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# Table of Contents

** Now Platform user interface ................................................................................................................................................................................. 5  
  UI16............................................................................................................................................................................................................................................. 9  
    Comparison of UI16 and UI15 styles ................................................................................................................................................................. 11  
    Activate UI16 ...................................................................................................................................................................................................... 15  
    Switch between UI16 and UI15 ................................................................................................................................................................. 15  
    UI16 application navigator .................................................................................................................................................................................. 16  
    System settings for the user interface (UI) .................................................................................................................................................... 24  
  UI15............................................................................................................................................................................................................................................. 28  
    UI15 application navigator ................................................................................................................................................................................ 30  
    UI15 banner frame and Edge buttons ........................................................................................................................................................... 31  
    Define a menu category in UI15 ....................................................................................................................................................................... 36  
  Keyboard shortcuts ................................................................................................................................................................................................………… 37  
    Enable keyboard shortcuts ............................................................................................................................................................................. 38  
    Disable keyboard shortcuts globally ............................................................................................................................................................ 38  
    Configure keys for keyboard shortcuts .......................................................................................................................................................... 38  
  Browser support ............................................................................................................................................................................................................. 39  
  Navigate to a record or module using a URL .......................................................................................................................................................... 40  
    Enable tiny URL support ............................................................................................................................................................................. 41  
    Examples of navigating by URL ........................................................................................................................................................................ 42  
  Common UI elements .................................................................................................................................................................................................. 44  
    Log in to an instance ...................................................................................................................................................................................... 44  
    Application navigator ...................................................................................................................................................................................... 44  
    The Edge ................................................................................................................................................................................................................ 59  
    Forms ....................................................................................................................................................................................................................... 61  
    Lists ....................................................................................................................................................................................................................... 100  
    Tree picker ............................................................................................................................................................................................................ 169  
    Dot-walking to data in related tables ........................................................................................................................................................ 171  
    Configure items on forms or in lists using a slushbucket ................................................................................................................................ 184  
    Activity streams .................................................................................................................................................................................................... 187  
    Create a condition statement using the condition builder ................................................................................................................................ 190  
    Tags ....................................................................................................................................................................................................................... 212  
    User presence ........................................................................................................................................................................................................ 222  
  User interface configuration ................................................................................................................................................................................................ 225  
    Response time indicator ............................................................................................................................................................................. 225  
    Navigation stack .................................................................................................................................................................................................... 228  
    Navigation action cancellation ..................................................................................................................................................................... 230  
    Context-sensitive help ................................................................................................................................................................................ 235  
    Embedded help and guided tours ................................................................................................................................................................. 243  
    Overview help pages .................................................................................................................................................................................... 301  
    System user guide .................................................................................................................................................................................................. 313  
    Manage audio files .................................................................................................................................................................................................. 322  
    Storing images in the database ................................................................................................................................................................. 323  
    User preferences .................................................................................................................................................................................................... 327  
    View management .................................................................................................................................................................................................. 354  
    Welcome pages ........................................................................................................................................................................................................... 363  
    Enabling accessibility features ................................................................................................................................................................. 365  
    Using accessibility features ............................................................................................................................................................................ 369  
    Map pages ........................................................................................................................................................................................................... 374  
    Customizing instance appearance .............................................................................................................................................................. 401
Now Platform user interface

Interact with Now Platform® applications and data from your preferred web browser.

Access data on any device through a configurable web-based interface

Access lists and forms, live form updates, user presence, applications, links, history, and activity streams.

View and download the full infocard for a highlight of Now Platform user interface features.

<table>
<thead>
<tr>
<th>Deliver a common user experience</th>
<th>Access applications and manage data from any browser.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personalize your user interface</td>
<td>Make your user interface work better for you. You can configure what data you see and how the system displays it.</td>
</tr>
<tr>
<td>Provide users just the data they need</td>
<td>Design forms and lists to provide users just the information they need. You can create views for particular groups or tasks.</td>
</tr>
</tbody>
</table>
Deliver a common user experience

Provide a common user experience across all browsers and web-based devices.
Each user can customize the UI to determine the information that they want to see in the format and style that they select.
Provide users just the data they need

Create views to display just the data that you need for specific tasks or users. You can create views for any form and list in the system.

Get started

- Learn about forms. See this video:
- Learn about form layout and design. See this video:
- Learn about lists. See this video:

System configurations

- Common UI elements
- Browser support
- Keyboard shortcuts
- Homepage administration
- Navigate to a record or module using a URL
- UI15
UI16

The UI16 interface provides an updated look and usability improvements. Notable features include real-time form updates, user presence, a redesigned application navigator with tabs for favorites and history, and enhanced activity streams. UI16 is the default user interface for new instances. For upgraded instances, an administrator must activate UI16. Watch the five-minute video User Interface | Overview to learn about the elements of the UI16 user interface.
UI16 components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner frame</td>
<td>Runs across the top of every page and contains a logo and the following information, controls, and tools.</td>
</tr>
<tr>
<td></td>
<td>- User menu provides options to access your profile and preferences. Administrators can impersonate users and elevate their security role.</td>
</tr>
<tr>
<td></td>
<td>- <em>Connect sidebar icon</em> ( ): Lets you begin or continue conversations. This icon is available if Connect is enabled.</td>
</tr>
<tr>
<td></td>
<td>- <em>Global text search icon</em> ( ): Finds records from multiple tables.</td>
</tr>
<tr>
<td></td>
<td>- <em>Help icon</em> ( ): Opens the help panel with embedded help, where available. If there is no embedded help, it offers help search options.</td>
</tr>
<tr>
<td></td>
<td>- <em>Gear icon</em> ( ): Opens the System settings for the user interface (UI).</td>
</tr>
<tr>
<td>Application navigator</td>
<td>Also called the left-navigation bar. Provides links to all applications and modules. See <em>Application navigator</em>.</td>
</tr>
<tr>
<td>Content frame</td>
<td>Displays information such as lists, forms, homepages, and wizards.</td>
</tr>
<tr>
<td>The Edge</td>
<td>The Edge is removed in UI16. The collapsed view of the UI16 application navigator is similar to the Edge.</td>
</tr>
</tbody>
</table>

Comparison of UI16 and UI15 styles

Review the basic style differences between UI16 and UI15 styles in the ServiceNow platform.

Banner frame comparison

In UI16, the banner information and controls are in different places. The search box in the UI16 header opens when you select it. The help icon is available from the banner frame, instead of being accessed from the Settings menu. Because the UI16 banner is narrower, there is no control to collapse it.
Banner frame differences

For more information about the UI16 changes, see *System settings for the user interface (UI).*
Application navigator

In UI16, modules that you select are not automatically marked as favorites as illustrated by the blue stars in the UI15 image. Any menu or module can be marked as a favorite, and it appears when you click the **Favorites** tab represented by the star. The other tab displays items you recently accessed.

For more information, see **UI16 application navigator**. The navigation filter works the same in both UI versions, by entering text in the navigation filter to show matching applications, modules, and favorites.

Another difference in the UI16 navigator menu is that you can no longer right-click an application menu name to edit the application menu. Navigate to **System Definition > Application Menus** to add or modify modules.

The Edge

The Edge in UI15 is replaced in UI16 by the **Favorites** tab, represented by the star. Any item you could place on the Edge can be marked as a favorite. When you switch to UI16, all bookmarks on the edge are migrated to favorites and are listed on the **Favorites** tab. For more information, see **Use the UI16 navigator**. The List and Form View option is no longer available in UI16.
System settings

UI16 System Settings appear in a pop-up window with subtabs to make it easier to update your settings. The Split Layout setting available in UI15 was removed. For more information, see System settings for the user interface (UI).

UI16 system settings

Basic configuration and the company logo

The banner size and color scheme has changed significantly in UI16. Therefore, there is a set of system properties for UI16 to set up your logo and branding before you switch to UI16. For more information, see Configure logo, colors, and system defaults for UI16.
The banner in which your logo appears is narrow, and your logo image is scaled based on the aspect ratio. A wider image scales better than a smaller one and is more readable, as in the following example. It is also recommended that you create a logo image with a transparent background.

![Logo examples](image)

**Activate UI16**

UI16 is the default user interface for new instances. For upgraded instances, you can activate the UI16 plugin (com.glide.ui.ui16) if you have the admin role.

Confirm that the instance upgrade completed successfully by visiting the upgrade monitor.

Role required: admin

1. Navigate to **System Applications > All Available Applications > All**.
2. Find the plugin using the filter criteria and search bar.
   
   You can search for the plugin by its name or ID. If you cannot find a plugin, you may have to request it from ServiceNow personnel. To request a plugin, follow the steps in [Request a plugin](#).
3. Click **Install**, and then in the Activate Plugin dialog box, click **Activate**.

   **Note:** When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, they will receive the following error: **Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>**.

**Switch between UI16 and UI15**

You can switch between the UI16 and UI15 user interface versions.

Role required: admin

After UI16 is activated, all users see the enhanced UI16 user interface. By default, administrators see a button at the top of the System Settings window that lets them switch between UI16 and UI15. The administrator can add a system property to configure other roles that see the button.

1. Click the gear icon (⚙️) in the banner frame to open the System Settings window.
2. Click **Switch to UI15** or **Switch to UI16**.

   The button that appears is based on which UI version you are using when you open System Settings.

   The application refreshes with the selected UI. Your homepage appears in the content frame. You can access your favorites on the Edge (UI15) or in the **Favorites** tab of the application navigator (UI16).
Configure roles allowed to switch between UI16 and UI15

After you enable UI16, users with the admin role see a button in the System Settings window that allows them to switch between UI16 and UI15. You can add a system property to configure other roles that are allowed to switch UI versions.

Role required: admin

You may need to allow users who develop or configure applications to view the changes in both versions of the user interface. You list the roles in the new system property, and users with one of the roles see the switch button at the top of the System Settings window.

1. **Add a new system property** with the following field values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>glide.ui.ui15_switch_roles</td>
</tr>
<tr>
<td>Type</td>
<td>string</td>
</tr>
<tr>
<td>Value</td>
<td>Enter a comma-separated list of roles that are allowed to switch between UI16 and UI15. If you set the value to Public, all users are able to switch between the UI versions.</td>
</tr>
</tbody>
</table>

2. **Click Submit.**

Test the new system property by impersonating a user with one of the roles and verifying that the switch button appears when the user opens the System Settings window.

**UI16 application navigator**

The UI16 application navigator appears at the left of the interface and provides access to all available applications and modules, favorites, and recently viewed items.

Use the application navigator to quickly find information and services.

The application navigator consists of a navigation filter and the following tabs.
## UI16 application navigator tabs

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>All applications</td>
<td>Displays all application menus and modules. Each application appears as a section in the application navigator denoted by an application label. The tab lists modules by name under each application label.</td>
</tr>
</tbody>
</table>

![All applications tab](image)

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<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorites</td>
<td>Displays items you have added as favorites. If you upgrade to UI16 from a previous interface, any <em>bookmarks</em> you created are automatically converted to favorites.</td>
</tr>
</tbody>
</table>

![Favorites tab](image-url)

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<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>Displays items you have recently accessed.</td>
</tr>
</tbody>
</table>

Enter text in the navigation filter to show matching applications, modules, and favorites. Matching favorites appear at the top of the results. You can also use the navigation filter to quickly access a specific table. For more information, see Navigate directly to a table.

**Use the UI16 navigator**

Everyone can collapse and expand the navigator, work with favorites, and view navigation history in UI16.

Complete any of the following tasks to work with the navigator in UI16.

**Collapse or expand information in the UI16 application navigator**

You can collapse or expand information in the application navigator to display only what you want to see.

Role required: none

Perform one of the following actions.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collapse or expand an application or application section</strong></td>
<td>Click the application or application section label.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Collapse or expand all applications</td>
<td>Double-click the all applications tab icon.</td>
</tr>
<tr>
<td>Collapse or expand the application navigator</td>
<td>Click the arrow icon at the bottom of the application navigator. In the collapsed view, the application navigator displays favorites only. Click the filter icon or the arrow icon in the collapsed view to expand the application navigator.</td>
</tr>
</tbody>
</table>

Add or edit favorites in UI16

You can add, edit, or delete favorites for frequently accessed items in the application navigator.

Role required: none

Items you add as favorites appear in the favorites tab of the application navigator, represented by a star icon.
Favorites also appear in the collapsed view of the application navigator as icons.

**Note:** Any bookmarks you created in a previous version of the UI are automatically converted to UI16 favorites. However, UI15 favorites are not converted to UI16 favorites and must be recreated manually.

1. Add a favorite in one of the following ways.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add a module as a favorite</td>
<td>In the application navigator, click the star icon by a module.</td>
</tr>
<tr>
<td>Add all the modules under an application as</td>
<td>In the application navigator, click the star icon by an application.</td>
</tr>
<tr>
<td>favorites</td>
<td></td>
</tr>
<tr>
<td>Add a list as a favorite using the list</td>
<td>1. Open a list.</td>
</tr>
<tr>
<td>context menu</td>
<td>2. Click the list context menu icon (Ξ) by the list title.</td>
</tr>
<tr>
<td></td>
<td>3. Select <strong>Create Favorite</strong>.</td>
</tr>
<tr>
<td></td>
<td>4. In the flyout, edit the name and icon as needed.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Add a list as a favorite by dragging and dropping | 1. Open a list.  
2. Drag a breadcrumb to the **Favorites** tab of the application navigator.                                                                 |
| Add a record as a favorite using the form context menu | 1. Open a record.  
2. Click the form context menu icon (≡) by the form title.  
3. Select **Create Favorite**.  
4. In the flyout, edit the name and icon as needed. |
| Add a record as a favorite by dragging and dropping | 1. Open a record.  
2. Drag the record title to the **Favorites** tab of the application navigator.                                                              |
| Add a different type of link as a favorite | Drag a supported link type to the **Favorites** tab of the application navigator. You can drag any of the following links:  
- Breadcrumbs  
- Links in lists  
- Reports  

**Note:** You may not be able to create bookmarks with other types of links. |
| Add a knowledge base article as a favorite | 1. Open a knowledge article.  
2. In the header at the top left, click the star icon.  
3. In the **Create Favorite** dialog box, edit the name and icon as needed.  
4. Click **Done**. |

You can add a different favorite for each view of a list or form. The favorite is added to the **Favorites** tab of the application navigator.

2. To edit or delete a favorite, complete any of the following actions.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| Reorder favorites in the list | 1. At the bottom of the application navigator, click **Edit Favorites**.  
2. Drag a favorite to a new location in the list.  
3. Click **Done** or **Edit Favorites**. |
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customize the name or icon for a favorite</td>
<td>1. At the bottom of the application navigator, click <strong>Edit Favorites</strong>.</td>
</tr>
<tr>
<td></td>
<td>2. Click a favorite.</td>
</tr>
<tr>
<td></td>
<td>3. Customize the name and icon as needed.</td>
</tr>
<tr>
<td></td>
<td>4. Click <strong>Done</strong> or <strong>Edit Favorites</strong>.</td>
</tr>
</tbody>
</table>

| Delete a favorite                           | 1. Point to the favorite.                                                   |
|                                             | 2. Click the remove favorite icon (**`).                                    |

**View your navigation history**

In UI16, you can view your navigation history in the application navigator.

Role required: none

Items you have accessed recently appear in the history tab of the application navigator, which is represented by a clock icon. Items appear in chronological order from most to least recently accessed.
History entries are stored in the Navigator History (sys_ui_navigator_history) table. The system creates history entries for many types of content, including lists, records, and homepages. Some content types are not tracked in the history, such as UI pages and other non-standard interfaces.

1. In the application navigator, click the history tab, which is represented by a clock.
2. Click an item to open it.

Configure the number of history entries displayed in the application navigator

A system property sets the maximum number of history entries displayed in the history tab of the application navigator.

Role required: admin

By default, the application navigator shows 30 history entries. You can configure the glide.ui.nav.history_length property to change this value.

1. Navigate to sys_properties.list.
2. Locate the glide.ui.nav.history_length property.
3. Edit the property Value.

System settings for the user interface (UI)

You can define system settings to customize the UI for yourself. The gear icon, located within the banner frame, displays the system settings pop-up window.

The system settings are organized by tab. At the top, administrators (admin role) see the Switch to UI15 button if UI16 is activated.

<table>
<thead>
<tr>
<th>Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General tab</td>
<td></td>
</tr>
<tr>
<td>Accessibility enabled</td>
<td>More advanced accessibility features are activated when this setting is enabled. The platform is designed to be accessible by default. Enabling this feature makes more accessibility features available.</td>
</tr>
<tr>
<td>Accessible tooltips on forms</td>
<td>Displays a help icon next to each field that has a hint. This user preference can be enabled only if Accessibility is also enabled.</td>
</tr>
<tr>
<td>Data visualization patterns enables</td>
<td>Adds pattern as well as colors to any color-based graphs or diagrams.</td>
</tr>
<tr>
<td>Compact the user interface</td>
<td>The UI is optimized to display more information in the browser window when this setting is enabled.</td>
</tr>
<tr>
<td>Compact list date/time</td>
<td>Date and time values appear in a compact format when this setting is enabled. The year is not shown for date values within the current year, and seconds are not shown for time values. This setting is not available if the Date/Time selection is Time Ago.</td>
</tr>
<tr>
<td>Control</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Keyboard shortcuts enabled</td>
<td>Determines whether a user can access parts of the platform using keyboard shortcuts. For more information on available keyboard shortcuts, see Keyboard shortcuts.</td>
</tr>
<tr>
<td>Home</td>
<td>Determines whether the Home module opens Homepages orDashboards. The user must have the pa_viewer role or the glide.cms.enable.responsive_grid_layout property must be set to true to see this setting.</td>
</tr>
<tr>
<td>Date/Time</td>
<td>The format in which dates and times appear depends on this setting. Select Calendar (for example, 2015-11-13, 15:58:58), Time Ago (for example, 11 minutes ago), or Both.</td>
</tr>
<tr>
<td>Language</td>
<td>Select a language or return to the default language ( ). This setting is available if a language plugin has been activated. For more information, see Activate a language.</td>
</tr>
<tr>
<td>Time zone</td>
<td>Select a time zone or return to the default time zone ( ) for the current session. Upon the next login, the time zone setting reverts to the system default, or user profile setting for time zone.</td>
</tr>
<tr>
<td>Domain</td>
<td>Specifies the currently selected domain for organizations that are using domain separation. The user must have the domain_admin or admin role to see this setting.</td>
</tr>
<tr>
<td>Show domain picker in header</td>
<td>Places a domain picker in the banner frame, next to the user menu, when this setting is enabled.</td>
</tr>
<tr>
<td>Printer friendly version</td>
<td>Opens a printer friendly version of the current content frame.</td>
</tr>
<tr>
<td>Theme tab</td>
<td>Select a theme for the user interface. Select the System theme to return to the default theme.</td>
</tr>
<tr>
<td>Lists tab</td>
<td></td>
</tr>
<tr>
<td>Wrap longer text in list columns</td>
<td>Long strings wrap in list columns instead of appearing as one long line when this setting is enabled.</td>
</tr>
<tr>
<td>Striped Table Rows</td>
<td>List v3 rows alternate between contrasting shades of gray when this setting is enabled. This setting is available if List v3 is activated.</td>
</tr>
<tr>
<td>Modern Cell Styles</td>
<td>List field status indicators use modern cell styles when this setting is enabled. This setting is available if List v3 is activated, though it applies to v2 lists as well.</td>
</tr>
<tr>
<td>Control</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Forms tab</td>
<td></td>
</tr>
<tr>
<td>Tabbed forms</td>
<td>Form sections and related lists appear in tabs when this setting is enabled.</td>
</tr>
<tr>
<td>Related list loading</td>
<td>Determines when related lists load on forms. This setting applies only when List v3 is disabled for related lists. For more information, see Configure when a related list loads.</td>
</tr>
<tr>
<td>Notifications tab</td>
<td></td>
</tr>
<tr>
<td>Search</td>
<td>Search bar for finding notifications. To find a notification:</td>
</tr>
<tr>
<td>Allow notifications</td>
<td>Global switch for enabling or disabling all notifications.</td>
</tr>
<tr>
<td>Notification channels</td>
<td>List of your channels for receiving notifications. Use this section to:</td>
</tr>
</tbody>
</table>

- Enable or disable a channel by using its toggle switch. If you disable a channel, notifications are not delivered through that channel.
- **Add channels** using the *Create Channel* option.
- **Modify channel information**, Click the channel row or the right arrow (>) next to the appropriate channel to edit or delete it.
<table>
<thead>
<tr>
<th>Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notifications by category</td>
<td>List of notification categories that identify and group related notifications. Each category contains the notifications that you can subscribe to.</td>
</tr>
<tr>
<td></td>
<td>To view the notifications in a given category, click the category row or the right arrow (&gt;): next to the appropriate category. You can:</td>
</tr>
<tr>
<td></td>
<td>• Edit settings for a notification:</td>
</tr>
<tr>
<td></td>
<td>• Enable or disable channels for the selected notification.</td>
</tr>
<tr>
<td></td>
<td>• Apply notification conditions, such as schedules and filters, that affect the delivery of the notification.</td>
</tr>
<tr>
<td></td>
<td>• Create personal notifications, which are subscriptions to specific notifications that matter to you.</td>
</tr>
<tr>
<td></td>
<td>Developer tab</td>
</tr>
<tr>
<td>Application</td>
<td>(Administrators only) Provides a link to the application picker, the Applications list ( ), and the currently selected application ( i ).</td>
</tr>
<tr>
<td>Show application picker in header</td>
<td>Places an application picker in the banner frame, next to the user menu, when this setting is enabled.</td>
</tr>
<tr>
<td>Update Set</td>
<td>(Administrators only) Provides a link to the update sets list, the update set picker, and the currently selected update set.</td>
</tr>
<tr>
<td>Show update set picker in header</td>
<td>Places the update set picker in the banner frame, next to the user menu, when this setting is enabled.</td>
</tr>
<tr>
<td>JavaScript Log and Field Watcher</td>
<td>(Administrators only) Opens the client-side JavaScript Debug window.</td>
</tr>
<tr>
<td>Automated Test Framework Page Inspector</td>
<td>Places the inspect icon in the banner frame when this setting is enabled. Enables page developers and test designers to identify page components on customized user interfaces available for custom UI testing in the Automated Test Framework.</td>
</tr>
</tbody>
</table>
UI15

The UI15 interface provides an updated look, usability improvements, and redesigned icons. UI15 is the default user interface for upgraded instances.
### UI15 user interface

#### UI15 components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner frame</td>
<td>Runs across the top of every page and contains a logo, global navigation controls, and tools. See <a href="#">UI15 banner frame and Edge buttons</a>.</td>
</tr>
<tr>
<td>Application navigator</td>
<td>Also called the left-navigation bar. Provides links to all applications and modules. See <a href="#">Application navigator</a>.</td>
</tr>
<tr>
<td>Content frame</td>
<td>Displays information such as lists, forms, homepages, and wizards.</td>
</tr>
<tr>
<td>The Edge</td>
<td>A toolbar on the left side of the interface that provides quick links to commonly used features. See <a href="#">The Edge</a>.</td>
</tr>
</tbody>
</table>
UI15 application navigator

The application navigator appears at the left of the interface and provides access to all available applications and modules. You can collapse and expand all items, and switch perspectives to a specified role.

