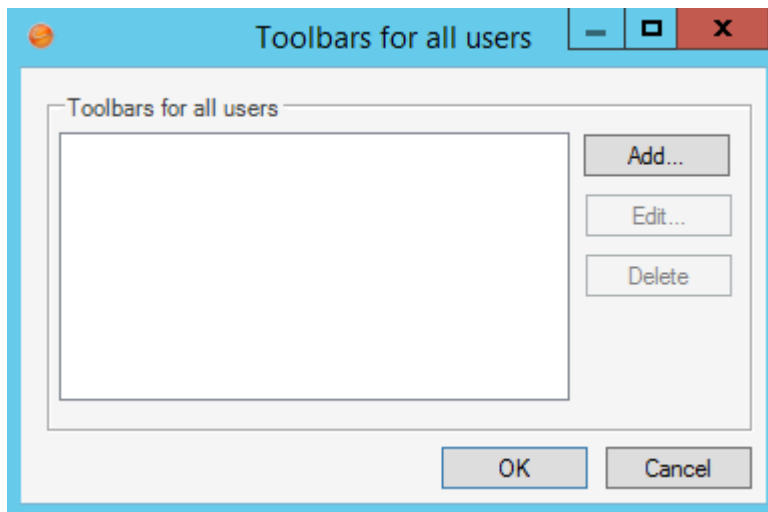
3. Click the **Add** button.

4. Define general properties and Actions for the toolbar:

   a. Name: Provide a name for the toolbar. This is the name that shows in the toolbar context menu (in the Desktop Client, right-click toolbar to show a context menu of available toolbars to display).

   b. Show by Default: Shows the custom toolbar in the Desktop Client by default. Otherwise, Users have to manually show it (right-click toolbar>select a toolbar to display).

   c. Add Action: Click this button and select the type of **Action** to add to the custom toolbar.

A CSM Item Manager opens (varies by type of Action selected in the previous step), and then select/create the CSM Item to initiate through the Action.

d. Select a **CSM Item** (example: A specific Dashboard).

e. Define properties for the Action:
   ◦ Action: Shows the name of the Action as it is recognized by CSM (example: Name of the Dashboard or Report).

   ◦ Display text: Provide the **text** to show on the toolbar button if *Show text on button* (below) is selected.

   ◦ Image button:

   Click the **Image** button to open the Image Manager, and then select an existing image or import a new image to represent the item in the UI.

   ◦ Help text: Provide a tooltip to show when the cursor is on the menu item.

   ◦ Begin group: Shows a horizontal line before the menu item, separating it from other menu items.

   ◦ Show text on button: Shows the Display Text on the toolbar button.

f. Add additional Actions to the toolbar.

5. (Optional) Create additional custom toolbars.