Each application appears as a section in the application navigator denoted by an application label. The application navigator lists modules by name under each application label. Use the application navigator to quickly find information and services.

Enter text in the navigation filter to show matching applications and modules. You can also use the navigation filter to quickly access a specific table. For more information, see Navigate directly to a table.

In the UI15 application navigator, a star appears by each module. For more information, see Use favorites in UI15.
Collapse or expand information in the UI15 application navigator

You can collapse or expand information in the application navigator to display only what you want to see.

- To collapse or expand an application or application section, click the application or application section label.
- To collapse all applications, click the application menu icon and select **Collapse All Applications**.
- To expand all applications, click the application menu icon and select **Expand All Applications**.
- To collapse or expand the application navigator, in the edge, click **Toggle Navigator**.

Switch perspectives in the UI15 application navigator

You can switch role perspectives to show different views of the application navigator. A perspective filters the available applications by that role. For example, select **ITIL** to show only ITIL items such as Incidents, and filter out asset management items such as Asset Portfolio. This option is available only if you have access to more than one role perspective.

To switch perspectives, in the application navigator, click the menu icon (Application navigator menu icon). Select **Roles**, and then select a perspective.

Use favorites in UI15

In UI15, you can select modules as favorites to quickly filter out modules you do not use often.

Role required: none

Each module in the application navigator has a star icon to the left of the module name that can be selected (★) or deselected (★).

**Note:** If you upgrade to UI16, you must recreate any UI15 favorites manually.

1. Click the star icons to select and deselect modules as favorites.
2. Click the filter favorites icon (★) next to the navigation filter to toggle between showing only the favorite modules and showing all modules.

By default, a module is automatically selected as a favorite when you open the module. To disable this setting, click the menu icon ( переход в меню) in the application navigator header and select **Automatically Add Favorites**.

UI15 banner frame and Edge buttons

The banner frame runs across the top of every page. In UI15, buttons on the Edge provide shortcuts to work with bookmarks and the user interface.

The banner frame for UI15 contains a logo and the following information, controls, and tools.
## UI15 banner frame controls

<table>
<thead>
<tr>
<th>Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome message</td>
<td>Shows the name of the current user and provides a link to the user's profile.</td>
</tr>
<tr>
<td>Impersonation key icon (👤)</td>
<td>(Administrators only) Allows the administrator to switch user views without logging out; useful for testing security and role-specific setup functions.</td>
</tr>
<tr>
<td>Elevate privileges icon ( emploi )</td>
<td>(Elevated privilege roles only) Allows the user to elevate to a higher security role when needed and then return to their normal role.</td>
</tr>
<tr>
<td>Global text search icon (🔍)</td>
<td>Global text search finds records from multiple tables.</td>
</tr>
<tr>
<td>Collapse/Expand banner icon (🔍/🔍)</td>
<td>Alters the amount of space the banner frame occupies.</td>
</tr>
<tr>
<td>Logout</td>
<td>Returns to the Welcome page for subsequent login.</td>
</tr>
<tr>
<td>Gear icon (⚙️)</td>
<td>Displays the system menu with additional settings and controls.</td>
</tr>
</tbody>
</table>

The gear icon, located within the banner frame, displays the system menu.

## System menu controls

<table>
<thead>
<tr>
<th>Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>What's new</td>
<td>Opens a slideshow of UI15 highlights.</td>
</tr>
<tr>
<td>Help icon (❓)</td>
<td>Opens the ServiceNow Wiki in another window or tab.</td>
</tr>
<tr>
<td>Home icon (🏠)</td>
<td>Provides links to available dashboards.</td>
</tr>
<tr>
<td>Wrap Longer Text in List Columns</td>
<td>Long strings wrap in list columns instead of appearing as one long line when this setting is enabled.</td>
</tr>
<tr>
<td>Compact View</td>
<td>The UI is optimized to display more information in the browser window when this setting is enabled.</td>
</tr>
<tr>
<td>Accessibility Enabled</td>
<td>Section 508 accessibility features are activated when this setting is enabled.</td>
</tr>
<tr>
<td>Tabbed forms</td>
<td>Form sections and related lists appear in tabs when this setting is enabled. This setting previously appeared as an icon in the form header.</td>
</tr>
<tr>
<td>Alt/#+Click Opens List Links in Form Pane</td>
<td>Pressing Alt (PC) or Command (Mac) and clicking the record name in a list, opens the record in a new form pane tab when this setting is enabled.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time</td>
<td>The format in which dates and times appear depends on this setting. Select Calendar (for example, 2014-11-13, 15:58:58), Time Ago (for example, 11 minutes ago), or Both.</td>
</tr>
<tr>
<td>Compact list date/time</td>
<td>Date and time values appear in a compact format when this setting is enabled. The year is not shown for date values within the current year, and seconds are not shown for time values. This setting is not available if the Date/Time selection is Time Ago.</td>
</tr>
<tr>
<td>Split Layout</td>
<td>Splits the content frame into two panes, either Vertical or Horizontal. In a vertical split, the list pane is on the left and the form pane is on the right. In a horizontal split, the list pane is on the top and the form pane is on the bottom. Select None to disable the split layout.</td>
</tr>
<tr>
<td>Related List Loading</td>
<td>Determines when related lists load on forms. For more information, see Configure when a related list loads.</td>
</tr>
<tr>
<td>Application</td>
<td>(Administrators only) Provides a link to the Applications list ( ), the application picker, and the currently selected application ( ).</td>
</tr>
<tr>
<td>Update Set</td>
<td>(Administrators only) Provides a link to the update sets list, the update set picker, and the currently selected update set.</td>
</tr>
<tr>
<td>Language</td>
<td>Select a language or return to the default language ( ). This option is available if a language plugin is activated. For more information, see Activate a language .</td>
</tr>
<tr>
<td>Time zone</td>
<td>Select a time zone or return to the default time zone ( ).</td>
</tr>
<tr>
<td>Theme</td>
<td>Select a theme for the user interface or return to the system theme ( ).</td>
</tr>
<tr>
<td>Domain</td>
<td>Specifies the currently selected domain for organizations that are using domain separation. The user must have the domain_admin role for this setting to appear.</td>
</tr>
<tr>
<td>Printer friendly version</td>
<td>Opens a printer friendly version of the current content frame.</td>
</tr>
<tr>
<td>Control</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>JavaScript Log and Field Watcher (🔍)</td>
<td>(Administrators only) Opens the client-side JavaScript Debug window. This icon is commonly called the debug icon.</td>
</tr>
</tbody>
</table>
System menu
### Define a menu category in UI15

Menu categories allow administrators to change the appearance of application menu labels. Use menu categories to make certain application menus stand out.

Role required: admin

1. **Add a property** with the following specifications.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>glide.ui14.navigator.use_border_color</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Type</td>
<td>true</td>
</tr>
<tr>
<td>Value</td>
<td>true</td>
</tr>
</tbody>
</table>

2. Navigate to **System Definition > Menu Categories**.
3. Click **New** or open an existing menu category.
4. In the **Style** field, define the border-color using an HTML *color name, hexadecimal (hex) value, or RGB color value*. For example, enter `border-color: blue`.
5. Optional: Enter a **Default order**.

    If you create an application without specifying an order, the default order of the category is used to determine the relative position in the application navigator.

**Note:** You may need to clear the instance cache and refresh the page after saving the menu category to see CSS changes.

**Keyboard shortcuts**

You can use keyboard shortcuts to quickly perform common actions in the user interface.

Access keys depend on the browser and operating system you are using. Available keyboard shortcuts are based on the UI version. The most common access key combinations are listed in the table. If the key combinations do not work, you may need to use a different access depending on your browser and operating system.

**UI16 keyboard shortcuts**

<table>
<thead>
<tr>
<th>Action</th>
<th>Windows keyboard shortcut</th>
<th>Mac keyboard shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate global search field</td>
<td>Alt+Ctrl+G</td>
<td>Ctrl+Opt+G</td>
</tr>
<tr>
<td>Toggle application navigator</td>
<td>Alt+Ctrl+C</td>
<td>Ctrl+Opt+C</td>
</tr>
<tr>
<td>Activate navigation filter field</td>
<td>Alt+Ctrl+F</td>
<td>Ctrl+Opt+F</td>
</tr>
<tr>
<td>Impersonate user</td>
<td>Alt+Ctrl+I</td>
<td>Ctrl+Opt+I</td>
</tr>
<tr>
<td>Navigate to the main content on the page</td>
<td>Alt+Ctrl+P</td>
<td>Ctrl+Opt+P</td>
</tr>
</tbody>
</table>

**UI15 keyboard shortcuts**

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard shortcut</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate global search field</td>
<td>Access key + S</td>
<td></td>
</tr>
<tr>
<td>Toggle banner frame</td>
<td>Access key + B</td>
<td>Ensure that the page focus is on the content frame</td>
</tr>
<tr>
<td>Toggle application navigator</td>
<td>Access key + N</td>
<td></td>
</tr>
<tr>
<td>Activate navigation filter field</td>
<td>Access key + F</td>
<td></td>
</tr>
<tr>
<td>Toggle list and form view</td>
<td>Access key + V</td>
<td></td>
</tr>
<tr>
<td>Toggle horizontal split</td>
<td>Access key + H</td>
<td></td>
</tr>
</tbody>
</table>
Enable keyboard shortcuts

You can enable or disable keyboard shortcuts from the system settings menu.

Role required: none

1. Click the gear icon (⚙️) in the banner frame to open the System Settings window.
2. In the General tab, select or clear the **Keyboard shortcuts enabled** option.
3. Close the system settings window.

Disable keyboard shortcuts globally

Keyboard shortcuts are enabled by default. You can disable all keyboard shortcuts globally or disable specific shortcuts using different user preferences.

Role required: admin

1. To disable all keyboard shortcuts globally for all users, navigate to **User Administration > User preferences**.
   a) Search for the `glide.ui.keyboard.shortcuts.enabled` user preference.
   b) Make sure the System check box is selected.
   c) Change the value to `false`.
   d) Click **Update**.

2. To disable a specific keyboard shortcut globally for all users, in the list of user preferences search for user preferences ending in `enabled`. For example `glide.ui.keyboard.shortcuts.<shortcut_name>.enabled`.
   a) Make sure the System check box is selected.
   b) Change the value to `false`.
   c) Click **Update**.

Configure keys for keyboard shortcuts

Determine which shortcut key pairings users can use to access elements in an instance.

Role required: admin

1. Navigate to **User Administration > User Preferences**.
2. Search for the user preference you want to change the key combination for. You can change any of the following options:

<table>
<thead>
<tr>
<th>Action</th>
<th>Keyboard shortcut</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximize the current pane</td>
<td>Access key + M</td>
<td></td>
</tr>
<tr>
<td>Send email</td>
<td>Access key + S</td>
<td></td>
</tr>
<tr>
<td>Submit form</td>
<td>Enter</td>
<td></td>
</tr>
</tbody>
</table>

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### Keyboard shortcuts

<table>
<thead>
<tr>
<th>Shortcut property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>glide.ui.keyboard.shortcuts.global_search.key_combo</td>
<td>Enables keyboard shortcut to activate global search</td>
</tr>
<tr>
<td>glide.ui.keyboard.shortcuts.impersonator.key_combo</td>
<td>Sets keyboard shortcut for impersonating a user</td>
</tr>
<tr>
<td>glide.ui.keyboard.shortcuts.main_frame.key_combo</td>
<td>Enables keyboard shortcut to jump to start of main content</td>
</tr>
<tr>
<td>glide.ui.keyboard.shortcuts.navigator_filter.key_combo</td>
<td>Enables keyboard shortcut to activate navigation filter</td>
</tr>
<tr>
<td>glide.ui.keyboard.shortcuts.navigator_toggle.key_combo</td>
<td>Enables keyboard shortcut to expand or collapse navigator</td>
</tr>
</tbody>
</table>

3. In the Value field, change the value to one of the following combinations:
   Include two access keys such as Control, Command, Alt, or Option as the start keys to any of the following keys. For example, ctrl+alt+p.

   0, 1, 2, 3, 4, 5, 6, 7, 8, 9, a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z, num0, num1, num2, num3, num4, num5, num6, num7, num8, num9, f1, f2, f3, f4, f5, f6, f7, f8, f9, f10, f11, f12, num, semicolon, equalsign, comma, dash, period, slash, forwardslash, graveaccent, openbracket, backslash, closebracket, singlequote, space, spacebar

4. Click **Update**.

### Browser support

Browser support varies for each version of the user interface (UI). Most major browsers are supported.

#### General browser support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Workspace</th>
<th>UI 16 and UI 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrome</td>
<td>Latest public release of the browser, and the two previous releases</td>
<td>Latest public release of the browser, and the two previous releases</td>
</tr>
<tr>
<td>Firefox and Firefox ESR</td>
<td>Latest public release of Firefox and Firefox ESR, and the two previous releases</td>
<td>Latest public release of Firefox and Firefox ESR, and the two previous releases</td>
</tr>
<tr>
<td>Internet Explorer</td>
<td>Not supported</td>
<td>IE version 11 and up. Edge mode is supported.</td>
</tr>
</tbody>
</table>
### Browser Compatibility

<table>
<thead>
<tr>
<th>Browser</th>
<th>Workspace</th>
<th>UI 16 and UI 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Edge Chromium</td>
<td>Latest public release of the</td>
<td>Latest public release of the browser, and the two previous releases</td>
</tr>
<tr>
<td></td>
<td>browser, and the two previous releases</td>
<td></td>
</tr>
<tr>
<td>Safari</td>
<td>Safari 12.0 and up</td>
<td>Safari 12.0 and up</td>
</tr>
<tr>
<td>Tablet Mobile</td>
<td>Not supported</td>
<td>Supported</td>
</tr>
<tr>
<td>Phone Mobile*</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

*Mobile phone browsers do not support the desktop version of the UI. Instead, mobile browsers use the mobile UI.

### Internet Explorer

**Important:** Due to significant performance issues, ServiceNow recommends that customers migrate away from Internet Explorer 11. For more information, refer to KB0683275.

- Internet Explorer 11 is susceptible to memory leaks, which may impact performance, especially in Windows 7.
- In Jakarta and later, Internet Explorer versions prior to IE11 are no longer supported.
- Compatibility mode is not supported.
- Setting the Security Mode to **High** (in the **Internet Options > Security** tab) is not supported.

### Firefox

The iOS version of Firefox does not support Now Community or other Service Portal-based pages.

### Navigate to a record or module using a URL

Users can navigate to a record or module directly by using a URL. This topic explains the URL schema by which the system renders pages.

**Role required:** admin

- **Note:** The `sysparm_query` page parameter behaves differently for a list versus a form.
  - List: Returns records that match the query conditions.
  - Form (with `sys_id=-1` specified): Applies the values to the new record.

1. **To access the unique, secure web address for each instance,** enter the default format:
   `https://<instancename>.service-now.com`

   **Note:** To display a custom base URL in email notifications, set the `glide.email.override.url` property. For more information, see Advanced email properties.

2. **For other URL displays,** enter one of the following schemas:
To display the page in the standard interface, with the banner frame on top and the application navigator on the left

To open a form, list, UI page, or other page

To view a list

To open a record in form view

To create a new record

To specify a query, view, redirection page, and more.

Parameters include the following examples:

- `sysparm_view=ess`: Specifies a view (ess).
- `sysparm_query=number=INC00040`: Specifies a query (number is INC00040).
- `sysparm_query=priority=2^active=true`: Specifies a complex query with two terms (priority is 2 and active is true).
- `sysparm_query=priority=2^active=true^EQ^GROUPBYcategory`: Groups query results (by category).
- `sysparm_order=number`: Specifies the field by which to sort (number).
- `sysparm_order_direction=desc`: Specifies a sort order (descending).
- `sysparm_force_row_count=5`: Limits the maximum number of results (5 records).
- `sysparm_result_view=viewname`: Specifies the view for search results.

To specify a file format. (CSV, XML, PDF, or UNL (Unload))

To separate page parameters

To build multiple term queries or specify multiple field values

Enable tiny URL support

The default URLs by which the system renders pages may exceed the character limit of Microsoft Internet Explorer, resulting in an error message. To prevent this error, you can enable tiny URL support, which generates shortened internal URLs.

Role required: admin

The Tiny URL Support plugin is activated automatically but is not enabled. Activate this plugin if Microsoft Internet Explorer displays failure to open page errors during routine operations in the Now Platform.
1. Navigate to System Properties > System.
2. Select the Use tiny URLs when a redirect URL becomes too large. This ensures that URLs that are too large for IE (greater than 2083) are not used. Instead, they are converted to a tiny URL to work around the IE issue. (glide.use_tiny_urls property).
3. Optional: Update the value in the Minimum length of a redirect URL that is turned into a tiny URL (default=1024) (glide.tiny_url_min_length property), if desired.
4. Click Save.

Examples of navigating by URL

A list of example URLs that demonstrate ways to open pages in the ServiceNow application.

Open a form with preset values

Schema: https://<baseURL>/nav_to.do?uri=<table name>.do?sys_id=-1%26sysparm_query=<field=value>

<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opens a new Incident form in the standard interface with a priority of 1 and an incident state of Awaiting Problem.</td>
<td>https://&lt;instance name&gt;.service-now.com/nav_to.do?uri=incident.do?sys_id=-1%26sysparm_query=priority=1^incident_state=3</td>
</tr>
<tr>
<td>You can also use JavaScript to access GlideSystem methods. The following example creates the same type of incident as above, and also populates the caller ID with the current user ID.</td>
<td>https://&lt;instance name&gt;.service-now.com/nav_to.do?uri=incident.do?sys_id=-1%26sysparm_query=priority=1^incident_state=3^caller_id=javascript:gs.getUserID()</td>
</tr>
</tbody>
</table>

Open an existing record with preset values


<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opens the incident record with the sys_id 966c9a414f5593001f6eac118110c75c</td>
<td>https://&lt;instance name&gt;.service-now.com/incident.do?sys_id=966c9a414f5593001f6eac118110c75c</td>
</tr>
<tr>
<td>Opens the incident record with the number INC0010001</td>
<td>https://&lt;instance name&gt;.service-now.com/incident.do?sysparm_query=number=INC0010001</td>
</tr>
</tbody>
</table>
View a list of incidents

Schemas for the following examples:

- https://<baseURL>/nav_to.do?uri=<table name>_list.do
- https://<baseURL>/<table name>_list.do

<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opens a list of all incidents with (example 1) the navigation frame.</td>
<td>https://&lt;instance name&gt;.service-now.com/nav_to.do?uri=incident_list.do</td>
</tr>
<tr>
<td>Opens a list of all incidents without the navigation frame.</td>
<td>https://&lt;instance name&gt;.service-now.com/incident_list.do</td>
</tr>
</tbody>
</table>

View a list of attachments

Schema: https://<baseURL>/nav_to.do?uri=<table name>_list.do

<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opens the Attachments table in list view.</td>
<td>https://&lt;instance name&gt;.service-now.com/sys_attachment_list.do</td>
</tr>
</tbody>
</table>

View a filtered list

Schema: https://<baseURL>/nav_to.do?uri=<table name>_list.do?sysparm_query=<field=value>

<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns a list of active incidents with high escalation in the standard interface.</td>
<td>https://&lt;instance name&gt;.service-now.com/nav_to.do?uri=incident_list.do?sysparm_query=active=true^escalation=2</td>
</tr>
</tbody>
</table>

Return a file

Schema: https://<baseURL>/nav_to.do?uri=<table name>_list.do?sysparm_<sysparmTypeOrField=value>%26CSV

<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns a comma-separated value file of records in the Incident table that meet the query conditions.</td>
<td>https://&lt;instance name&gt;.service-now.com/nav_to.do?uri=incident_list.do?sysparm_query=active=false%26CSV</td>
</tr>
</tbody>
</table>
Common UI elements

This page lists common UI elements for the standard user interface.

Log in to an instance

Each ServiceNow instance has a unique, secure web address. The base URL for each instance has the default format: https://<instancename>.service-now.com.

Role required: none

Users log in to the instance from a web browser. Administrators can associate a custom URL, such as support.myurl.com, that resolves to point to instancename.service-now.com.

Note: ServiceNow does not support any other methodologies to associate a custom or vanity URL. If you have a custom or vanity URL associated with an instance prior to the Madrid release, contact Support.

1. Enter the base URL in any web browser.
   - If your system uses external authentication, you are automatically logged in. For example, you may log in to company services when you log in to your computer.
   - If your system does not use external authentication, the Welcome page appears.

2. Enter your user name and password.

3. Optional: Select the Remember Me check box to remain logged in until you manually log out. The administrator can enable or disable this option. For more information, see Change settings for the Remember me check box and cookie.

4. Press the Enter key or click Login.

Application navigator

The application navigator, or left navigation bar, provides access to all applications and the modules they contain, enabling users to quickly find information and services.

An application is a group of modules, or pages, that provide related information and functionality in an instance. For example, the Incident application contains modules for creating and viewing incidents. The Configuration Management application contains modules for configuring servers, databases, and networks.

In UI16, the application navigator also provides access to favorites and recently viewed items. Administrators can customize the application navigator to provide different modules by user role, modify or define applications and modules, and change its appearance.

Watch this four-minute video for a tour of the Application Navigator:

Navigate directly to a table

You can use commands in the navigation filter to navigate directly to the list, form, or configuration view of a table.

Role required: none

Commands work only for tables you are permitted to access.
1. In the navigation filter of the application navigator, enter one of the following commands.

<table>
<thead>
<tr>
<th>Command</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;table name&gt;.list</code></td>
<td>Opens the list view of the table in the same window or tab.</td>
</tr>
<tr>
<td><code>&lt;table name&gt;.LIST</code></td>
<td>Opens the list view of the table in a new window or tab.</td>
</tr>
<tr>
<td><code>&lt;table name&gt;.form</code></td>
<td>Opens the form view of the table in the same window or tab.</td>
</tr>
<tr>
<td><code>&lt;table name&gt;.do</code></td>
<td>Opens the form view of the table in a new window or tab.</td>
</tr>
<tr>
<td><code>&lt;table name&gt;.FORM</code></td>
<td>Opens the form view of the table in a new window or tab.</td>
</tr>
<tr>
<td><code>&lt;table name&gt;.config</code></td>
<td>Opens the configuration view (personalize_all.do) of the table in the</td>
</tr>
<tr>
<td></td>
<td>same window or tab.</td>
</tr>
<tr>
<td><code>&lt;table name&gt;.CONFIG</code></td>
<td>Opens the configuration view (personalize_all.do) of the table in a new</td>
</tr>
<tr>
<td></td>
<td>window or tab.</td>
</tr>
</tbody>
</table>

For example, enter `change_request.form` to open a new change request.

2. In UI16, press the Enter key.

Create or modify a menu list

In UI15, it is possible to switch menu lists, providing different perspectives of the applications and modules. You can create or edit these menu lists using the Menu List table.

Role required: admin

Menu lists are not used in UI16.

1. Navigate to **System UI > Menu Lists**.
2. Select a menu list to modify, or click **New** to create a new menu list.

   The applications that appear on the form are listed in the **Applications** field, one per line. Applications use the name of the application record, not the human-readable record that appears in the left navigation bar.

   The roles that are able to see the form are listed in the **Roles** field.
   - Specifying no roles creates a global menu list.
   - A menu list displays only the applications and modules the role has permissions to see.
   - If a role is specified to see a menu list, but role cannot view any of the applications within it, they do not see the menu list.

3. Adjust the information in the menu list as desired.
4. Click **Update**.

Enable or disable an application menu or module

You can enable (show) or disable (hide) an application menu or module in the application navigator.
Role required: admin

1. Navigate to **System Definition > Application Menus**.
2. If you are enabling an application menu, click **All** in the breadcrumbs to display both active and inactive application menus (remove the default filter condition).
3. Click the desired title. The application menu record opens and the **Modules** related list shows the modules that appear in the application navigator.
4. Enable or disable the application menu and modules as desired.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| Enable or disable a specific module in the application | 1. Double-click the **Active** field beside the module name in the **Modules** related list.  
2. Set **Active** to **true** (show) or **false** (hide). |
| Enable or disable multiple modules at the same time | 1. Select the check boxes next to the module names.  
2. Select **Change active state** from the **Actions** choice list. |
| Enable or disable the entire application menu (for example, Incident or Service Catalog) | Select or clear the **Active** check box. |
| Restrict the application menu to specific roles | Use the **Roles** field. |

5. Click **Update**.

When you change application menus or modules, the application navigator automatically refreshes to display the changes.

**Add an application menu to a category**

There are two methods for adding an application menu to a category.

Role required: admin

- **Note:** Menu categories are deprecated in UI16. The following procedure has no effect in UI16.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| In the menu category record, add the application menu to the Application Menus related list. | 1. Navigate to **System Definition > Menu Categories**.  
2. Open a menu category.  
3. In the **Application Menus** related list, click **Edit**.  
4. Use the slushbucket to add the application menu to the category.  
5. Click **Save**. |
In the application menu record, enter the menu category in the Category field.

1. Navigate to System Definition > Application Menus.
2. Open an application menu.
3. In the Category field, select the menu category.
4. Click Submit.

Create an application menu

Application menus define the main content that users can access in the application navigator. You can configure which applications appear in the application navigator.

Role required: admin

When creating an application menu, consider grouping like modules into a consolidated application menu. When editing an existing menu, add more useful modules to the application menu, and remove unneeded ones.

1. Navigate to System Definition > Application Menus.
2. Click New.
3. Complete the form.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Defines the display name of the application menu.</td>
</tr>
<tr>
<td>Roles</td>
<td>Restricts access to the specified roles. All users can view the application menu when it is active.</td>
</tr>
<tr>
<td>Category</td>
<td>Specifies the menu category that defines the navigation menu style (default value is Custom Applications).</td>
</tr>
<tr>
<td>Hint</td>
<td>Defines the text that appears in a tooltip when a user points to this application menu.</td>
</tr>
<tr>
<td>Active</td>
<td>Select the check box to activate the application menu. Only active application menus appear in the application navigator.</td>
</tr>
<tr>
<td>Description</td>
<td>Provide a more detailed explanation of what this application does.</td>
</tr>
</tbody>
</table>

Other fields

Order

Defines the relative position of the application menu in the application navigator. If you do not specify an order, the default order of the menu category is used.

Default device type

This field is not used. You can define application menus for mobile devices in a separate table. See Define a new smartphone application menu.
4. Click **Submit**.
5. **Create modules** to appear in the application menu.
   Only application menus that contain modules appear in the application navigator.

### Create a module

Modules are the children, or the second tier navigation options to the applications in the application navigator. Modules often link to other pages or records in the platform. You can configure which modules appear in the application navigator using Application Menus module.

**Role required:** admin

Watch this five-minute video to learn about adding application menus and modules to the application navigator.

1. Open the application menu record using one of the following methods.
   - Navigate to **System Definition > Application Menus** and select the application menu from the list.
   - In UI16, point to the application menu and click the edit application (pencil) icon.
   - In UI15, right-click the application label in the application navigator and select **Edit Application**.
Make your life easier, create a dashboard!

Did you know you can create a dashboard version of this homepage? Dashboards are like homepages, but easier to use. Dashboards have a drag-and-drop canvas that lets you easily add, move, and resize widgets. You can also add multiple tabs. Flexible sharing lets any user view and collaborate on dashboards with you!

Don't ask me again Remind me later

System Administration

- Guided Setup
  - Guided Setup tools to help you set up ServiceNow

- System Security
  - Configure and monitor instance security settings

- Create and Deploy
  - Create, modify and deploy applications to your instances

- Data Management
  - Manage the way data is stored and displayed

- Email
  - Customize behavior of inbound and outbound email

- Homepages
  - Configure homepages for ServiceDesk and SelfService users

- Business Logic
  - Manage workflow and behavior of applications

- Diagnostics
  - Performance, development and debugging tools

- Integration
  - Integrate with 3rd-party systems and data sources
2. Scroll down to the **Modules** related list and click **New**.
3. Define the module by completing the fields on the Module form.

### Module form

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Defines the module name. Choose a title that clearly identifies the module.</td>
</tr>
<tr>
<td>Application menu</td>
<td>Specifies the name of the application menu under which the module appears.</td>
</tr>
<tr>
<td>Hint</td>
<td>Defines the tooltip that appears when a user points to the module name.</td>
</tr>
<tr>
<td>Order</td>
<td>The order in which the module displays relative to other modules.</td>
</tr>
</tbody>
</table>

**Note:** Module Hints are deprecated in UI16

4. On the **Visibility** tab, complete the fields.

### Visibility tab

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles</td>
<td>Restricts module access to the specified roles. If this field is left blank, the module is visible to all users who have access to the application menu.</td>
</tr>
<tr>
<td>Active</td>
<td>Defines whether the module appears in the application navigator.</td>
</tr>
<tr>
<td>Override application menu roles</td>
<td>Allows users to access this module even if they do not have permission to view the containing application menu. Users must still meet the role requirements for this module.</td>
</tr>
</tbody>
</table>

5. On the **List Type** tab, complete the fields.

The fields displayed depend on the **Link type** you choose. All module URIs must be encoded. If you supply arguments to the module URI, either you or ServiceNow. For more information about encoding module URIs, see *Encoding module URIs*.

### List Type tab

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link type</td>
<td>Specifies what type of link this module opens. You must specify additional information based on the link type. See <em>Module link types</em>.</td>
</tr>
<tr>
<td>Table</td>
<td>Specifies the table used by the module.</td>
</tr>
<tr>
<td>Filter</td>
<td>Conditions for the items presented in the module, for example, <strong>Active</strong> is true.</td>
</tr>
</tbody>
</table>

**Note:** The list shows only tables and database views that are in the same scope as the module.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument</td>
<td>String appended to the URI to create the module URI. Can be a <code>sysparm_query</code>. These values must be encoded either by you or ServiceNow. For more information about encoding module URIs, see Encoding module URIs.</td>
</tr>
<tr>
<td>Order</td>
<td>Specifies the order in which the modules appear under the application.</td>
</tr>
</tbody>
</table>

### Module link types

The **Link type** field on the Module form specifies what type of link the module opens.

#### Module link types

<table>
<thead>
<tr>
<th>Link Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>Links to the assessment-based survey you select in the Assessment reference field. See Create a survey module.</td>
</tr>
<tr>
<td>Content Page</td>
<td>Displays the content page you select in the Content page reference field. See Create a content page.</td>
</tr>
<tr>
<td>Documentation Link</td>
<td>Links to a documentation page and opens in a new tab or window. This link type is used with embedded metadata in documentation topics. To open an internal document from a module, use the URL (from Arguments) module link type.</td>
</tr>
<tr>
<td>Homepage</td>
<td>Displays the homepage you select in the Homepage reference field.</td>
</tr>
<tr>
<td>HTML (from Arguments)</td>
<td>Places HTML in the application navigator. This link type is used for more complicated links, where a flat URL is not customizable enough.</td>
</tr>
</tbody>
</table>

**Note:**

- The HTML (from Arguments) link type is supported in UI15 and UI11 only. In UI16, use the URL (from Arguments) link type instead.
- Enter a value for the Arguments field.
<table>
<thead>
<tr>
<th>Link Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| New Record                    | Displays a form for creating a record in the table you select in the **Table** field.  
- Use the **View name** field to specify a view.  
- Use the **Arguments** field to apply a template.  
See *Create a module for a template*. |
<p>| Run a Report                  | Runs the saved report you select in the <strong>Report</strong> field.                                                                                                                                                 |
| Script (from Arguments)       | Runs a script, as defined in the <strong>Arguments</strong> field.                                                                                                                                                   |
| <strong>Note:</strong>                     | <strong>Enter a value for the <strong>Arguments</strong> field.</strong>                                                                                                                                                            |
| Search Screen                 | Link that displays a blank form for searching records in the table. Use the <strong>View name</strong> field to specify a view.                                                                                |
| <strong>Note:</strong>                     | <strong>Use the parameter <strong>&amp;sysparm_result_view=view_name</strong> to define the view the results are rendered in.</strong>                                                                                                 |
| <strong>Note:</strong>                     | <strong>All searches use a (starts with) query to search for matching text. Other query types are not supported in search screens.</strong>                                                                          |
| Separator                     | Creates a division between modules. Enter a name in the <strong>Title</strong> field to add a section name that users can collapse or expand.                                                                    |
| Single Record                 | Displays a form for a single record on the table. Use the <strong>View name</strong> field to specify a view.                                                                                                         |
| Survey                        | Links to the legacy survey you select in the <strong>Survey</strong> reference field. Use the <strong>Survey overwrite</strong> check box to determine whether the survey can be taken multiple times. |
| <strong>Note:</strong>                     | <strong>The Survey link type is for use with legacy surveys only, which assessment-based surveys replace. Select the Assessment link type to link the module to an assessment-based survey.</strong> |
| Timeline Page                 | Displays the timeline page you select in the <strong>Timeline Page</strong> reference field. See <em>Timeline pages</em>.                                                                                                   |</p>
<table>
<thead>
<tr>
<th>Link Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>URL (from Arguments)</td>
<td>Opens any URL, as defined in the Arguments field.</td>
</tr>
<tr>
<td></td>
<td>(Optional) Use the Window name field to define a link that opens in a new window.</td>
</tr>
</tbody>
</table>

**Note:**
- For internal links, always use a relative link such as `./catalog_home.do?sysparm_view=catalog_default` or `catalog_home.do?sysparm_view=catalog_default`. Do not use an absolute link to a ServiceNow instance. It creates problems when you move an update set from a development instance to a production instance because the URL still references the development instance.
- Enter a value for the Arguments field.

**Encoding module URIs**
Clicking a module name in the navigation pane executes a URI that opens the module’s page in the content pane. All the characters in module URIs must be URL-encoded or the link breaks.

**Note:** If you’re upgrading to the New York release or later from a pre-New-York release, your module UIs may break if they do not follow the conventions presented in this topic.

When you create modules, you have the option of adding arguments and filter conditions that sort and/or reduce the number of results displayed in the content pane. When you click a module name in System Definitions > Application Definitions, you can see those conditions and arguments on the Link Type tab.
The argument definition in **Arguments** and filter conditions defined in **Filter** become part of the module's URI and must be URL-encoded. ServiceNow automatically URL-encodes filter conditions and appends them to the module URI using `sysparm_query`. For example, adding the filter condition, **Active is true** appends `sysparm_query=active%3Dtrue` to the module's URI; `%3D` is the URL-encoding for the equals sign (=).

The following table shows when you must URL-encode the argument in the **Arguments** field and when ServiceNow URL-encodes the argument.

### Rules for encoding arguments

<table>
<thead>
<tr>
<th>Has a filter condition?</th>
<th>Argument definition starts with</th>
<th>Who encodes the argument?</th>
<th>How argument is handled</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>^</td>
<td>ServiceNow</td>
<td>Removes the caret (^) from the argument, encodes it and uses <code>sysparm_query</code> to append it to the module URI.</td>
</tr>
<tr>
<td>No</td>
<td>&amp;</td>
<td>You</td>
<td>Removes the ampersand (&amp;) from the argument and appends it to the module URI.</td>
</tr>
<tr>
<td>No</td>
<td>Anything else</td>
<td>ServiceNow</td>
<td>Encodes the argument and uses <code>sysparm_query</code> to append it to the module URI.</td>
</tr>
</tbody>
</table>
### Paris    Now Platform user interface

<table>
<thead>
<tr>
<th>Has a filter condition?</th>
<th>Argument definition starts with</th>
<th>Who encodes the argument?</th>
<th>How argument is handled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>^</td>
<td>ServiceNow</td>
<td>URL-encodes the filter definition and the argument and uses sysparm_query to append the combination to the module URI.</td>
</tr>
<tr>
<td>Yes</td>
<td>Anything else</td>
<td>You</td>
<td>URL-encodes the filter definition and uses sysparm_query to append it and the (unaltered) arguments to the module URI.</td>
</tr>
</tbody>
</table>

You can turn on (the default) and off the URL-encoding requirement for module UIs using the `glide.ui.encode_module_uri` property.

### Examples

The following examples demonstrate when you have to URL-encode the argument definition in **Arguments**:

- **There are no filter conditions and the argument definition in Arguments starts with an ampersand**, for example, `&sysparm_fixed_query=assigned_to=javascript:gs.user_id()`.
  
  This argument breaks the module URI because the equals sign and the colon are not URL-encoded, and the ampersand prevents ServiceNow from URL-encoding the argument. URL-encode the argument: `&sysparm_fixed_query=assigned_to%3Djavascript%3Ags.user_id()`.

- **There are filter conditions and the argument definition in Arguments does not start with a caret (^)**, for example, `sysparm_name=Barnes & Noble's`.
  
  This argument breaks the module URI because the ampersand and spaces are not URL-encoded. URL-encode the argument: `sysparm_name=Barnes%20%26%20Noble's`.

### Additional queries and examples

The administrator can append queries to the **List of Records** module link type value. The **URL (from Arguments)** link type can be used to provide a custom filter or open the page in a new window.

### Appending queries to list view modules

For **List of Records** module link types, you can append additional queries to the module to further define the filter for the returned list. For example, to filter active incidents that are assigned to the currently logged in user, use the following argument query:

```plaintext
active=true^assigned_to=javascript:gs.user_id()
```

**Example URL module that opens in a new window**

You can configure a module to open an external URL in a new browser window.

**Role required:** admin

1. Open the application menu record using one of the following methods.
   - Navigate to **System Definition > Application Menus** and select the application menu from the list.
• Point to the application menu and click the edit application (pencil) icon. This action is possible in Istanbul UI16 only.
• Right-click the application label in the application navigator and select Edit Application. This action is possible in UI15 only.

2. Scroll down to the Modules related list and click New.
3. If the Window name field is not displayed, configure the form and add this field.
4. Select URL (from Arguments) from the Link type list.
5. Add the complete web address to the Arguments field.
6. Select an icon for the module in the Image field.
7. Enter _blank in the Window name field. If this field is empty, the page opens in the content frame, which is the default behavior.

Example URL module that opens a list with a custom filter URL
To create a module that opens a list with a custom filter, sort order, and grouping, use a link type of URL (from Arguments) and create a link to a custom URL.

Role required: admin
Use the following shortcut to determine the arguments for your custom URL.

1. Navigate to the list by URL, without loading it in the standard interface.
   For example, navigate to the Incident list by entering <base URL>/incident_list.do.
2. Apply the desired filter, sort order, and grouping.
3. Copy the resulting URL from the browser address bar.
   For example, if you apply a filter of active=true with an ascending sort on priority, a descending sort on opened_on, and grouped by assignment_group, the address bar reads: incident_list.do?
symparm_query=active=true^EQ^ORDERBYpriority^ORDERBYDESCopened_at^GROUPBYassignment_g

Note: Do not copy the base URL (the http://instance_name.service-now.com/portion). Always use a relative link to prevent problems when you move an update set from a development instance to a production instance.
4. Define a module with a **Link type** of **URL (from Arguments)**.
5. Paste the custom URL from **step 3** into the **Arguments** field.
6. Click **Submit**.
   The module now opens the custom list in the content frame.

**Creating a change password module**

To allow users to change their own password, you can create a simple module in Self-Service.

**Prerequisites**

Role required: admin

Create a module in the Self-Service application called **Change Password**, give it a **Type** of **URL**, and give it an **Argument** of `login_cpw.do`. The module presents the user with a password change form and has them validate the new password by typing it twice.
Change password module
The Edge

The Edge is a toolbar on the left side of the screen which provides quick access to features such as bookmarks and flyout windows. The Edge is available in UI15. The collapsed view of the UI16 application navigator is similar to the Edge.

Bookmarks

A bookmark is a link to information in the ServiceNow system, such as a record or a module, that is stored on the Edge.

All users create and manage their own bookmarks.

Bookmarks are available in UI15. Favorites replace bookmarks in UI16. For more information, see Use the UI16 navigator.

Bookmarks are stored in the Bookmark (sys_ui_bookmark) table. To view bookmarks in a list, navigate to System Definition > Bookmarks.

Create a bookmark

You can create bookmarks by dragging links to the Edge.
Role required: none

You can create a bookmark from any of the following links:

- Modules in the application navigator
- Breadcrumbs
- Links in lists (including lists displayed in flyouts)
- Reports

**Note:** You may not be able to create bookmarks with other types of links. To request this functionality for another type of link, you can log an enhancement request with the ServiceNow customer support system.

Drag a link to the Edge.
The bookmark for the link appears on the Edge. Each bookmark includes an image and a title, both of which can be customized.

**Customize a bookmark**

You can customize bookmark appearance and behavior.

Role required: none

1. Enter a Title.

2. To open the bookmark link in a flyout window, select the **Flyout** check box and clear the **Open in form pane** check box.

   By default, the bookmark opens in the content pane. Selecting **Flyout** opens a window on top of the current screen without navigating away from your working panes.

**Note:** Do not add homepages that are set to refresh automatically as flyout bookmarks. These homepages refresh in the background, which can slow down performance for you and other users.
4. Select the **Show on edge** check box to display the bookmark as a button on the Edge. Clear the check box to remove the button from the Edge. The bookmark still appears in the bookmark list.

5. To change the bookmark image, click **Image** and then select from the list of available images.

6. Click **Update**.

**Open a bookmark**

When you open a bookmark, it appears in the content pane or as a flyout.

Role required: none

Open a bookmark in one of the following ways.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open the bookmark as defined in the bookmark settings</td>
<td>Click the bookmark.</td>
</tr>
<tr>
<td>Open the bookmark in a flyout</td>
<td>Hold Ctrl (Windows) or Command (Mac) and click the bookmark.</td>
</tr>
<tr>
<td>Open the bookmark in the content pane</td>
<td>Hold Shift and click the bookmark.</td>
</tr>
</tbody>
</table>

**Delete a bookmark**

You can delete a bookmark.

Role required: none

When you delete a bookmark, it is removed from the Edge.

Delete the bookmark from either of the following locations in the interface.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookmark tooltip</td>
<td>1. Point to the bookmark in the Edge.</td>
</tr>
<tr>
<td></td>
<td>2. In the tooltip window, click <strong>Edit Bookmark</strong>.</td>
</tr>
<tr>
<td></td>
<td>3. In the edit bookmark window, click <strong>Delete</strong>.</td>
</tr>
<tr>
<td>Bookmarks list</td>
<td>1. Point to the all bookmarks icon in the Edge</td>
</tr>
<tr>
<td></td>
<td>2. Point to a bookmark in the list.</td>
</tr>
<tr>
<td></td>
<td>3. Click the remove bookmark icon by the bookmark name.</td>
</tr>
</tbody>
</table>

**Forms**

A form displays information from one record in a data table.
The specific information on a form depends on the type of record displayed. Users can view and edit records in forms. Administrators can configure what appears on forms. Watch this ten-minute video for an overview of the features and functions of ServiceNow forms:
Paris    Now Platform user interface

Form header

Fields

Sections

Related links

Related lists
Form elements

<table>
<thead>
<tr>
<th>Form element</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form header</td>
<td>Provides navigation tools and actions related to the record.</td>
</tr>
<tr>
<td>Fields</td>
<td>Stores specific data about the record.</td>
</tr>
<tr>
<td>Sections</td>
<td>Groups related information on the form. To enable or disable form tabs, click the gear icon in the banner frame and toggle the Tabbed forms option. Users can use icons to collapse or expand form sections when tabbed forms are disabled. When you collapse or expand a form section, your selection is saved as a user preference. The next time you access a record that uses the same form, the same sections are collapsed or expanded.</td>
</tr>
<tr>
<td>Related links</td>
<td>Provides access to additional functions based on record type and system setup. Administrators can add related links to forms using UI actions.</td>
</tr>
<tr>
<td>Related lists</td>
<td>Displays records in other tables that have relationships to the current record.</td>
</tr>
<tr>
<td>Embedded lists</td>
<td>Allows for editing related lists without having to navigate away from the form. Changes are saved when the form is saved.</td>
</tr>
<tr>
<td>Response time indicator</td>
<td>Appears at the bottom of some forms to indicate the processing time required to display the form.</td>
</tr>
</tbody>
</table>

Form headers for UI versions

UI16 and UI15 each have a different form header that offers different navigation icons. Learn about form header navigation by selecting the form header topic that corresponds to the UI version your organization uses.

UI16 form header

The form header displays the title of the form (table) and provides several controls. The UI16 form header includes the following controls.
**Form header UI16**

**UI16 form header controls**

<table>
<thead>
<tr>
<th>Control</th>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back</td>
<td>![&lt; icon]</td>
<td>Navigates to the previously viewed page without saving changes.</td>
</tr>
<tr>
<td>Form context menu</td>
<td>![ icon]</td>
<td>Appears when a user clicks the menu icon beside the form title or right-clicks the form header. This menu is also called a right-click menu.</td>
</tr>
<tr>
<td>Attachments</td>
<td>![file icon]</td>
<td>Allows users to view and add attachments to the record. For more information, see Add and manage attachments.</td>
</tr>
<tr>
<td>Show activity stream</td>
<td>![ච icon]</td>
<td>Moves focus to the journal entry section of the form. If the journal fields are not on the form, the activity stream opens in a fly-out window.</td>
</tr>
<tr>
<td>Personalize form</td>
<td>![↕ icon]</td>
<td>Opens the form personalization menu. For more information, see Personalize a form.</td>
</tr>
<tr>
<td>More options</td>
<td>![more icon]</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>![✉ icon]</td>
<td>Opens an email window.</td>
</tr>
<tr>
<td>Control</td>
<td>Icon</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Template bar</td>
<td></td>
<td>Opens a bar at the bottom of the form and lists available templates.</td>
</tr>
<tr>
<td>Annotations</td>
<td></td>
<td>Displays on-form annotations. For more information, see Administering form annotations.</td>
</tr>
<tr>
<td>Tags</td>
<td></td>
<td>Displays the option to create custom tags and categorize documents. For more information, see Tags.</td>
</tr>
</tbody>
</table>

**Remaining controls**

<table>
<thead>
<tr>
<th>Control</th>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit or Update</td>
<td></td>
<td>Saves changes and returns to the previously viewed page.</td>
</tr>
<tr>
<td>Related actions</td>
<td></td>
<td>Provides standard actions in the form header for some tables, such as Close Incident or Resolve Incident in incident.</td>
</tr>
<tr>
<td>Delete</td>
<td></td>
<td>Deletes the record from the list.</td>
</tr>
<tr>
<td>Previous and Next</td>
<td></td>
<td>Opens the previous and next record on the list from which the record was accessed.</td>
</tr>
</tbody>
</table>

**UI15 form header**

The form header displays the title of the form (table) and provides several controls.

The UI15 form header includes the following controls.

![UI15 form header](image)

**Form header UI15**
# Form context menu

The form context menu provides controls based on the table and user access rights. Administrators can customize some of the options available on a context menu using UI actions. Access the form context menu by clicking an icon beside the form title or by right-clicking the form header (≡).

<table>
<thead>
<tr>
<th>Control</th>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back</td>
<td>🔄</td>
<td>Navigates to the previously viewed page without saving changes.</td>
</tr>
<tr>
<td>Form context menu</td>
<td>🕖</td>
<td>Appears when a user clicks the menu icon beside the form title or right-clicks the form header. This menu is also called a right-click menu.</td>
</tr>
<tr>
<td>Edit tags</td>
<td>📖</td>
<td>Displays the Add tag field below the form header, which allows users to create custom tags and categorize documents. For more information, see Tags.</td>
</tr>
<tr>
<td>Attachments</td>
<td>📝</td>
<td>Allows users to view and add attachments to the record. For more information, see Uploading Attachments.</td>
</tr>
<tr>
<td>Annotations</td>
<td>🕵️</td>
<td>Displays on-form annotations. For more information, see Administering form annotations.</td>
</tr>
<tr>
<td>Email</td>
<td>📧</td>
<td>Opens an email window.</td>
</tr>
<tr>
<td>Show activity stream</td>
<td>🎨</td>
<td>Opens the document feed for this record in a flyout window.</td>
</tr>
<tr>
<td>Personalize form</td>
<td>🛠️</td>
<td>Opens the form personalization menu. For more information, see Personalize a form.</td>
</tr>
<tr>
<td>Submit or Update</td>
<td>🇺🇸</td>
<td>Saves changes and returns to the previously viewed page.</td>
</tr>
<tr>
<td>Related actions</td>
<td>🣧</td>
<td>Provides standard actions in the form header for some tables, such as Close Incident or Resolve Incident in incident.</td>
</tr>
<tr>
<td>Delete</td>
<td>🗑️</td>
<td>Deletes the record from the list.</td>
</tr>
<tr>
<td>Previous and Next</td>
<td>⬆️</td>
<td>Opens the previous and next record on the list from which the record was accessed. These controls save changes to the record.</td>
</tr>
</tbody>
</table>
The form context menu includes the following options.

**Note:** Some of the options displayed on the form context menu depend on the user role, installed applications, and version of the UI.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save</td>
<td>Saves changes without leaving the form view.</td>
</tr>
</tbody>
</table>
| Add to Visual Task Board| Provided standard actions in the form context menu for some tables, such as Add to Visual Task Board or Create Change in incident.
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert</td>
<td>Saves the data as a new record and returns to the previously viewed page.</td>
</tr>
<tr>
<td>Insert and Stay</td>
<td>Saves and displays the new record. For more information about inserting records, see Edit a form.</td>
</tr>
<tr>
<td>Configure</td>
<td>Provides administrative functions, such as configuring forms.</td>
</tr>
<tr>
<td>Toggle Template Bar</td>
<td>(UI15 only) Shows or hides the template bar. For more information, see Toggle the template bar.</td>
</tr>
<tr>
<td>Export</td>
<td>Exports data to PDF. Administrators can also export to XML. For more information, see Exporting data.</td>
</tr>
<tr>
<td>View</td>
<td>Changes fields to a predefined layout. Switching views submits the form, which saves all changes. Administrators can customize views.</td>
</tr>
<tr>
<td>Create Favorite</td>
<td>(UI16 only) Adds the current record to your favorites list, represented by a star icon on the tab.</td>
</tr>
<tr>
<td>Assign Tag</td>
<td>(UI15 only) Allows the user to assign a new or existing tag to a record, which provides quick access to frequently referenced or urgent information. When tag is assigned to a record, the record is displayed on the Tagged Documents page. For more information, see Tags.</td>
</tr>
<tr>
<td>Copy URL</td>
<td>Copies to the clipboard the URL for the form view of the record. Follow browser instructions if browser security measures restrict this function.</td>
</tr>
<tr>
<td>Copy sys_id</td>
<td>Administrators only. Copies to the clipboard the sys_id of the record. Follow browser instructions if browser security measures restrict this function.</td>
</tr>
<tr>
<td>Show XML</td>
<td>Administrators only. Displays record data in XML format.</td>
</tr>
<tr>
<td>History</td>
<td>Administrators only. Displays audit history for the record, which must be enabled for the table. For more information, see Enable auditing for a table.</td>
</tr>
<tr>
<td>Reload Form</td>
<td>Reloads information from the database to refresh the form view.</td>
</tr>
</tbody>
</table>

**Form fields**

A field represents an individual item of data on a record.

Users can view and modify field data on a form. For more detailed information, see Field administration.

**Field status indicators**

Indicators are used on some fields to denote a special field type.
A field status indicator is a colored asterisk that may appear to the left of mandatory fields. Field status indicators change colors to represent different states of mandatory fields.

### Field status indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpopulated</td>
<td>Required field is empty. The user must enter a value to save the form. Default color is red.</td>
</tr>
<tr>
<td>Populated — saved</td>
<td>Required field contains a value that was saved or must be saved. Default color is gray.</td>
</tr>
<tr>
<td>Populated — unsaved</td>
<td>Required field contains a value that was saved or must be saved. Default color is gray.</td>
</tr>
</tbody>
</table>

**UI16/UI15 field status indicators**

**Configure the activity filter**

The activity formatter contains a filter that lets users select which of the available fields to show in the activity list.

Role required: none

All fields on the activity list display in alphabetical order by default. You can change the order that fields appear on the form by using the Configure available fields option in the activity formatter.

**Use the activity filter**

Use the activity filter to show or hide fields that you want to display activity.

1. Open the filter by clicking the activity filter icon (🔧) in the Activity header.
2. Select the fields for which you want to display activity.
3. Fields are added or removed dynamically as the selection is made.
4. Click the activity filter icon again to close the filter.
Embedded lists

Some forms may show related lists as embedded. Changes to embedded lists are saved when the form is saved.

Note: Embedded lists are not supported in List v3. Embedded lists always display in List v2.

Use these controls to work with an embedded list. For more information, see Edit a form.

Working with embedded lists

<table>
<thead>
<tr>
<th>Task</th>
<th>Icon</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand an embedded list</td>
<td>+</td>
<td>Click the expand icon in the list header.</td>
</tr>
<tr>
<td>Collapse an embedded list</td>
<td>-</td>
<td>Click the collapse icon in the list header.</td>
</tr>
<tr>
<td>Insert a new row</td>
<td></td>
<td>Double-click Insert a new row...</td>
</tr>
<tr>
<td>Edit a row</td>
<td></td>
<td>Double-click in an empty area of that field. See Use the list editor.</td>
</tr>
<tr>
<td>Delete a row</td>
<td>-</td>
<td>Click the delete icon beside the row. New rows are removed immediately. Existing rows are designated for deletion when the record is saved. To clear this designation, click the delete icon again.</td>
</tr>
</tbody>
</table>
Related lists appear on forms and show records in tables that have relationships to the current record.

Users can view and modify information in related lists like any other list. Administrators can configure related lists to appear on forms and in hierarchical lists by configuring a form. Related lists do not have a size limit.

By default, all related lists display in List v2, even when List v3 is activated. An administrator can enable List v3 for related lists. The same List v3 compatibility rules apply to related lists as to standard lists.

Select or create records in a related list

When a form contains a related list, such as the Incidents related list in the problem form, you can select existing records or add new ones in the related list.

Role required: none

1. Open the record to work with records in a related list, such as a problem record.
2. Locate the related list, for example, Incidents.
3. To select existing records, complete the following steps.
   a) Click Edit.
   b) Using the slushbucket, select the records to associate with the current record.
      When you select a record, information about it appears below the Collection list to help
      you identify the record to select.
   c) Click Save.

4. To create a new related record, complete the following steps.
   a) Click New.
      A new form for the related table opens, for example, the incident form.
   b) Complete the form and click Submit.
      The new record is added to the related table and to the related list of the record.

Configure when a related list loads

If there are many related lists on a form or many records in the related lists, the form may load
slowly. In UI16 and UI15, you can improve form response times by configuring related lists to load
manually, on demand, or automatically, after the rest of the form loads.

Role required: none

Note: This functionality applies only when List v3 is disabled for related lists, which is the
default setting. When List v3 is enabled for related lists, all related lists load asynchronously
after the form loads, even if there are no v3 related lists on the form.

1. Click the settings icon (⚙️) in the banner frame to open the system settings menu.

2. Select one of the following options under Related List Loading.
   In UI16, click the Forms tab to see this setting.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>With the Form</strong></td>
<td>Related lists load when you open the form, which is the default setting.</td>
</tr>
<tr>
<td></td>
<td>When selected, it sets the value of the glide.ui.related_list_timing system property to default.</td>
</tr>
<tr>
<td><strong>After Form Loads</strong></td>
<td>Related lists load after the rest of the form loads.</td>
</tr>
<tr>
<td></td>
<td>When selected, it sets the value of the glide.ui.related_list_timing system property to deferred.</td>
</tr>
<tr>
<td><strong>On-demand</strong></td>
<td>Related lists load on demand. When this option is selected, a Load Related Lists button appears at the bottom of each form that contains related lists. Click the button to load related lists.</td>
</tr>
<tr>
<td></td>
<td>When selected, it sets the value of the glide.ui.related_list_timing system property to ondemand.</td>
</tr>
</tbody>
</table>

3. Close the system settings menu.
Create a default filter for a related list

You can create a default filter that is applied to a related list when a form loads.
Role required: admin

Note: This functionality is not supported in List v3 related lists.

1. Navigate to the related list (example, Incidents on a problem record).
2. Create the desired filter using the condition builder (example, (Active) is (true)).

3. Click Set as Default Filter.

Configure the edit option

You can configure the edit option that allows users to add records to related lists in forms.
Role required: admin

The Edit button is available for related lists that represent many-to-many and one-to-many relationships. Defined related lists may not have an Edit button, as related records are added to these lists automatically based on the relationship between the records.

1. Navigate to the related list, such as the Incidents related list on a problem record.
2. Perform the appropriate action for the list version.

<table>
<thead>
<tr>
<th>Version</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>Right-click any column heading and select Configure &gt; List Control.</td>
</tr>
<tr>
<td>List v3</td>
<td>Open the list title menu and select List Control.</td>
</tr>
</tbody>
</table>

3. Perform one of the following actions.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show the Edit option</td>
<td>Clear the Omit edit button check box.</td>
</tr>
<tr>
<td>Hide the Edit option</td>
<td>Select the Omit edit button check box.</td>
</tr>
</tbody>
</table>
### Option | Description
---|---
Show the Edit option if the check box is cleared and the button does not appear | Click Enable Edit.

4. If the list represents a one-to-many relationship (example, incidents can be associated with only one problem, but problems can be associated with many incidents), complete the following steps.
   a) Open a record in the target table (example, Incident).
   b) Right-click the header and select **Configure > Dictionary**.
   c) Open the dictionary entry for the reference field (example, **Problem ID** on **Incident**).
   d) In the Reference Specification section, select the **Reference floats** check box.

5. Click **Update**.

**Create defined related lists**

You can add default related lists to the form for all users to see when viewing records.

Role required: admin
For example, you may include a list of related incidents at the bottom of a problem record, or a list of members at the bottom of a group record. This functionality depends on reference fields or many-to-many table relationships. If two tables are related via the system dictionary, one can appear as a related list on the other.

Defined related lists allow relationships between arbitrary tables to be expressed as a related list. Any two tables that can have a logical relationship can appear as a parent/child pair via a related list. The following are some examples.

- On an incident record, show all incidents opened by the same caller.
- On a user record, show the last 20 transactions that user has made.
- On an incident record, show all problems opened on the reported CI.

These relationships are beyond the relationships normally defined in the system dictionary through reference fields and many-to-many relationships.

Every related list requires a relationship record. Before creating a relationship, verify that there is not an existing relationship record that already provides the needed information. Use the following steps to create a relationship record.

1. Click **System Definition > Relationships**.
2. Click **New**.
3. Specify the relationship record fields.

### Relationship record fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Type the name of the related list. The form configuration page displays this name in the list of available lists.</td>
</tr>
<tr>
<td>Advanced</td>
<td>Select this check box to use JavaScript in place of the Applies to table and Queries from table fields.</td>
</tr>
<tr>
<td>Applies to table</td>
<td>Select the table on which the related list appears. This field is hidden in Advanced relationship records.</td>
</tr>
<tr>
<td>Queries from table</td>
<td>Select the table from which this related list retrieves data. This field is hidden in Advanced relationship records.</td>
</tr>
<tr>
<td>Apply to</td>
<td>Type a script that sets the answer variable to true when a user opens a form on the desired table. This field is only visible with the Advanced check box selected.</td>
</tr>
<tr>
<td>Query from</td>
<td>Type a script that sets the answer variable to the name of the table from which the related list retrieves data. This field is only visible with the Advanced check box selected.</td>
</tr>
<tr>
<td>Query with</td>
<td>Type a script to specify the records to include from the table the relationship queries.</td>
</tr>
<tr>
<td>Insert Callback</td>
<td>Type a script to run after a successful insert action. This field is only visible with the Advanced check box selected.</td>
</tr>
</tbody>
</table>
Add incidents by same caller related list
This example adds the existing relationship, Incidents by Same Caller, to incident forms.

- **Applies to table**: This list appears as an available related list when viewing an incident record.
- **Queries from table**: This list displays a list of incidents.
- **Query with**: This script selects records where the `caller_id` matches the `caller_id` of the parent record (the incident you are viewing).

1. Open an incident.
2. Right-click the header and select **Configure > Related Lists**.
   The name of the existing relationships appears in your list of available lists.
3. Move the **Incidents by Same Caller** list to the **Selected** list.
4. Click **Save**.
Notes and limitations:

- If you click the **New** button on one of these new relationships, the system attempts to ensure that the new record matches the list conditions. For example, clicking **New** on the example list results in an incident where the **caller_id** is pre-populated with **Bud Richman**.

- When scripting your condition, **current** is the record to which you want to add queries while **parent** is the main record being displayed.

- These relationships do not refresh until you update a form. In the example, if you changed the caller from **Bud Richman** to **Fred Luddy**, the list at the bottom of the screen still displays the incidents belonging to Bud Richman until you save the incident.

- You are not limited to a single query condition. It is, for example, possible to have a related list of all incidents opened by the same caller in the last week, or all open incidents opened by the same caller.

- The **current** and **parent** objects cannot be used with the **Queries from** field. Instead, the **gs** object is available for GlideSystem calls.

- The **Edit** button is not available on defined relationships, as the relationship is scripted.

Additional use case: You can enable a similar relationship for the Request table to display **Requests by the Same Caller** using **Requested For** on the Request table.

### Add transactions by user related list

This example adds a relationship, Last 20 transactions, to the user form.

**Role required:** admin

The new relationship creates a list of task records opened by the current user.

1. **Navigate to** **System Definition** > **Relationships**.
2. **Click** **New**.
3. **Create a relationship** with the following values.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Last 20 transactions</td>
</tr>
<tr>
<td>Applies to table</td>
<td>User (sys_user)</td>
</tr>
<tr>
<td>Queries from table</td>
<td>Task (task)</td>
</tr>
<tr>
<td>Queries with</td>
<td>current.addQuery('opened_by', parent.sys_id);</td>
</tr>
</tbody>
</table>

4. **Click** **Submit**.
5. **Navigate to** **User Administration** > **Users**.
6. **Select any user.**
   
   For example, select David Loo.
7. **Configure the related lists** for the user form and add the related list **Last 20 transactions**.
8. **Navigate to** **User Administration** > **Users**.
9. **Select any user.**
   
   For example, select David Loo.
10. **The Last 20 transactions** related list displays all task records opened by the current user.

**Notes and limitations:**

- This query returns all task records opened by the user. The related list defaults to displaying 20 task records per page.
• The parent variable refers to the **Applies to table**. In this case, it applies to the User (sys_user) table.
• Querying against a record sys_id is a common query method for relationships.

**Add fields to selections in a related list**

When you click **Edit** in a related list and select an item, information about the item appears below the list. You can expand the fields that appear for the item to provide more information.

Role required: admin
To add fields to selections in a related list, record the exact field name, or element, not the label name. This example demonstrates adding fields to the **Groups** related list (sys_user_group).

1. Navigate to **System UI > Views**.
2. Select **sys_ref_list**.
3. To add fields from the Group table, in the **Lists** related list, select **sys_user_group**.
4. In the **List Elements** related list, click **New**.
5. Enter the field name and its relative position when it appears in the description.
   Fields appear from top to bottom, lowest to highest number.
6. Click **Submit**.

**Create a default related record selection filter for a related list**

You can set a default filter to restrict which related records users can select. Default filters are simple to set up but lack a dynamic filtering element, which prevents the end user from changing the default filter.

Role required: personalize_list

A filter is used to restrict the records that are listed in the slushbucket that displays when a user clicks **Edit** in a related list.
Unfiltered list of records

1. Perform the appropriate action for the list version.

<table>
<thead>
<tr>
<th>Version</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>Right-click any column heading and select Configure &gt; List Control.</td>
</tr>
<tr>
<td>List v3</td>
<td>Open the list title menu and select List Control.</td>
</tr>
</tbody>
</table>

2. Configure the List Control form to add the Edit default filter field, if necessary.

3. In the Edit default filter field, use the condition builder to create a default filter.

4. Click Update.
When users click the **Edit** button in the related list, the list of records they can select is filtered according to the default filter.

### Edit a form

You can edit a record in the form view. You can also insert a record, apply a template, and cancel changes to the record.

**Role required:** none

1. **Navigate to the form.**
   - If another user is looking at the same record, you see their avatar with a green dot in the form header. If more than one user is viewing the record, the avatar is a number, and you can point your cursor to it to see the names.

2. **Enter appropriate data.**
   - Depending on system setup, the data entered in a form can affect other options on the form or change its appearance. For example, if you select a status of **Closed** for an incident, a required **Close Notes** field may appear. Administrators can create custom form effects in various ways, including UI policies and client scripts.

3. **Save the record using one of these methods:**
   - Click **Submit** or **Update** to save changes and return to the previously viewed page.
   - Right-click the form header and select **Save** to save changes without leaving form view.

On UI16 forms, fields update dynamically and display a field update icon 🔄 to indicate changes made by other users. You can point to the field update icon to see which user made the update. This dynamic indication helps to prevent users from accidentally overwriting each other's work.

**Note:** If you entered a different value from the value saved by the other user, the system does not update the field automatically. Change your value manually to match value entered by the other user. Otherwise, you overwrite the change when you save the record.
Insert a record

Insert provides a method for creating multiple similar items, such as email notifications, users, groups, or business rules.

Role required: none

Administrators can enable the Insert function for task records. For more information, see Advanced form configuration.

1. Open a similar item.
2. Edit the item and give it a new Name.
3. Right-click the form header and select one of the following options.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert</td>
<td>Saves the item as a new record and returns to the previously viewed page.</td>
</tr>
<tr>
<td>Insert and Stay</td>
<td>Saves and views the new record.</td>
</tr>
</tbody>
</table>
Apply a template in a form

Your organization may use templates to help with frequently requested tasks. A template contains prepopulated fields that default when the template is selected.

Role required: none

1. Navigate to the form.
2. Do the appropriate action for your version of the UI.

| UI16 | 1. Click the more options icon in the form header. |
|      | 2. Select **Toggle Template Bar**. |
|      | 2. Select **Toggle Template Bar**. |

3. Select the template to apply.

If there is a conflict between the selected template and the form, a conflict message appears with a link to view the details of the conflict. For example, if a field that does not appear on the form is populated in the template, the conflict message details identify the missing field and the value is not set. If you have a conflict message, review the details and notify your administrator if necessary.

Specific fields are populated with values from the template.

4. Complete the form.

You can change any value that was populated from the template.

5. Click **Submit** to create the record.

Cancel changes to a form

Cancel changes to a form by navigating away from the form without saving.
Role required: none

1. Navigate away from the form view without saving the record.

2. If a message appears, click **Leave this Page** to confirm cancellation.

   **Note:** Administrators can disable the confirmation message by setting the `glide.ui.dirty_form_support` property to false.

**Use form pane tabs in UI15**

When using the split screen feature, you can open multiple forms in the form pane. Form pane tabs are available in UI15 only.

Form pane tabs appear above the form header. The current tab is highlighted.
Form pane tabs

1. View a list in the content frame, for example, the Incident list.
2. Click the List and Form View button on the Edge to split the screen.
   The list is displayed in the list pane on the left and an empty form pane with a new highlighted tab is displayed on the right.
3. Select an incident record in the list pane to display the incident in the highlighted tab.
   The incident number appears in the tab at the top of the form pane.
4. Click the + tab to add a tab to the form pane.
   The new tab is added to the right of the current tabs and has the generic name New Tab until you select another incident from the list pane.
5. To remove a tab, select the tab to be deleted and click the x.

Personalize a form

When the form personalization feature is activated, users can personalize fields to appear on a specific form view according to individual preferences. Form personalization is available in UI16 and UI15.

Role required: itil, personalize_form, or admin

Personal form customizations do not affect what other users see on their forms.

In contrast to configuring a form, personalizing a form does not enable users to perform the following actions:

- Change the order of fields on the form.
- Add fields that are not configured to appear on the form.
• Hide mandatory fields.

**Note:** Personalizing a form in this way modifies the form for you only. To make changes to a form that are visible to all users, you must **configure the form**.

1. Open any record.
2. In the form header, click the personalize form icon.
   The Personalize Form menu appears and hide field icons appear on the form.

   ![Personalize Form Menu](image)

   **Personalize Form**

   **Form Fields**
   - Caller
   - Closed
   - Additional comments (Customer visible)
   - On hold reason
   - Number
   - Opened
   - Short description
   - State
   - Urgency
   - Watch list

   A cleared gray check box indicates fields that you previously hid.

   **Note:** Only the fields that the form is configured to display are available in the Personalize Form menu. To add fields to the form, you must configure the form layout.

3. Clear a check box or click the hide field icon
   ![Hide Field Icon](image)
   by a field.
Some check boxes are gray and selected. These check boxes indicate fields that cannot be hidden because they are required or are already hidden by UI policies or client scripts.

4. Click outside the Personalize Form menu to save your changes.
   If you navigate away from the form, the next time you personalize the form you must reset your customizations to show fields that you have hidden.

5. To restore the default form view, personalize the form and click Reset.

### Add and manage attachments

You can upload a file as an attachment to an incident, a knowledge article, a change request, or to another type of record.

Administrators can configure attachments and how they work in the system. For more information, see [Administering attachments](#).

Attachment file size is not limited by default. However, uploading large attachments can cause issues with the user’s active session on the instance. Empty attachments (file size of 0 kb) are not supported.

- **Note:** Do not use the **Upload File** module in the **System Definition** application. It is not compatible with multi-node instances.

1. Navigate to the record. For example, an incident record.

2. Click the attachments icon (Attach).

3. Click **Choose Files** or **Browse**, depending on your browser, and navigate to a file.

4. Optional: Upload multiple files in one of the following ways.
   - Select multiple files at the same time in the file browser. Internet Explorer does not support this feature.
   - Add each file on a separate line by clicking **Add Another Attachment**, and then clicking **Choose Files** on the next line. Repeat until all desired files are selected. This feature is available in all supported browsers.

5. Click **Attach**.
   Attached files appear in the **Current file attachments** list and at the top of the form. A message appears if a file is not attached because it is too large or is a restricted file type. Administrators can configure these limits.

6. Close the pop-up window to return to the form.

Limit the users who can view attachments by applying ACL rules. For more information on ACL rules, see [Access control list rules](#).

### Manage attachments

You can view, rename, and remove the attachments on a record, and add additional attachments.

1. Navigate to the record (example, an incident record).

2. Click the attachments icon (Attach) or the **Manage Attachments** link if files are already attached.
   The number of attachments for a record is listed on the **Manage Attachments** link.
Manage Attachments

3. To rename an attachment, complete the following steps.
   a) Click (rename) beside the file name at the top of the form or in the pop-up window.
   a) Edit the file name and press the Enter key.

   **Note:** Press the Esc key instead of the Enter key to undo your changes and cancel rename.

4. To remove attachments, click the Manage Attachments link and complete the following steps.
   a) Select the check boxes next to the attachments to delete.
   b) Click Remove.
      The attachment disappears and the pop-up window remains open.

   **Note:** After a record has been closed, you cannot delete the attachments for that record.

5. To add additional attachments, complete the following steps.
   a) Click Choose Files.
   b) Select the file to attach and click Open.
   c) Click Attach.

6. Close the pop-up window to return to the form.

**Attach files with drag-and-drop**
You can drag files from your local computer into your browser window to attach them to the current record.
This functionality is supported in Firefox 3.6 or later and Chrome. Support will be added for other web browsers as they implement the HTML5 specification.

1. Navigate to the record.
2. On your computer, browse to the files to attach.
3. Select the files in the file browser, and then drag them over the form.
4. Release the mouse button to begin the upload.

![Incident](INC0000052)

Sampleimage.gif (2MB)

When the upload is complete, the file name is added to the attachments header. Upload speed depends on the file size and the speed of your network connection.

**Warning:** Do not navigate away from the record while an upload is in progress. The upload must be completed for the file to be attached.

### Document Viewer

Document Viewer enables you to view documents directly in the Now Platform rather than having to download them.

Document Viewer supports viewing various file types in the platform. The maximum document file size is 50 MB. To use Document Viewer, enable it at instance level and for the tables for which you want to use it.

**Note:** Document Viewer does not support FedRAMP instances, instances that are on-premise, or instances that use Encryption Support.

You can view the following file types:

- MS Word (.doc) and (.docx)
- MS PowerPoint (.ppt) and (.pptx)
- MS Excel (.xls) and (.xlsx)
- PDF
- PNG
- JPEG

Other document types, for example, .zip or .exe files, are automatically downloaded without requiring Document Viewer.
Legacy mobile UI configuration

The legacy mobile UI is available only on instances that do not use the smartphone interface. Administrators can define which modules are available to mobile users at the application menu or module level. In the mobile UI, modules appear in sections grouped by application menu, separated by horizontal lines.

- Modules with a device type of Mobile or Any are available on mobile devices, regardless of the application menu setting.
- Modules without a specified device type are available on mobile devices when the application menu setting for the default device type is Mobile or Any.

When accessing ServiceNow from an iPhone or Android device, users can choose whether to use the standard browser UI or the mobile UI. The user's most recent selection is saved with these user preferences:

- mobile_use_full.iphone
- mobile_use_full.android

Make module available for mobile and standard browsers

Modules are made available for mobile users, as well as standard browser users.
The following table describes the icons used in Document Viewer.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Folder" /></td>
<td>Toggle the sidebar to see a preview of all the pages in the document.</td>
</tr>
<tr>
<td><img src="image" alt="Download" /></td>
<td>Download the attachment.</td>
</tr>
<tr>
<td><img src="image" alt="Arrows" /></td>
<td>Page up or down using the arrow buttons. You can also scroll or use your keyboard arrow keys.</td>
</tr>
<tr>
<td><img src="image" alt="Rotate Right" /></td>
<td>Rotate the page to the right.</td>
</tr>
<tr>
<td><img src="image" alt="Rotate Left" /></td>
<td>Rotate the page to the left.</td>
</tr>
<tr>
<td><img src="image" alt="Zoom In/Out" /></td>
<td>Zoom in or out of the document.</td>
</tr>
<tr>
<td><img src="image" alt="Full Width" /></td>
<td>Increase the page to the full width of Document Viewer.</td>
</tr>
<tr>
<td><img src="image" alt="Search" /></td>
<td>Search for keywords in the document. Use the arrows to toggle to the next search result.</td>
</tr>
</tbody>
</table>

**Enable Document Viewer**

Enable Document Viewer to view documents directly rather than download them to view them in their native applications.

Role required: admin

Enable Document Viewer at the instance level and then enable it at the table level for the tables where you want to use it. Ensure that the system property `com.snc.documentviewer.enable_document_viewer` is set to true or create it if it does not already exist.

1. Activate Document Viewer at the instance level
   a) Navigate to **System Definition # Plugin**.
   b) Enter **Document Viewer** in the Search field.
   c) Click **Install**

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2. Activate **Document Viewer** for the tables where you want to use it.
   a) Navigate to **System Definition#Dictionary**.
   b) Open the table **Collection** record to update.
   c) Enter `use_document_viewer=true` in the **Attribute** field.

   Document Viewer is enabled at the table level. Repeat this procedure for each table for which you want to enable Document Viewer.

**View attachments with Document Viewer**

View documents within the platform using Document Viewer rather than having to download them to your own file system.

Make sure that Document Viewer is enabled for the table containing the record. For more information, see **Enable Document Viewer**.

Role required: none

Document Viewer supports inline viewing of certain **document types** within the platform.

1. Navigate to a record (incident, form, list, and so on) with an attachment.
2. Click View next to the file attachment name.

   Document Viewer displays the document.

   If the document does not display, Document Viewer does not support inline viewing in your situation and a message instructs you to download the document. The possible reasons are:
   - The document uploaded is platform encrypted or edge encrypted.
   - The file size exceeds the maximum allowed value of 50 MB.
   - The document is password-protected but it is not a PDF file.

   Click **Download Document** to view the document in the relevant external application.

**Disable Document Viewer**

Disable Document Viewer at the instance level to disable it or at table level to disable it for specific tables within the instance.

Ensure the **system property** (com.snc.documentviewer.enable_document_viewer) exists in your instance or create if it does not already exists.

Role required: admin

Disable Document Viewer at the instance level or for specific tables.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable Document Viewer at the instance level</td>
<td>1. Search for <code>sys_properties.list</code> in the navigation filter.</td>
</tr>
<tr>
<td></td>
<td>2. Set the system property <code>com.snc.documentviewer.enable_document_viewer</code> value to <code>false</code>.</td>
</tr>
<tr>
<td></td>
<td>3. Click Update.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Disable Document Viewer at the table level</td>
<td>1. Navigate to System Definition # Dictionary.</td>
</tr>
<tr>
<td></td>
<td>2. Open the table and click New under the Attributes tab.</td>
</tr>
<tr>
<td></td>
<td>4. Enter false in the Value field.</td>
</tr>
<tr>
<td></td>
<td>5. Click Submit.</td>
</tr>
</tbody>
</table>

**Checklists**

Checklists provide a simple way to track the progress of tasks without creating additional records. Checklists can be added to the form view of any table that extends Task (task).

For example, if a support agent is assigned an incident task to investigate a wireless issue, a checklist can be used to document the individual steps taken.

Checklists are added to records after they are submitted. You cannot add a checklist as you create a record.
Sample checklist

Enabling checklists in forms

To enable checklists, navigate to the form and add the **Checklist** formatter. For instructions, see *Add a formatter with the form designer*. 
Using checklists

You can add, remove, or rearrange checklist items. You can also save a checklist as a template for future use on other records. Any user can create or edit a checklist and check off completed items.

Activate checklists

Checklists are active by default on new instances. For instances upgrading from a previous version, the Checklist plugin must be activated.

Role required: admin

1. Navigate to System Applications > All Available Applications > All.
2. Find the Checklist plugin using the filter criteria and search bar.
   
   You can search for the plugin by its name or ID. If you cannot find a plugin, you may have to request it from ServiceNow personnel. To request a plugin, follow the steps in Request a plugin.
3. Click Install, and then in the Activate Plugin dialog box, click Activate.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the global domain. Otherwise they will receive the following error: Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.

Create a checklist

You can create a unique checklist for each task record. You can quickly create a checklist from a previously created template.

The Checklist formatter must be added to the form by a user with the personalize_form role.

Role required: for the write role, read role, and delete role, the logged in user must be sys_created_by.

   Note: If the Explicit roles plugin is installed, the sn_internal role is required by the Customer Service Management and the Vendor Risk Management plugins (and possibly others.) The Explicit roles plugin automatically creates the sn_internal role and assigns it to all users.

A template saves time by creating checklist items automatically. You can add, edit, or remove checklist items without impacting the template. You can use any checklist template, even if it was created on a different table.

1. Navigate to a record that does not already contain a checklist.
2. Click the down arrow beside the Checklist formatter.
3. Complete one of the following steps.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>To create a new checklist</td>
<td>Select Create new.</td>
</tr>
<tr>
<td>To create a checklist by using a template</td>
<td>Under Create from template, select a template. The checklist items in the template appear. Use any of the following steps to manage items in the checklist.</td>
</tr>
</tbody>
</table>

4. Click Add Item.
5. Enter text for the checklist item.
6. Press the Enter key to add the checklist item.
7. Create as many additional checklist items as desired.
8. Optional: Click the minus (-) icon to delete a checklist item.
9. Optional: Click the drag icon
   and drag a checklist item to a different position in the list.
10. Optional: Save the checklist as a template for easy reuse.
    a) Click the down arrow beside the Checklist formatter.
    b) Select Save as Template.
       A dialog box appears.
    c) Enter a descriptive template name to identify the checklist.
       When a user creates a checklist from a template, all templates are listed in alphabetical
       order and there is no way to filter which templates appear. To provide a better user
       experience, consider implementing a naming system for checklist templates. For
       example, include the name of the table or another identifier to clarify how the checklist
       should be used.
    d) From the User Group list, select a group to limit the checklist template to.
       Only members of the selected group and the user who created the checklist can use the
       checklist as a template. Leaving this field blank prevents anyone but the template creator
       from using the checklist template.
    e) Click Save.
11. Save the form.

Delete checklist or a template

You can remove a checklist from a record, and delete checklist templates you no longer need.

Role required: for the write role, read role, and delete role, the logged in user must be sys_created_by.

Note: If the Explicit roles plugin is installed, the sn_internal role is required by the Customer
Service Management and the Vendor Risk Management plugins (and possibly others.) The
Explicit roles plugin automatically creates the sn_internal role and assigns it to all users.

Deleting a checklist template has no effect on checklists created from that template.

1. To delete a checklist, navigate to the record that contains the checklist.
2. Click the down arrow beside the Checklist formatter.
3. Select Remove Checklist.
   A confirmation dialog box appears.
4. Click Delete.
5. Complete the following steps to delete a checklist template.
   a) In the navigation filter, enter checklist_template.list.
   b) Select the check box by the checklist template you want to delete.
   c) In the actions choice list, select Delete.
   d) In the confirmation dialog box, click Delete.
Lists

A list displays a set of records from a table.

Users can search, sort, filter, and edit data in lists. Lists may be embedded in forms and may be hierarchical (have sublists).

The list interface consists of a title bar, filters and breadcrumbs, columns of data, and a footer. Each column in a list corresponds to a field on the table.

Watch the twelve-minute video User Interface | Getting Started with Lists for an in-depth introduction to list functionality.

A response time indicator (⏳) may appear at the bottom right of some lists to indicate the processing time required to display the list.

There are two versions of lists available. Companies with large or complex datasets, or those accustomed to the features in List v2 should avoid activating the list v3 plugin. For more information, see Comparison of List v2 and List v3.
Record list

List features and actions

The list interface consists of a title bar, filters and breadcrumbs, and columns of data. Each of these components provides features and lets you act on the list and the displayed records. There are two list versions: List v2 and List v3.
### List v2 view features, menus, and actions

#### Hierarchical lists

Hierarchical lists allow users to view records from related lists directly from a v2 list without navigating to a form.

**Note:** Hierarchical lists are not supported in List v3. Tables that have hierarchical lists enabled always display in List v2.
Lists can have sublists in a hierarchy that can also be accessed in list view. To expand or collapse the related lists on a record in a hierarchical list, click the arrow beside the reference icon.

Hierarchical list

Administrators can enable hierarchical lists for a table. For more information, see Enable a hierarchical list.

Detail rows

Detail rows, when enabled, appear below the field row for each record and display the value of a specified field. For example, the detail row might display the short description for each incident in a list. Detail rows support the same functionality as fields, including links, editing capabilities, and access to the context menu.

Note: When a field is designated as the source for the list detail rows, the system hides the list column for that field.
Administrators can enable detail rows and add them to v2 lists (UI15 or later required). For more information, see Administer detail rows. Detail rows are not supported in List v3.

List fields

Fields display data and provide certain functions.

**Note:** Some of the options displayed in the field context menu depend on the user role and the installed features.

### Field functions

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Links</td>
<td>Open the associated record in form view. Click the first column field to open the current record. You can also click a link to a related record in other columns to go to that record.</td>
</tr>
<tr>
<td>Editing</td>
<td>Changes the information in one or more records. For more information, see Methods for list edits.</td>
</tr>
<tr>
<td>Reference icon (i)</td>
<td>Provides a preview of the record. Click the icon to open a preview of the record. To open or edit the record, click the Open Record button in the record preview. Pressing shift and pointing to the reference icon only displays the tool tip for the reference icon.</td>
</tr>
</tbody>
</table>
### Context menu

Also called a right-click menu, offers several options, including:

- **Quick filter** options, such as **Show Matching** and **Filter Out**.
- The option to copy the record URL to the clipboard.
- The option to copy the sys_id of the record to the clipboard (administrators only).
- **Quick edit** options, such as **Assign to me**, **Approve**, and **Reject**.
- The option to edit the record **tags**, which provide quick access to frequently referenced or urgent information. When a tag is assigned to a record, the record is displayed on the Tagged Documents page.
- Options specific to features such as **Live Feed** and **Visual Task Boards**.

### Configure and use list functions

All users can interact with lists for the tables their role permits them to access. Some list and column header menu options are controlled by permissions granted to the user role.

The following procedures describe functions that users can configure or use with lists.

#### Sort a list

You can quickly find information in a list by sorting the list. The method that the system uses to sort a list depends on the type of record in the sort column.

**Role required:** none

Consider the example record: **Label**=`Requested Item`; **Value**=`sc_req_item`. Field types other than choice list types are sorted based on the label. The example record label, **Requested Item**, would be sorted with records whose labels start with "r."

A choice list field lets the user select from a pre-defined set of choices. Choice list fields are sorted by the underlying dictionary entry value of the field, not by the label. The example record value, **sc_req_item**, would be sorted with records whose values start with "s."

Sorting by value can be useful. For example, choices for the **State** of tasks are ordered **New** > **Work in Progress** > **Closed**. Based on the label, the sort would be **Closed** > **New** > **Work in Progress**.

An arrow next to the column name indicates the current sort order. A downward pointing arrow indicates that the column is sorted in descending order. Only the primary sort order is indicated.

**Note:** The following sorting rules apply to lists:

- In a translated instance, only translated_text, translated_field, and translated_html type columns support sorting.
- The column label should be created in English first then translated accordingly.
To sort a list, use one of the following methods:

- Click a column name to sort the list in ascending order. Click again to sort in reverse order.
- Right-click a column name and select **Sort (a to z)** or **Sort (z to a)** to sort in ascending or descending order, respectively.
- Specify a sort order with a filter. Filters provide for sorting by more than one column (for example, by Category and then Subcategory).

**Configure field status indicators**

You can enable or disable modern cell coloring for list field status indicators. In List v2, this setting is available when you personalize a list. This setting is available in your system settings.

**Role required:** none

Field status indicators on lists are displayed with modern cell coloring, as a colored circle on the left side of the field. You can select the style of the field status indicator. You can revert to using a field background color by disabling modern cell coloring.

![Modern cell coloring on](image)

The process depends on the version:

<table>
<thead>
<tr>
<th>Version</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v3</td>
<td>1. In the banner frame, click the gear icon.</td>
</tr>
<tr>
<td></td>
<td>2. On the System Settings window, click the <strong>Lists</strong> tab.</td>
</tr>
<tr>
<td></td>
<td>3. Toggle the <strong>Modern Cell Styles</strong> switch to enable or disable modern cell coloring.</td>
</tr>
<tr>
<td>List v2</td>
<td>1. Click the personalize list icon (⚙️) in the list.</td>
</tr>
<tr>
<td></td>
<td>2. Select the <strong>Modern cell coloring</strong> check box to use the style field status indicator.</td>
</tr>
<tr>
<td></td>
<td>3. Click <strong>OK</strong>.</td>
</tr>
</tbody>
</table>

For more information, see *Creating Personal Lists*.

**Customize the number of list rows per page**

You can customize the number of records, or rows, to display on each page of a list. The default is 20 rows per page.

**Role required:** none

When you customize the number of rows, it applies to all lists that you can access.
For information about the performance impact of displaying more rows, see the blog post *Improve performance by displaying “just enough” data* by a ServiceNow employee in the Now Community.

1. Open a list.
2. Perform the appropriate action for the *list version*.

<table>
<thead>
<tr>
<th>Version</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>Right-click the list title and select Show &gt; &lt;Number&gt; rows per page.</td>
</tr>
<tr>
<td>List v3</td>
<td>In the list footer, click the &lt;Number&gt; rows per page button and select the number of rows you want to display.</td>
</tr>
</tbody>
</table>

The list refreshes to display the number of records selected, or, if there are fewer than the number of rows you are displaying, the total number of records. The page control is updated to show your selected number of records (1 to 50 of 59).

---

### Switch between list views

A view defines the elements that appear when a user opens a list.

Role required: none

You can switch between list views to which you have access.

1. Open the list.
2. Select the view to configure by performing the appropriate action for your list version.

<table>
<thead>
<tr>
<th>Version</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>List V2</td>
<td>Open the list title menu and select View &gt; (view name).</td>
</tr>
<tr>
<td>List v3</td>
<td>Open the list title menu and select Change View, and then click the name of the view.</td>
</tr>
</tbody>
</table>

The page refreshes with in the selected view.

---

### Speed up loading large lists

Remove the calculation of the total number of records in a list to speed up loading lists.

Role required: admin

Calculating the total number of records to be included in a list filtered from extremely large tables can take a long time.

To improve performance, you can remove that calculation for all or specified views.

1. On a list, click the menu icon (≡) and navigate to **Configure > List Control**.
2. On the List Control page, select a check box:
   - **Remove pagination count**—Removes pagination calculation from all views.
   - **Remove pagination count for specified views**—Removes pagination calculation from specified views.

3. Optional: If you selected **Remove pagination count for specified views**, click the lock icon (🔒) and select the views that suppress displaying the number of pages in the list.

4. Verify that the pagination is not calculated for your view by switching to that view. On a list, click the menu icon (☰) and navigate to **View > <a view>**.
The pagination calculation should not appear and the fast forward icon (➡) should be grayed out.

Perform actions on selected items in a list

Action check boxes enable you to perform actions on one or more items in a list.

1. Select the check boxes beside the records you want to affect.
   To select all records on the page in List v3, select the check box at the top of the list just under the list filter. To select all records on the page in List v2, select the check box at the bottom of the list.

2. Apply the desired action.
   • List v2: In the column context menu, select **Update Selected** to update all the selected records.
   • List v3: In the list title menu, select **Update Selected** to update all the selected records.
   • In the action choice list below the list, select an action such as **Delete** (administrators only), or **Add to Visual Task Board**. The available actions vary depending on the list and which plugins are activated. In List v3, the action choice list appears after you select one or more check boxes.

Use embedded lists

Some lists may be embedded in forms when List v2 is in use. Use list controls to work with records in an embedded list within a form.

Role required: none
Note: Embedded lists are not supported in List v3. Embedded lists always display in List v2.

Changes to embedded lists are saved when the form is saved. For more information, see Edit a form.

Use the following controls to work with an embedded list.

- To expand or collapse an embedded list, click the expand (+) or collapse (-) icon in the list header.
- To add a new row, double-click Insert a new row...
- To edit a row, double-click in an empty area of the field. See Use the list editor.
- To delete a row, click the delete icon (x) beside the row. New rows are removed immediately and existing rows are designated for deletion when the record is saved. To clear this designation, click the delete icon again.
Activity streams in list view

Stream live activity information for all records on the current list.
Paris    Now Platform user interface

Activity stream window
To view the activity stream information, click the list activity stream icon (和睦) in the list title bar. This icon appears in the title bar for all task tables.

The activity stream information appears in a flyout window, and is the same information that appears in the activity formatter for a record. The short description appears as the title for the entry. Activity stream items on the task table use the task number as the title. The information in the flyout window updates automatically with audit and journal entries. Click the >> icon at the top to close the activity stream.

You can add a comment to any item in the activity stream. When you point to the item with your cursor, a Comment button appears.

You can click an item to open the activity stream for that record. The record activity stream lets you open the task record, post additional comments or work notes, or preview images. Click the < icon at the top to close the record activity screen.

Note: The activity stream window is not the same interface as the activity formatter which appears on forms. Modifications and property settings used to change the behavior on the activity formatter are not applied to the activity stream window.

Search a list

You can search a list to find information quickly. The list title bar includes options for searching the list. Administrators can enable text searches for any list.

Role required: none

There are two options for searching the list: for a string in a selected field, or for a text string found in any field. In List v2, these options are labeled Go to and Search. In List v3, the search fields appear with no label.

- The Go to option sorts the list by the selected field and returns records where the field value is equal to or greater than the search term. For the Number field, which is a string type field, it finds the records that have a number ending with the number that you enter. For example, searching a list of incidents by selecting Number and entering 4 shows records with numbers like INC0000004 and INC0000014.

- The Search option appears when you select for text. It returns records that contain the search term in any field in the list table. If you added a related list condition, the search does not include records in the related table.

Each option in a choice list is defined with a column label and a value. For example, the incident State field contains several options, such as New and Closed. These labels are column labels, and each one has an underlying value. For incidents, the default value for New is 1 and the default value for Closed is 7. You can search a column for either the column label or the value with the following results.

- Enter the column label to list matching records, for example, all incident records in the New state.
- Enter the value to find records that have a state greater than or equal to (=>) the specified value. For example, enter 6 to list incident records in the Resolved and Closed states.

1. Navigate to a list of records.
2. If necessary, personalize the list to add the desired fields.
3. Select a field or select for text.
4. Enter the search text. Use wildcards to further refine list searches.
5. Press the Enter key to execute the search.

Search by one or more columns in a list

In addition to searching by field or for text, you can search by one or more individual columns in a UI16 or UI15 list.

Role required: none

Column search (List v2)

This search supports queries that include AND, but does not support OR. You cannot search in a column that uses the List field type, for example, watch lists.

1. Click the search icon to expand the column headers and add a search field to each column.
   The search icon for a list report on a dashboard has slightly different behavior. When loading a dashboard, the search icon for a list report does not appear initially on the dashboard view. To access the search icon from a dashboard list report, you must sort a column or apply a filter. This initial behavior prevents overriding condition builder filters set by the report creator.

2. To search a single column, enter the search text in the desired column search field and press the Enter key.
Use wildcards to further refine column searches. For example, use the * to define a contains search.

3. To search multiple columns, perform one of the following actions.
   - Enter the search text in each of the desired column search fields and press the Enter key.
   - Search an individual column and then search additional columns based on the results of the first search.

The search returns records that match the search term.

To clear a column search, complete one of the following actions.

   - Delete the text in the search field for the desired column and press the Enter key. This returns results for any remaining column search criteria.
   - Delete the text in all the column search fields to return all records in the list.

**Available list search wildcards**

The platform supports several wildcard characters to expand and refine search results.

<table>
<thead>
<tr>
<th>Wildcard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*search-term</td>
<td>Search for values that contain search-term.</td>
</tr>
<tr>
<td>%search-term%</td>
<td>Search for values that end with search-term.</td>
</tr>
<tr>
<td>%search-term</td>
<td>Search for values that start with search-term.</td>
</tr>
<tr>
<td>=search-term</td>
<td>Search for values that equal search-term.</td>
</tr>
<tr>
<td>!*search-term</td>
<td>Search for values that do not contain search-term.</td>
</tr>
<tr>
<td>!%search-term</td>
<td>Search for values that do not end with search-term.</td>
</tr>
<tr>
<td>!=search-term</td>
<td>Search for values that do not equal search-term.</td>
</tr>
</tbody>
</table>

**Configure the default search behavior**

The default search behavior in a list is to search for values that are greater than or equal to the value you enter. Administrators can add properties to change the search behavior to use either a contains search or a starts with search by default, instead of a greater than search.

If you enter text in the search box without using a wildcard, the search is performed for values greater than or equal to the value you enter. For text data-type-fields, this means that the search first sorts the records on the selected field, then finds the first record that starts with the text and all following records. For numeric data-type-fields, this means that the search finds all records where the number field ends with the entered number.

**Note:** The system treats some string fields that contain record numbers as numeric fields. Any field named number or u_number is treated as a numeric field.

Changing the default search behavior to contains or starts with can cause performance issues as both search options return more results than a greater than search.
Role required: admin

1. Navigate to the list of system properties by typing `sys_properties.list` into the navigation filter.

2. Add one of the following properties depending on your default search behavior preferences.

   **Default search behavior property**
   
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>glide.ui.goto_use_contains</td>
<td>Changes the default search behavior for a list to a <code>contains</code> search.</td>
</tr>
<tr>
<td></td>
<td>- Type: true</td>
</tr>
<tr>
<td></td>
<td>- Value: true</td>
</tr>
<tr>
<td>glide.ui.goto_use_starts_with</td>
<td>Changes the default search behavior for a list to a <code>starts with</code> search.</td>
</tr>
<tr>
<td></td>
<td>- Type: true</td>
</tr>
<tr>
<td></td>
<td>- Value: true</td>
</tr>
</tbody>
</table>

3. Click Submit.

**Configure default search behavior using a dictionary attribute**

Change the default search behavior at the field level by adding an attribute to a field using the system dictionary.

Role required: admin

1. Navigate to **System Definition > Dictionary**.
2. Search for the field in a table that you want to apply the default search attribute to.
3. In the Attributes field, add one of the following attributes.

   **Note:** You may need to switch to the advanced view for the dictionary entry to see the attributes field.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>goto_use_starts_with=true</td>
<td>Changes the default search behavior to use the <code>starts with</code> operator for a specific field. Applying <code>starts with</code> to a non-text field returns any data starting with that search, which can cause performance degradation.</td>
</tr>
</tbody>
</table>

**Grouped lists**

Grouping aggregates a list by a field and displays the record count per group. Grouping can help you find data quickly by organizing and providing a summary of search or filter results.

For example, this picture shows active incidents grouped by caller.
List grouped by caller (List v2)

- Groups are named for the values of the field selected for grouping. For example, if you group by the assigned user, each group is a user’s name.
- The record count for each group appears next to the group name.
- The total number of items in the list (all groups combined) appears near the paging controls in the list. This total displays only when the list is grouped on a field.

List v3 provides extended grouping capabilities.

Use a grouped list in List v2

You can find information by grouping a list by a particular field. After grouping items in a list, several options let you focus on a particular group or set of groups.

Role required: none

1. Use one of the following methods to group and ungroup items in a list.
   - On the title bar, click the context menu and select **Group By**. Select the field by which to group the list. To remove a grouping, select **-- None --**.
   - Right-click the column name and select **Group By**. To remove a grouping, select **Ungroup**.

   For example, this picture shows active incidents grouped by caller.
Group by

2. Use any of the following actions to expand the groups.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>To expand or collapse a group</td>
<td>Click the arrow (⊙) next to the group name.</td>
</tr>
<tr>
<td>To expand or collapse all groups</td>
<td>Click the arrow at the top of the list.</td>
</tr>
<tr>
<td>To open the full list for a group</td>
<td>Click the group name.</td>
</tr>
<tr>
<td>To see all records for a given group</td>
<td>Open the full list.</td>
</tr>
</tbody>
</table>

**Note:** The maximum number of records shown per group is the number of records per page in list view.

Use a grouped list in List v3

You can find information by grouping a list by a particular field. In the grouped by list view, you can change the grouped list focus, hide the visualization panel, or switch the graph view.

Role required: none

1. Right-click the column heading for the column to group by, and then select **Group By <column name>**.
   
   To undo a grouping, click **Ungroup** in the list footer.
The system groups the list by the column values and opens the grouping panel. Grouped order displays highest to lowest.
<table>
<thead>
<tr>
<th>Incident ID</th>
<th>Created</th>
<th>Description</th>
<th>Category</th>
<th>Priority</th>
<th>Status</th>
<th>Priority</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNC0000020</td>
<td>2017-02-14 04:37:12</td>
<td>Network file shares access issue</td>
<td>Critical</td>
<td>Critical</td>
<td>Hold</td>
<td>Critical</td>
<td>Network</td>
</tr>
<tr>
<td>PNC0000203</td>
<td>2017-02-21 04:37:30</td>
<td>Wireless access is down in my area</td>
<td>Critical</td>
<td>Critical</td>
<td>In Progress</td>
<td>Critical</td>
<td>Network</td>
</tr>
<tr>
<td>PNC0000007</td>
<td>2015-08-13 04:38:24</td>
<td>Need access to sales DB for the West</td>
<td>Critical</td>
<td>Critical</td>
<td>In Progress</td>
<td>Critical</td>
<td>Database</td>
</tr>
<tr>
<td>PNC0000008</td>
<td>2017-02-06 05:08:46</td>
<td>I can’t launch my VPN client since the last software update</td>
<td>Critical</td>
<td>Critical</td>
<td>Hold</td>
<td>Critical</td>
<td>Software</td>
</tr>
<tr>
<td>PNC000016</td>
<td>2017-02-01 05:10:23</td>
<td>Rain is leaking on main DNS Server</td>
<td>Critical</td>
<td>Critical</td>
<td>In Progress</td>
<td>Critical</td>
<td>Hardware</td>
</tr>
<tr>
<td>PNC000017</td>
<td>2015-08-13 05:11:00</td>
<td>How do I create a sub-folder</td>
<td>Critical</td>
<td>Critical</td>
<td>Hold</td>
<td>Critical</td>
<td>Inquiry</td>
</tr>
<tr>
<td>PNC000018</td>
<td>2017-02-07 05:12:46</td>
<td>Sales forecast spreadsheet is READ ONLY</td>
<td>Critical</td>
<td>Critical</td>
<td>In Progress</td>
<td>Critical</td>
<td></td>
</tr>
<tr>
<td>PNC000025</td>
<td>2017-01-30 05:03:46</td>
<td>Need to add more memory to laptop</td>
<td>Critical</td>
<td>Critical</td>
<td>In Progress</td>
<td>Critical</td>
<td>Hardware</td>
</tr>
</tbody>
</table>
2. Use any of the following actions to work with grouped records.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show or hide a group</td>
<td>In the <strong>Show All</strong> tab of the grouping panel, clear or select the check box by a group.</td>
</tr>
<tr>
<td>Focus on specific groups</td>
<td>In the <strong>Show Selected</strong> tab of the grouping panel, clear the check boxes of any groups you do not want to see.</td>
</tr>
<tr>
<td>Switch the graph view between a pie graph and a bar graph</td>
<td>In the grouping panel, use the graph toggle.</td>
</tr>
<tr>
<td>Show or hide the grouping panel</td>
<td>In the list footer, click <strong>Toggle group by</strong>.</td>
</tr>
</tbody>
</table>

**Note:** The maximum number of records shown per group is the number of records per page in list view.

**Filters and breadcrumbs**

A filter is a set of conditions applied to a table to help you find and work with a subset of the data in that table.

You can apply, modify, create, and save filters. A hierarchical list of conditions at the top of the table — breadcrumbs — indicates the current filter.

Breadcrumbs offer a quick form of filter navigation. They are ordered from left to right. The left condition is the most general, and the right condition is the most specific. Clicking a breadcrumb removes all the conditions to its right. Clicking the condition separator (>) before a condition removes only that condition.

By default, a user with no roles cannot see the breadcrumbs or filter. Administrators can configure the ESS portal to allow unauthenticated users to see breadcrumbs and filters by using a script include. For more information on using script includes to suppress breadcrumbs and filters, see *Use script includes to suppress filters and breadcrumbs*.

**Note:** In List v3 split mode, you cannot edit the filter from the breadcrumb. Click the filter icon in the left pane to open the filter conditions in the right pane for editing.
Examples:

- Clicking **Priority = 2** removes the condition **Category = Software** and returns all active incidents with a priority of 2.
- Clicking the condition separator (>) before **Priority = 2** removes the condition **Priority = 2** and returns all active incidents in the software category.
- Clicking **All** removes all conditions and returns all incidents in the system.

Click a breadcrumb to refresh the list of records and show the latest information for those records.
Note: Clicking the **New** button in a filtered list automatically applies the same filter to the new record. For example, clicking **New** in the Resolved Incidents list opens a record preset with **State** set to **Resolved**. In a list filtered for active, priority 1 incidents, clicking **New** opens a record preset with **Active** selected and **Priority** set to **1 - Critical**.

You can change the preset values on the form as needed. If there is a field you do not want to have populated in this way, you can add the following dictionary attribute to the field: `ignore_filter_on_new=true`.

Additional navigational functions are available when you right-click a breadcrumb.

**Breadcrumb right-click options**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open new window</td>
<td>Opens the results list for the breadcrumb in a new tab or window.</td>
</tr>
<tr>
<td>Copy URL</td>
<td>Copies the URL to the clipboard for the results list of the breadcrumb. Follow browser instructions if browser security measures restrict this function.</td>
</tr>
<tr>
<td>Copy query</td>
<td>Copies the encoded query to the clipboard for the breadcrumb. You can use this query in the URL of an instance or in the reference qualifier field of a dictionary entry. For example, if you are viewing a list of all active incidents with a high or medium impact, right-click the breadcrumb and copy the query <code>active=true^impact=1^ORimpact=2</code>. You can append this query to the end of the instance URL as follows: <code>https://{instance_name}/incident_list.do?sysparm_query=active=true^impact=1^ORimpact=2</code>. This selection is not available for the <strong>All</strong> breadcrumb.</td>
</tr>
</tbody>
</table>

**Quick filters**

To quickly filter a list using a value in a field, right-click in the field and select **Show Matching** or **Filter Out**. For date fields, choose from **Show Before**, **Show After**, and **Filter Out**.

These functions add a condition to the right in the breadcrumb of the current filter.
In this example, right-clicking **In Progress** and selecting **Show Matching** adds the condition `State = In Progress` as the most specific condition of the filter. By contrast, right-clicking **In Progress** and selecting **Filter Out** adds the condition `State != In Progress` as the most specific condition of the filter.

For date and date-time fields, you can also use **Show After** or **Show Before** to define a time-based filter.

Using the quick filter method to filter out a particular value builds the following conditions: `(field) (is not) (value)` or `(field) (is) (empty)`. Records that contain empty or null values still display in the filtered list. If you manually create a filter, it does not automatically include the OR condition `(field) (is) (empty)`, so records that have an empty or null value do not display in the filtered list.

### Filters

A filter restricts what records appear in a list by providing a set of conditions each record must meet to be included in the list.

A condition consists of the following parts.

- **Field**: Each field contains data from a particular column in the table. Selecting a reference field allows you to dot-walk to data from other tables.
- **Operator**: Each field type has its own set of valid operators. The operator determines if a value is needed.
- **Value**: Each field has its own set of valid values determined by the field type. Reference fields have access to auto-complete, and choice lists provide a list of options.
- **Grouping**: Each condition line is grouped with either an AND or OR connector. The filter requires all condition lines linked with an AND connector to be met. The filter separately evaluates each condition line linked with an OR connector.

List v3 provides the **Related Lists Conditions** section that allows you to include a condition based on a related table.

Create filters on a list using the condition builder.
Related list conditions in List v3

By default, all lists allow you to filter on the current table data, which includes dot-walking to fields in referenced tables. In v3 lists, another type of condition, Related Lists Conditions, is available in the condition builder. For more information, see Add related list conditions.

Pin a filter in List v2

To make the condition builder appear every time you open the list, click the pin/unpin filter icon ( ). This functionality is not supported in List v3.

Create a filter in List v2

You can create a filter to restrict what records appear in a list by providing a set of conditions. When you run the filter, only records that meet the specified conditions are listed.

Role required: none

1. Open the condition builder by clicking the show/hid filter icon ( ).

   If the icon is disabled and the breadcrumb has a related list condition in it, you must remove the related list condition to open the filter. The condition was created when the List v3 was enabled for this list. List v2 does not support related list conditions. For more information about related list conditions, see Add related list conditions.

2. Select a field from the list.

   The field type determines the available operators and values. For example, the Active field can have a value of true, false, or empty, while a text field can have many different values. Similarly, the greater than operator does not apply to the Active field, but it does apply to the Priority field. For more information, see Condition builder.

3. Select or enter a value, if appropriate.

4. Add or remove conditions to construct the desired filter by completing one or more of the following steps.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>To add a top-level condition</td>
<td>Click AND or OR on the condition builder toolbar, above the conditions.</td>
</tr>
<tr>
<td>To add a dependent condition</td>
<td>Click AND or OR beside the condition.</td>
</tr>
<tr>
<td>To remove a condition</td>
<td>Click x beside the condition.</td>
</tr>
</tbody>
</table>

   Note: To find all records that do not contain the specified value, create a filter with two conditions: (field) (is not) (value) or (field) (is) (empty).
6. To specify the sort order of the results, click **Add Sort** and then select a field to sort by and a sort order.

7. Optional: Click **Save** to keep the filter for future use. For more information, see *Save and use filters in a list view.*

8. Click **Run** to apply the filter.

### Create a filter in List v3

You can create a filter to restrict what records appear in a list by providing a set of conditions. When you run the filter, only records that meet the specified conditions are listed.

**Role required:** none

The filter can include conditions from a related list. For example, you filter the problem list to show high-priority problems. You can add a related list condition to include only those high-priority problems that have one or more related incidents.

**Note:** List v3 is supported only in UI16.

1. Click the show / hide filter icon ( ) beside the breadcrumbs in UI16.

2. Select a field from the first choice list.

   You can dot-walk to a field on a referenced table, as shown in the following example. An arrow icon appears beside each reference field. Click the arrow to open additional reference fields to the right to find the field to use.
3. Select an operator from the next choice list. The field type determines the available operators and values. For example, the Active field can have a value of true, false, or empty, while a text field can have many different values. Similarly, the greater than operator does not apply to the Active field, but it does apply to the Priority field. For more information, see Condition builder.

4. Select or enter a value, if appropriate.

5. Add or remove conditions to construct the desired filter by completing one or more of the following steps.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add a top-level condition</td>
<td>Click New Criteria below the condition builder.</td>
</tr>
<tr>
<td>Add a dependent condition</td>
<td>Click AND or OR beside the condition.</td>
</tr>
<tr>
<td>Remove a condition</td>
<td>Click the remove condition icon (#) beside the condition.</td>
</tr>
</tbody>
</table>
Option | Description
--- | ---
Add a related list query | Click **RELATED LISTS CONDITIONS** below the condition builder. Select a relationship from the **Table** choice list and the number of records to include in the result. Optionally, select the field, operator, and value for the related table.

Related list queries add the ability to quantify the related list query, which you cannot do if you dot-walk to the related field. For more information, see **Add related list conditions**.

**Note:** To find all records that do not contain the specified value, create a filter with two conditions: `(field) (is not) (value)` or `(field) (is) (empty)`.

6. To specify the sort order of the results, click **Add Sort**, and complete the following steps.
   a) Select a field to sort by and select a sort order.
   b) Optional: Click the add condition icon (+) beside the sort condition to add an extra level of sorting.
      For example, you can sort a list of incidents by state, then sort incidents of the same state by date opened.
   c) Optional: Click the remove condition icon (-) beside a sort condition to remove it.
   d) Click **Run Sort**.

You cannot add **Keywords** to the filter more than once.

7. Optional: Click **Save Filter** to keep the filter for future use. For more information, see **Save and use filters in a list view**.

8. Click **Run** to apply the filter.

**Add related list conditions**

Related list conditions allow you to include a relationship with another table in the filter. Related list conditions are supported only in List v3.

Role required: none

You can optionally include conditions on the related table. For example, you can filter active problems with one or more related incidents that are in the **Canceled** state. Another example is to filter incidents with a breached service level agreement (SLA).

The List v3 filter contains two sections, one for the current table conditions and one for related lists conditions. You can include only one related table in the query, however, you can add multiple conditions for that table.
The easiest way to understand the parts of a related list condition is to use an example. The steps below use the example of open problems with some number of related incidents. You can perform these steps for any list view that supports List v3.

1. For this example, navigate to Problems > Open.
2. Open the list filter and select the conditions for the current (Problem) table.
   The (State) (is) (Open) condition is already added.
3. Click RELATED LISTS CONDITIONS to expand the section.
4. From the choice list, select the table relationship to include in the query.
   For this example, select Incident>Problem. You can select any table that you have access to view.
5. To select a quantifier, click Greater Than Or Equal To 1.
   The Quantity popover opens.
6. Select a quantity, enter number of records in the related table that must match, and then click X to close the popover.

The default number is 1. Following are descriptions and examples of each quantifier for this example.

- **Greater Than Or Equal To**: Returns problem records where the number of related incidents is greater than or equal to the number you enter. A value of 5 includes problems with five or more related incidents. Problem records with 4 or fewer incidents are not returned.
- **Greater Than**: Returns problem records that have more than this number of related incidents.
- **Less Than Or Equal To**: Returns problem records that have the number or fewer than the specified number of related incidents. A value of 1 includes problem records with one or no related incidents.
- **Less Than**: Returns problem records with fewer than the number of related incidents. A value of 1 returns problems with no related incidents.
- **Equal To**: Returns problems with this number of related incidents. A value of 5 includes problem records with exactly five related incidents.
- **None**: Returns problems that do not match the specified table relationship. A selection of None returns problems with no related incidents.
- **Between**: Returns problems with any number of related incidents that is between the two numbers you enter. Between values of 5 and 10 include problem records with 5, 6, 7, 8, 9, or 10 related incidents.

7. Optional: Enter one or more conditions for the related table. Click New Criteria to add another condition.

The following image shows the example of filtering for problem records with more than two related incidents that are critical priority.
Note: You cannot perform a keyword search in a related table condition.

8. Click **Run** to execute the filter query.

The breadcrumb displays **Related List condition...**. Open the filter to view the related list query statement.

List breadcrumb and the related list condition query statement

Note: If List v3 is disabled for a list with a related list condition query in the default filter, the filter edit function is disabled. Remove the related list condition to enable list filter editing.
OR conditions
The condition builder uses two different types of OR conditions: top-level and dependent.

Using a dependent OR condition, you can specify alternative criteria to a single operation. Dependent OR conditions work in the manner A and (B or C). When you have an OR condition in the query, the magnifying glass is no longer available. The conditions you put in the quick search headers are ANDed together. Having an OR makes it ambiguous as to where the new condition should go, for example before the OR, or after the OR.

For example, to return a list of all unassigned problem and incident records from the Task table, create a filter with a dependent OR on the Number field.

- (Assigned to) (is) (empty) AND (Number) (begins with) (PRB) OR (Number) (begins with) (INC).
A top-level OR condition allows you to display the results of multiple filter criteria in a single list. Top level OR conditions work in the manner (A and B) or (C and D).

For example, to return a single list of all active incidents with a category of hardware, and all inactive incidents with a category of software, create two condition sets separated by a top-level OR condition.

- (Active) (is) (true) AND (Category) (is) (Hardware)
- Top level OR condition
- (Active) (is) (false) AND (Category) (is) (Software)
Top level OR List v2

In List v3, select the New Criteria button in the condition builder to create a new top-level OR condition.
Top level OR List v3

Top-level and dependent OR conditions can be used together. Filters using both types of OR conditions work in the manner (A or B) or (C or D). By mixing AND conditions with top-level and dependent OR conditions, you can create very specific filters.

**Filter on multiple string values**
For a string field, you can create a filter that searches for multiple values by creating a comma-delimited list.

This feature enables administrators to copy and paste search criteria from a Microsoft Excel spreadsheet into a filter, for example.

**Note:** Do not use the *(is one of)* operator on fields that contain commas, as the query does not return the expected set of records. Instead, create a filter using multiple *(or)* statements.

1. Create the filter with the *(is one of)* or *(is not one of)* operator.
   Depending on the selected field, a choice list or a text box appears.
2. Select one or more of the options by using multiple selection key commands.
   The choice list remains visible.
Alternatively, for text or number fields, type your search options. Separate the options by commas or put each option on a separate line, and do not enclose the selections in brackets.

3. Click **Run** to filter the list.

   The filter conditions appear as a comma-delimited string at the top of the results list.
Comma-delimited filter string

**Dynamic operators**
The dynamic operator, **is (dynamic)**, lists predefined dynamic filter options where the condition value is computed from a value in a reference field.

The following dynamic filter options are available by default.

**Note:** Administrators can create new dynamic filter options.

<table>
<thead>
<tr>
<th>Default dynamic filter options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target table of reference field</strong></td>
</tr>
<tr>
<td>User (sys_user)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Target table of reference field | Option label | Description
--- | --- | ---
Users With Roles | Users With Roles | The reference field contains users that have any role.
Group (sys_user_group) | One of My Groups | The reference field contains a group to which the current user belongs.

The following table contains examples and descriptions of dynamic filter conditions.

### Example of using the dynamic operator

<table>
<thead>
<tr>
<th>Field</th>
<th>Operator</th>
<th>Dynamic filter option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caller</td>
<td>is (dynamic)</td>
<td>Me</td>
<td>Computes the value of Caller based on the current user viewing the list.</td>
</tr>
<tr>
<td>Assignment group</td>
<td>is (dynamic)</td>
<td>One of My Groups</td>
<td>Computes the value of Assignment group based on the current user viewing the list.</td>
</tr>
</tbody>
</table>

### Save and use filters in a list view

Depending on your access rights, you may save filters for everyone, a user group, or yourself. You can apply saved filters and edit or delete them.

Role required: varies depending on action. See procedure.

**Note:** A new Create ACL allows all users to save filters by default. This overrides any custom ACLs in place if administrators are restricting filter access. The new ACL gives all users access to the User field by default, and access to the Group field only if users have the filter_group role and are in the currently selected group.

1. Create or modify a filter in the filter interface.
2. Click **Save...** (or **Save Filter** in List v3).
3. Enter a name for the filter.
4. Select one of the following visibility options.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me</td>
<td>Creates a personal filter, which only you can access. If you do not have Write access to the User field, this option will not be available. See your administrator for more information.</td>
</tr>
<tr>
<td>Everyone</td>
<td>Creates a global filter, which all users can access. This option is available to users with the filter_global role.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>Group</td>
<td>Creates a group filter, which only members of the user group you select can access. This option is available to users with the filter_group role. If you do not have Write access to the Group field, this option will not be available. See your administrator for more information.</td>
</tr>
</tbody>
</table>

5. Click **Save** (or **Submit** in List v3).

| Note: In UI15, click the **Save** button that appears to the right of the visibility options, as opposed to the **Save...** button at the top. |

6. To use a saved filter, select the filter name in the list title menu. The filter runs and the breadcrumbs appear.

7. Click **Save** (or **Submit** in List v3).

8. To use a saved filter, select the filter name in the list title menu (List v2) or open the filter interface and select **Load Filter** (List v3). The filter runs and the breadcrumbs appear.
9. To edit or delete personal filters, complete the appropriate action for your list version.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>Select <strong>Edit personal filters</strong> from the title menu.</td>
</tr>
<tr>
<td>List v3</td>
<td>Select the edit filter icon, click <strong>Load Filter</strong>, and then click <strong>Manage Filters</strong>.</td>
</tr>
</tbody>
</table>

10. Complete the following steps.
   a) Click the title of the filter to edit.
   b) Update the filter title or add or remove conditions.
   c) Optional: To delete the filter, click **Delete** and confirm deletion.
   d) If you edited the filter, click **Update**.

**Filter admin functions**

Administrators can work with filters in the Filters table (sys_filter), including creating, editing, and deleting filters.

Administrators can also create scripted filters that cannot be created in the condition builder. Scripted filters required a knowledge of JavaScript. Scripted filters can be used to create additional **dynamic filter options**.

**Create and edit filters**

Administrators can create filters and edit any saved filter.

Role required: admin

1. Navigate to **System Definition > Filters**.
2. To create a filter, complete the following steps.
   a) Enter a **Title** and select the **Table**.
   b) Add filter conditions.
c) Click **Submit**.

3. To edit a saved filter, select the filter to edit and complete the following steps.
   a) Modify the **Filter** conditions as necessary.
   b) Click **Update**.

*Delete filters*

You can delete any saved filter, including global, group, or personal filters.

Role required: admin

1. Navigate to **System Definition > Filters**.
2. Optional: To see who created the filter and when, personalize the list to add the **created_by** and **created** fields to the list.
3. Optional: To see who has access to the filter, configure the list to add the **user**, **group**, or **domain** fields.
   - Filters that are not assigned to a user or group are global.
4. Select the filter to delete.
5. Click **Delete** and confirm the deletion.

*Create scripted filters*

The condition builder alone cannot create some filters, such as displaying a record set that depends on an unrelated table. If you know JavaScript, you can create JavaScript functions for use in advanced filters.

Role required: admin

1. Create a new script include.
   a) Navigate to **System Definition > Script Includes**.
   b) Click **New**.
   c) Fill out the form, and then select **Submit**.
2. Open the script include and, in the **Script** field, create a JavaScript function that returns an array of **sys_ids**.
   - Ensure that the function uses the same name as the script include.
   - Ensure that the script include is **Active** and **Client callable**.
3. Call the JavaScript function from the condition builder.
   For more information, see **GlideRecord queries** and **Script includes**.

A company provides intensive care for a group of customers. To track these services, the service manager needs a high-level journal and links to all incidents that the customers raise.

The company creates an application, Intensive Care, and a table, (u_intensive_care). While the table contains a reference field for the customer name, there is no direct link to the user table. Thus, the manager cannot set up an incident list filter using the condition builder for customers who are under intensive care.

The solution is to write a JavaScript function that uses a GlideRecord query to build an array of user sys_ids in the (u_intensive_care) table, as shown in the sample
code below. Call the function from the condition builder in the Incident table `((Caller) (is) (javascript:myFunction()))`.

```javascript
function myFunction () {
    var arrUsers = [];
    gr = new GlideRecord ( 'u_intensive_care' );
    now_GR. query ( );
    while (now_GR. next ( ) ) {
        arrUsers. push (now_GR. u_customer. toString ( ) );
    }
    return arrUsers;
}
```

Create a dynamic filter option
Dynamic filter options enhance filtering by allowing users to run existing script includes or JavaScript against a reference field within condition builders and dynamic reference qualifiers.

Role required: admin

This task describes how to create a new dynamic filter option and an associated script include.

Dynamic filter options "objectize" script includes/JavaScript, enabling them to be reused in multiple condition builders and dynamic reference qualifiers. This type of filter enables you to modify a script once and have the changes automatically take effect everywhere the dynamic filter option is used.

When defining a dynamic filter, you can:

- use an existing is (dynamic) dynamic filter option (condition builder only)
- use an existing dynamic filter option (OOB or custom)
- create a new dynamic filter option and script include/JavaScript

All condition builder dynamic filters use the is (dynamic) operator and call a dynamic filter option. In the following example, the pre-existing dynamic filter option Me is being used. For a list of available pre-existing condition builder dynamic filter options, see Dynamic operators.

**Note:** Dynamic filters are not supported in scoped applications or UI policy conditions.
Dynamic operands

1. Create a scripted filter as a client-callable script include or business rule.
2. Navigate to System Definition > Dynamic Filter Options.
3. Click New.
4. Complete the form.

**Dynamic filter options**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>Enter a descriptive name for the dynamic filter option.</td>
</tr>
<tr>
<td>Script</td>
<td>Enter the name of the function you created, JavaScript (no script include needed), or the complete script include/business rule call, such as <code>new GlobalCanvasUtil().refQualPaTabs()</code>.</td>
</tr>
<tr>
<td>Field type</td>
<td>Select Reference.</td>
</tr>
<tr>
<td>Referenced table</td>
<td>Select the table to which this dynamic filter option applies.</td>
</tr>
<tr>
<td>Order</td>
<td>Enter a number to designate the placement of this dynamic filter option in the filter option choice list.</td>
</tr>
<tr>
<td>Roles</td>
<td>Select the role a user must have to see this option.</td>
</tr>
<tr>
<td>Active</td>
<td>Enable or disable the option.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Reference script</td>
<td>Optional. Select the client-callable script include or business rule you created for the scripted filter. If the Script field contains JavaScript, an encoded query, or the entire script include/business rule reference, this field can be empty.</td>
</tr>
<tr>
<td>Available for filter</td>
<td>Select this option to display the dynamic filter option as a filter breadcrumb.</td>
</tr>
<tr>
<td>Available for default</td>
<td>Select this option to allow dynamic filter option to be a default in a dictionary entry.</td>
</tr>
<tr>
<td>Available for ref qual</td>
<td>Select this option to allow dynamic filter option to be selected as a dynamic reference qualifier.</td>
</tr>
</tbody>
</table>

5. Click **Submit**.

**Encoded query strings**

An encoded query string represents a complex filter on a list of records.

Use encoded query strings to include a filter as part of a URL parameter, such as the *Navigate to a record or module using a URL*, or as a *reference qualifier* to restrict the data that is selectable for a reference field.

To construct an encoded query string, generate a list query and then *copy it from the list filter*. This is the preferred method because the alternative is to create the string manually.

In order to create an encoded query string manually, you need to know the relevant table and field names and *operators*.

**Encoded query string examples**

<table>
<thead>
<tr>
<th>Title</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referring to Boolean or string values</td>
<td>To create a query string on Boolean fields, use this syntax: field=true or field=false. For example, to return only active records in a table, use:</td>
</tr>
<tr>
<td></td>
<td>active=true</td>
</tr>
<tr>
<td></td>
<td>To create a query string with a field that has a specific string value, use this syntax: field=value. For example, to return incident records where the category is network, use:</td>
</tr>
<tr>
<td></td>
<td>category=network</td>
</tr>
<tr>
<td>Referring to reference fields</td>
<td>To create a query string that refers to a reference field in another table, use this syntax: field_in_referenced_table=value. For example, to return users with the itil role in the Assigned to reference field on the Incident form, use:</td>
</tr>
<tr>
<td></td>
<td>roles=itil</td>
</tr>
<tr>
<td>Title</td>
<td>Example</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Referring to choice list values | To create a query string that refers to a choice list option, use the value of the choice list, not the label, with this syntax: choice list field=value. For example, to return configuration items (CIs) with the status **Installed**, which has a value of 1 in the choice list, use:  

```
install_status=1
```

See *Values to associate with choice labels for scripting* to find the options for the values. |
| Using multiple conditions     | To use two conditions joined by an AND operator, use the carat ^ symbol in this syntax: field1=value1^field2=value2. For example, to return all active users with the 'itil' role, use:  

```
active=true^roles=itil
```

To use two conditions joined by an OR operator, use the carat symbol with OR with this syntax: field1=value1^ORfield1=value2. For example, to return all users with either the 'itil' or 'admin' roles, use:  

```
roles=itil^ORroles=admin
```

To add multiple conditions where one condition is a JavaScript function, use this syntax:  

```
javascript:'active=true'^ + function().  
```

The function must return a string that can be concatenated with the first string to produce a valid query string. For example, to return all active users and meet the conditions of the getGroupQualifier() function, use:  

```
javascript:'active=true'^ + getGroupQualifier() 
```
<table>
<thead>
<tr>
<th>Title</th>
<th>Example</th>
</tr>
</thead>
</table>
| Listing values in order       | To sort data by a specific field, use the ORDERBY condition with the following syntax: `field1=value^ORDERBYfield2`. For example, to return the days of the week in order from the Day of the Week (sys_cal_unit) table, use:  
  
  `unit_name=day^ORDERBYvalue`  
  
  In the Day of the Week table, `unit_name` is the field that specifies day, week, or month, and `value` is a numerical value for each day from 1 (Monday) to 7 (Sunday). The query string returns a list of the days of the week in order from the lowest value, which represents Monday, to the largest value, which represents Sunday.  
  
  **Note:** Reference qualifiers do not support the ORDERBY condition. In reference qualifiers, you can sort the reference lookup list by using standard list controls. To specify the order of an auto-complete list for a reference field, use the `ref_ac_order_by` dictionary attribute. |
| Including a related list query | At the end of the query statement, enclose the related list information with ^RLQUERY and ^ENDRLQUERY and the quantity. For example, in a query on the Problem table that includes problems with at least one related incident, use:  
  
  `^RLQUERYincident.problem_id,>=1^ENDRLQUERY`  
  
  You can also specify conditions on the related table. For example, to include the condition that at least one of the related incidents is critical priority, use:  
  
  `^RLQUERYincident.problem_id,>=1^priority=1^ENDRLQUERY`  
  
  **Note:** Related list queries must be enabled in System PropertiesList v3. Select the Allow related list query conditions to be added through the filter check box to enable it. You can build a related list query for a list that uses List v2, however, the filter conditions cannot be modified until you removed the related list condition in the breadcrumb. |
Including a search term query

To include a search term in a query, use the 123TEXTQUERY321 reserved variable. For example, to return results with the ‘email’ search term, use this encoded query string.

123TEXTQUERY321=email

Including a text index group query

To include a text index group in a query, use the 123TEXTINDEXGROUP321 reserved variable. For example, to return results within the portal_index_group text index group in the Text Index Groups (ts_index_group) table, use this encoded query string.

123TEXTINDEXGROUP321=portal_index_group

Generate an encoded query string through a filter

You can generate an encoded query string through a filter on any list and paste the string into a URL query or a reference qualifier.

Role required: none

1. Open a list of records.
2. Construct the filter.
3. Click Run.
4. Right-click the end of the filter breadcrumb and select Copy query from the context menu.

Copy the query from the breadcrumb

If you are in split mode in List v3, right-click the blue filter text in the left pane.

5. Copy the query to your system clipboard.
6. Use the query string to Navigate to a record or module using a URL or an advanced reference qualifier.
When you use the CONTAINS operator on a list filter, the system translates the filter to a LIKE query. For example, if you filter for active records with numbers that contain 123, the URL is https://InstanceName.service-now.com/incident_list.do?sysparm_query=active%3Dtrue%5EGOTOnumberLIKE123.

Methods for list edits

Users can edit data in lists using various methods.

Quick edit functions

To edit a record in a list using quick edit functions, right-click a field and select the appropriate function.

Assign to me

For records that use assignments, places the name of the logged-in user into the Assigned to field.

Approve

For records that use approvals, changes the approval state of the record to Approved.

Reject

For records that use approvals, changes the approval state of the record to Rejected.

Assign tag

For records you want to track based on a user-defined label, lets you select an existing tag or add a tag.

List editor

The list editor lets you edit field values in a list without opening a form. Administrators can configure the list editor. By default, list editing is disabled for some tables. Fields of certain types cannot be edited from lists.

Multiple record edits

You can edit more than one record at the same time using the list editor or an editing form.

Use the list editor

The list editor allows you to edit field values directly from a list without navigating to a form.

Role required: none

The list editor lets you edit field values in a list without opening a form. Administrators can configure the list editor. By default, list editing is disabled for some tables. Fields of certain types cannot be edited from lists.

Before the list editor opens, access rights to edit the field are verified. If this process takes longer than expected, a loading indicator appears. In List v2, if the field has a dependency relationship
(for example, Category and Subcategory), then a composite editor opens to allow editing of all dependent fields. You must have rights to edit all dependent fields to use the list editor.

1. Double-click in an empty area of the field. The appropriate editor for the field type opens. For v2 lists, you can enable single-click editing from the list personalization interface. You can also use keyboard navigation to access the list editor.

2. Enter the appropriate values.

3. Save the records by performing the appropriate action for your list version.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>Click the save icon (✓), click the cancel icon (✗) or press the Escape key to retain the original value.</td>
</tr>
<tr>
<td>List v3</td>
<td>Click Save, Press the Escape key or click outside the dialog box to retain the original value.</td>
</tr>
</tbody>
</table>

4. To use keyboard navigation in List v2, press the Tab key until the first field in the list is selected, and then select the field to edit in one of the following ways.
   - Move right: Tab or the Right Arrow key.
   - Move left: Shift + Tab or the Left Arrow key.
   - Move down: the Down Arrow key.
   - Move up: the Up Arrow key.

   To select multiple fields in the same column, hold Shift and press the Down Arrow or the Up Arrow key.

5. Press the Enter key to open the list editor.

6. Enter a new value. To add another line in a multi-line text field, press Shift + Enter.

7. Save or cancel your changes in one of the following ways:
   - Press the Enter key. The new value is saved and the field below the edited field becomes selected.
Press the Tab key. If the list is configured to save immediately, the new value is saved. If the list is configured to save data by rows, an indicator appears beside the value and the list editor opens for the next field. The row is saved only when you navigate away from the row or click the check mark icon beside the row.

Press Ctrl + Enter keys. If the list is configured to save immediately, the new value is saved. If the list is configured to save data by rows, an indicator appears beside the value and the current field remains selected.

Press the Esc key. The list editor closes without saving changes and the field remains selected.

**Note:** Certain browsers use different key combinations to edit certain field values. For example, to edit a choice list using Chrome, press the Spacebar.

Create a record from a list row

Users can create records by inserting a new row in the list.

Role required: any role required to create records on the table

Administrators can configure the list editor to enable this feature for lists.

**Note:** This feature is not supported in List v3. When this feature is enabled for a list, the list displays in List v2.

1. Navigate to the empty row at the bottom of the list.
2. Open the list editor for a field in the row and enter a value.
3. Save or cancel your changes.

Insert a new row (record)

Edit multiple records in a list using the list editor

You can edit multiple records at the same time using the list editor. If you want to update a single field on multiple records to have the same value, the list editor is the quickest method.

Role required: none

1. Select the records you want to edit by performing one of the following actions.
   - To select multiple consecutive fields, hold Shift and drag in the desired fields, or select a cell and then press Shift + Up Arrow or Shift + Down Arrow.
   - To select multiple non-consecutive fields, press Shift and click in one of the desired fields, then hold Shift + Ctrl (Shift + Command on Mac), and click in the desired fields.
2. Open the list editor by double-clicking (or clicking, depending on setup) in an empty area of the field.
The number of selected rows that you are editing is indicated. If any rows cannot be edited due to security constraints, that is indicated.

Selected fields are highlighted in blue.

3. Enter the appropriate values and click Save.

**Edit multiple records in a list using an editing form**

You can edit multiple records at the same time using an editing form. If you want to edit multiple fields or fields that do not appear in the list view, use an editing form.

Role required: list_updater

Depending on your ACL settings, some of these options might not be available even with the right role. For example, if the list is task.list and users try to select multiple incident records from that task list, the form uses the task form and not the incident form so ACLs on task are enforced instead. Since users would not have access to task specifically, the form would not show any fields.

1. Perform one of the following actions.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update selected records</td>
<td>1. Select the check box by each row you want to edit.</td>
</tr>
<tr>
<td></td>
<td>2. Perform the appropriate action for the list version:</td>
</tr>
<tr>
<td></td>
<td>- List v3: Open the list title menu and select Update Selected.</td>
</tr>
<tr>
<td></td>
<td>- List v2: Right-click any column header and select Update Selected.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Update all records in the list| 1. Filter the list so it contains only the rows you want to edit.  
2. Perform the appropriate action for the list version:  
   - List v3: Open the list title menu and select Update All.  
   - List v2: Right-click any column header and select Update All.                                                                                   |

An editing form opens.

2. Enter appropriate values in any of the fields and click **Update** to save your changes in all selected records.

### Personal lists

Users can create personal lists to customize which columns appear and the order in which they appear. Personal lists modify a specific list view according to individual preferences.

Personal list customizations do not affect what other users see in their lists. Administrators can **manage** the personal lists function.

*Note:* In List v2, some general list preferences are available in the list personalization interface. The List v3 list personalization interface does not contain these preferences. Some of the preferences are located in the Lists section of the system settings. Others do not apply to List v3 or are not supported.

### Personalize a v2 list

In List v2, you can personalize a specific list view based on individual preferences.

1. Open the list.
2. Click the personalize list icon (🛠️) in the upper left corner. The Personalize List Columns window opens.
3. Use the slushbucket to select the columns and the desired order. Values in the first column appear as links. If the first column is not a reference field, the link opens the record from the list, as expected. If the first column is a reference field, the link opens the record from the referenced table. This behavior can be confusing. For this reason, avoid using a reference field as the first column.

4. Select display options.

   Note: These options apply to all v2 lists, not just the view you are personalizing.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display long text on more than one line</td>
<td>Select the Wrap column text check box. Clear the check box to display text on one line.</td>
</tr>
<tr>
<td></td>
<td>In UI16, this option is also available in the Lists section of the system settings.</td>
</tr>
</tbody>
</table>
5. **Select list editing options (requires you to configure the list editor).**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condense the vertical space between rows</td>
<td>Select the <strong>Compact rows</strong> check box. Clear the check box to use standard row spacing.</td>
</tr>
<tr>
<td>Highlight list rows as the cursor passes over them</td>
<td>Select the <strong>Active row highlighting</strong> check box. Clear the check box to restore the static, alternate row highlighting.</td>
</tr>
<tr>
<td>Use updated field status indicators</td>
<td>Select the <strong>Modern cell coloring</strong> check box. In UI16, this option is also available in the <strong>Lists</strong> section of the <strong>system settings</strong>.</td>
</tr>
</tbody>
</table>

   **Note:** These options apply to all v2 lists, not just the view you are personalizing.

6. **Click OK.**

   The list reloads to show the changes. If you personalized the columns, an indicator appears on the personalize list icon (🔧).

   To reset a list to the default layout, click the personalize list icon and click the **Reset to column defaults** button.

### Personalize a v3 list

In List v3, you can personalize a specific list view based on individual preferences.

Role required: none

1. **Open the list.**
2. **Click the list title menu icon and select** **Personalize List Columns.**

   The Personalize Columns window appears.
### Perform any of the following actions.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Add columns</strong></td>
<td>In the <em>Available</em> section, select the check box by each column you want to add. Use the search field to find a specific column.</td>
</tr>
<tr>
<td><strong>Remove columns</strong></td>
<td>In the <em>Available</em> section, clear the check box by each column you want to remove. Alternatively, in the <em>Selected</em> section, point to a column and click the delete icon (X).</td>
</tr>
<tr>
<td><strong>Rearrange columns</strong></td>
<td>In the <em>Selected</em> section, drag columns in the desired order.</td>
</tr>
</tbody>
</table>
Values in the first column appear as links, which open the record from the list. If the first column is a reference field, the open reference value icon (🔗) appears by the value. Click the icon to open the record from the referenced table.

4. Click **Save**.
   The list reloads to display the changes.

To reset a list to the default layout, open the list personalization interface and click the **Reset Columns** button.

**Comparison of List v2 and List v3**

There are several differences between List v2 and List v3. List v3 is no longer available for new deployments. If you are already using list v3, you may continue to do so.

List v2 is the default version of lists and is supported in all versions of the UI. Even when List v3 is activated, some UI16 lists may display in List v2. For details, see [List v3 compatibility](#).

List v3 performance is different from performance in List v2. Based on your instance configuration and the complexity of the query, List v3 may load records more slowly than List v2.

In List v2, the list editor does not enforce client scripts or UI policies. In List v3, the list editor enforces UI policies and mandatory dictionary attributes, but not client scripts. Allowing list editing with client scripts running on fields in a form can result in incorrect data being saved to the record. For more information on list administration and using business rules and client scripts, see [List editor administration](#).

**Visual differences between List v2 and List v3**

If you are unsure whether a list is v2 or v3, look for the following identifiers.

- The personalize list gear icon appears in the upper left corner of v2 lists. The personalize list option is located in the **List title menus**.
- Page controls appear in the list title bar of v2 lists.
- The list mode toggle appears in the list title bar of v3 lists. You can switch between the standard list mode, called **Grid** mode, and a **Split** list and form mode.
- Avatars appear by user names in v3 lists.
- Page controls appear in a footer at the bottom of the page for v3 lists.
- The response time indicator does not appear on the bottom, right of v3 lists. You can create a property to display the response time in milliseconds (ms) on the lower left in the List v3 footer.
List v2 identifiers
List v3 identifiers

List features

Most List v2 features are supported in List v3 as well, with the following exceptions.
Features that are not supported in List v3

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hierarchical lists</td>
<td>Tables that have hierarchical lists enabled display in List v2.</td>
</tr>
<tr>
<td>Embedded lists</td>
<td>Embedded lists display in List v2.</td>
</tr>
<tr>
<td>Create a basic list report</td>
<td>List reports display in List v2.</td>
</tr>
<tr>
<td>Customizing list title or list column heading menus</td>
<td>Options added to list context menus using the Context Menu (sys_ui_context_menu) table do not appear in List v3. Because it is only possible to customize the list title menu or list column heading menu by editing records on the Context Menu table, it is not possible to customize these menus in List v3. Administrators can customize list field menu options by editing UI actions.</td>
</tr>
<tr>
<td>Detail rows</td>
<td>Detail rows do not appear in List v3.</td>
</tr>
<tr>
<td>Composite fields</td>
<td>Links do not display in composite fields, and the different field values may appear on the same line in List v3.</td>
</tr>
<tr>
<td>Limiting access to list column personalization</td>
<td>Administrators cannot disable list column personalization or control which user roles can personalize list columns in List v3.</td>
</tr>
<tr>
<td>Administering certain list editor capabilities</td>
<td>Administrators cannot configure which field types are editable and cannot enable single-click list editing for v3 lists. In List v3, the list editor enforces UI policies and mandatory dictionary attributes.</td>
</tr>
<tr>
<td>Configuring when related lists load</td>
<td>When List v3 is enabled for related lists, all related lists load asynchronously after the form loads, even if there are no v3 related lists on the form.</td>
</tr>
<tr>
<td>Creating default filters for related lists</td>
<td>The <strong>Set as Default Filter</strong> button is not available in the filter interface for v3 related lists.</td>
</tr>
</tbody>
</table>

**List title menus**

The list title menu contains several options related to the list.

Some of the options displayed in the list title menu depend on the list version, the user role, and the installed applications. The List v3 list title menu contains several options that appear in the list column context menu in List v2.

To open the list title menu, click the menu icon (≡) by the list title.

**List title menu in List v2**

You can click the title of the list to access options related to viewing and filtering the entire list.
Note: Administrators can customize which options appear in the list title menu.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Changes the view of the list by presenting different information.</td>
</tr>
<tr>
<td>Filters</td>
<td>Changes the values in the filter. Some of the choices are: None, Active, and Edit personal filters.</td>
</tr>
<tr>
<td>Group by</td>
<td>Groups records in a list by the values in a selected field from that table. Any field from the table can be used as a group filter, whether or not it appears in the list.</td>
</tr>
<tr>
<td>Show</td>
<td>Changes the number of rows shown on each page of the list.</td>
</tr>
<tr>
<td>Refresh List</td>
<td>refreshes the list to show changes immediately.</td>
</tr>
<tr>
<td>Create Favorite</td>
<td>Adds a link to this list to your favorites.</td>
</tr>
</tbody>
</table>
List title menu in List v3

The options that appear are based on the user's role. Pictured are the options that administrators see. Administrators can customize which options appear in the list title menu.

**List title menu options**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personalize List Columns</td>
<td>Configures which columns appear and the order in which they appear for a user.</td>
</tr>
<tr>
<td>Change View</td>
<td>Changes the view of the list by presenting different information.</td>
</tr>
<tr>
<td>List Layout</td>
<td>Configures the list view for all users (requires access rights).</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>List Calculations</td>
<td>Configures list calculations for columns, which calculate column totals, minimums, maximums, and averages (requires access rights).</td>
</tr>
<tr>
<td>List Control</td>
<td>Configures list controls, such as buttons and filters (requires access rights).</td>
</tr>
<tr>
<td>Configure</td>
<td>Provides administrative functions related to the information displayed and how it is controlled (requires access rights).</td>
</tr>
<tr>
<td>Import</td>
<td>Import data from an Excel template file.</td>
</tr>
<tr>
<td>Export</td>
<td>Exports data to Excel, CSV, XML (administrators only), or PDF.</td>
</tr>
<tr>
<td>Create Favorite</td>
<td>Adds a link to this list to your favorites.</td>
</tr>
<tr>
<td>Update All</td>
<td>Perform updates to multiple records at once.</td>
</tr>
<tr>
<td>Update Selected</td>
<td></td>
</tr>
<tr>
<td>Create Application Files</td>
<td>Creates demo data from the current list of records that can be included when you install or update the application on another instance (administrators only). Used with custom application development.</td>
</tr>
<tr>
<td>Import XML</td>
<td>Imports a set of records that were exported from a source instance, for example, a developer instance (administrators only).</td>
</tr>
</tbody>
</table>

**Column headings**

Column headings appear at the top of each list column. These headings display column names and provide some list actions. The available actions are different for v3 and v2 lists. In List v3, several of the actions are moved to the list title menu.

**Column headings in List v2**

These headings display column names and provide some list options. Column headings are stationary at the top of the list and do not scroll with list content.

**Note:** Some of the options displayed in the list context menu depend on the user role and the installed applications.
## Column heading controls

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorting</td>
<td>Click the column name to sort the list in ascending order. Click again to sort in reverse order. An arrow by the column name indicates the column currently being sorted as well as the sort direction. A downward pointing arrow indicates that the column is sorted in descending order.</td>
</tr>
<tr>
<td>Title</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>List column context menu</td>
<td>Access this menu, also called a right-click menu, by clicking the menu icon (expand icon) at the top of a list column (UI16/UI15) or by right-clicking the column heading (any UI version). The list context menu offers the following controls.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Sort (a to z) and (z to a)</strong>: Sort in ascending or descending order.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Show Visual Task Board</strong>: Create a Visual Task Board based on the current list.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Group By</strong>: Aggregate records by a field. For more information, see <em>Use a grouped list in List v2</em>.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Bar Chart</strong> and <strong>Pie Chart</strong>: Create quick bar and pie chart reports based on the filter criteria of the list. Users can then modify these reports or create gauges (depending on access rights).</td>
</tr>
<tr>
<td></td>
<td>• <strong>Launch Interactive Analysis</strong> (requires Performance Analytics): Enables you to quickly explore data using visualizations.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Time Series Chart</strong> (available on columns with MetricBase data; requires MetricBase): Shows a basic report on the MetricBase data.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Time Series Chart Designer</strong> (available on columns with MetricBase data; requires MetricBase): Launches the Report Designer to that you can configure a time series report for the metric in the column. For more information, see <em>Create reports from MetricBase time-series data</em>.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Configure</strong> (requires access rights): Provides administrative functions related to the information displayed and how it is controlled. For more information, see <em>List configuration</em>.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Import</strong> (administrators only): Import data from an Excel template file.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Export</strong>: Exports data to Excel, CSV, XML (administrators only), or PDF. For more information, see <em>Exporting data</em>.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Update Selected</strong> and <strong>Update All</strong>: Perform updates to multiple records at once. For more information, see <em>Edit multiple records in a list using the list editor</em>. These options require the list_updater role.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Create Application Files</strong> (administrators only): Creates demo data from the current list of records that can be included when you install or update the application on another instance. Used with custom application development.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Import XML</strong> (administrators only): Imports a set of records that were exported from a source.</td>
</tr>
</tbody>
</table>
Column headings in List v3

These headings display column names and provide some list options. Column headings are stationary at the top of the list and do not scroll with list content.

Note: Some of the options displayed in the list context menu depend on the user role and the installed applications.

Column heading controls

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorting</td>
<td>Click the column name to sort the list in ascending order. Click again to sort in reverse order. An arrow by the column name indicates the column currently being sorted as well as the sort direction. A downward pointing arrow indicates that the column is sorted in descending order.</td>
</tr>
<tr>
<td>List column context menu</td>
<td>Access this menu, also called a right-click menu, by clicking the menu icon at the top of a list column or by right-clicking the column heading. The list context menu offers the following controls.</td>
</tr>
<tr>
<td>Search</td>
<td>Enables the column search. For more information, see Search by one or more columns in a list.</td>
</tr>
</tbody>
</table>

List v3 split mode

In List v3, split mode lets users view a list and form side by side, in a split pane layout.

List v3 is no longer available for new deployments. If you are already using list v3, you can continue to do so.

Split mode differs from the standard list mode, called grid mode. In grid mode, lists display records in a table view, with several columns.
Split mode differs from the standard list mode, called grid mode. In grid mode, lists display records in a table view, with several columns.

List v3 split mode is similar to the list and form view available in UI15. However, List v3 split mode consolidates information from multiple columns into a single row. List v3 split mode does not support multiple form tabs.

**Note:** Users with the personalize_control role can make split mode the default view for a list, by configuring the list control and setting the Default view mode field to Split.

When you open a record in split mode, Display type business rules are evaluated twice, once for each pane. This double evaluation might have an impact on performance. Consider this impact when creating business rules.

### List pane configuration

![List pane configuration](image)

In split mode, the title of the list card is either a default value or it is configured in System Mobile UI > Table Titles.

**Important:**

Table title records are used in the mobile application as well as in the list pane. You can change the title for any table or add a title record for a different table, however, the change affects the mobile user interface (UI).

For example, in split mode the default title for the Departments (cmn_department) table is the department Name. If you create a table title record to display the Description field as the Department list card title, the Departments list appears in the mobile application.

Other fields that appear in the list card are specified in the base system and cannot be modified.
Use List v3 split mode

In List v3, you can view lists and forms side by side in split mode.

Role required: none

In split mode, you can select a record from a compact view of the list, to open it in the adjacent form pane.

1. Open a v3 list.
2. In the list title bar, select Split in the list mode toggle.

Note: The list mode toggle is not available in grouped or related lists.

The list reloads in split mode.
3. Perform any of the following actions to filter the list.
### Option | Description
--- | ---
**Edit the filter conditions** | 1. Click the filter icon ( ) to open the filter condition builder in the right pane.  
2. Add, remove, or edit conditions as you would in the standard List v3 filter interface. For more information, see [Create a filter in List v3](#).  
3. Load or save the filter, or add a sort order.  
4. Click Run.

**View all breadcrumbs** | 1. Click the filter icon ( ) to open the filter condition builder in the right pane.  
2. Add or remove conditions using the breadcrumbs.  
3. Right-click a breadcrumb to access the breadcrumb context menu. For more information about breadcrumb conditions and the breadcrumb context menu, see [Filters and breadcrumbs](#).

**View the breadcrumb right-click options** | 1. Right-click the blue filter text in the left pane.  
2. Select any of the following options.  
   - [Open new window](#): Opens the results list for the breadcrumb in a new tab or window.  
   - [Copy URL](#): Copies the URL to the clipboard for the results list of the breadcrumb.  
   - [Copy query](#): Copies the encoded query to the clipboard for the breadcrumb.  
4. Right-click a record in the list to access the following options.  
   - Copy URL  
   - Copy sys_id  
5. Click a record in the list to open it in the adjacent form pane.

### Tree picker

The tree picker is a special reference lookup that you can add as an attribute to a form. The tree picker is a special reference lookup for the following items.  
- Configuration Items (CIs) for a field that depends on another CI field.  
- Reference elements for any hierarchical table. A hierarchical table is any table that has a parent field pointing back at itself.  
- Values for a user reference that depends on the group.
Add the tree picker attribute

A limit of 1000 has been placed on the number of nodes returned to the tree picker. This limit is configurable with the `glide.ui.group_heirarchy.max_nodes` property.

Role required: personalize_dictionary

1. Modify the dictionary entry for the field.
2. Add `tree_picker=true` to the Attributes field.
   If there are multiple attributes, use a comma to separate them without any spaces between.

Tree picker examples

The sections below include tree picker examples.

Simple dependent fields

It is also possible to add the tree-picker attribute on a reference field that depends on a reference field of a different type. For example, if Assigned to depends on Assignment group, it is possible to add the tree picker attribute on Assigned to. The result is a one-node tree for the group and its members.

Tree picker on a reference field

Dependent fields

In this example, there are two CI reference fields, and one depends on the other. The dependent one has the `tree_picker` attribute:
For this example, the configuration item is Bond Trading. The tree picker for the Dependent CI field shows all downstream and upstream relationships for that CI. The small orange square icon above a relationship indicates that the CI, lawson, already has an open task against it. Pointing to the orange square displays a pop-up window with information about the open task.

**Note:** Dependencies for CIs are enforced only when the dictionary entry for the reference field has `tree_picker=true` in the Attributes field.

### Dot-walking to data in related tables

Dot-walking provides access to fields on related tables from a form, list, or script. If the current table contains a reference to another table, any field on the referenced table can be accessed using dot-walking.

Dot-walking references a field by building a chain of field names separated by dots (periods). For instance, `incident.assigned_to.company` references the company of the user assigned to an incident. The recommended limit for chain length is three levels.
Dot-walking examples

Access fields on a related table from a form, list, or script by dot-walking. This topic includes examples of the different ways you can dot-walk.

List fields

You can dot-walk to related fields in a list, such as the field list in a filter. This example demonstrates how to filter the Incident (incident) table by the company of the caller who registered the incident.

When you open the list of fields that you want to filter, you see the list of available Incident table fields. The reference fields are followed by the related fields. For example, Caller is followed by Caller > User fields, which means that Caller is a reference field, and the related fields are user fields on the Caller record. If the related fields are not present in the list, you would select Show Related Fields at the bottom of the list.

When you select Show Related Fields, the menu reloads to display related fields.
When you select a related field, the menu reloads with the fields of the related table.
When you select **Company** under **Caller # User fields**, the field then becomes **Caller.Company**.

The following example shows where you are in the dot-walk. Each selected reference is stored at the top of the fields menu, and the number of dots preceding the field label indicate how many dots from the initial record the user has reached.
The example shows that the user is at **Incident.Caller.Company**. You can return to higher levels in the hierarchy by selecting fields located at the top of the menu. For instance, selecting **Incident fields** returns to the list of incident fields.

The related fields can be removed by selecting **Remove Related Fields** at the bottom of the list.
Condition builders

You can make a detailed query on a table by dot-walking in the condition builder.

To dot-walk in a condition builder, first select Show Related Fields on the fields menu. This action allows you to add fields from related tables to your query.

The following GIF shows how you would dot-walk fields in a condition builder to find all Incident records assigned to one specific user, Beth Anglin. In the example, the user navigates to Incident > Open and then opens the condition builder. In the fields menu, the user first selects Show Related Fields and then opens the fields menu again to select Assigned to # User fields. The user opens the fields menu again to select Last name. The user builds the following condition: (Last name) (is) (Anglin). After the user selects Run, the Incident list displays only the records assigned to Beth Anglin.
List collectors

When selecting a list of fields from a list collector (for example, when you are configuring a form), you can dot-walk to fields from other forms.
To see which fields are reference fields and can be dot-walked, look for green fields with a plus symbol.

<table>
<thead>
<tr>
<th>Available</th>
<th>Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Number</td>
</tr>
<tr>
<td>Activity due</td>
<td>Caller</td>
</tr>
<tr>
<td>Actual end</td>
<td>Category</td>
</tr>
<tr>
<td>Actual start</td>
<td>Subcategory</td>
</tr>
<tr>
<td>Additional assignee list</td>
<td>Business service</td>
</tr>
<tr>
<td>Additional comments</td>
<td>Configuration item</td>
</tr>
<tr>
<td>Approval</td>
<td>Company</td>
</tr>
<tr>
<td>Approval history</td>
<td></td>
</tr>
<tr>
<td>Approval set</td>
<td>Contact type</td>
</tr>
<tr>
<td>Assigned to [+*]</td>
<td>State</td>
</tr>
<tr>
<td>Assignment group [+*]</td>
<td>On hold reason</td>
</tr>
<tr>
<td>Business duration</td>
<td>Impact</td>
</tr>
<tr>
<td>Business resolve time</td>
<td>Urgency</td>
</tr>
<tr>
<td>Business service [+*]</td>
<td>Priority</td>
</tr>
<tr>
<td>Caller [+*]</td>
<td></td>
</tr>
<tr>
<td>Caused by Change [+*]</td>
<td>Assignment group</td>
</tr>
</tbody>
</table>

Once a reference field is highlighted, the expand icon

appears above the add icon.
Selecting the expand icon opens the list of fields from the related list in the **Available** pane. The following example shows that the **Assigned to** fields were selected. The previous lists of fields appear at the top of the list.
Once the field is added to the **Selected** pane, it appears with its full dot.walked syntax. The following example, shows that **Assigned to.Active** has been selected.
Scripts

You can dot-walk within a script by invoking the dot-walk syntax. This functionality requires a knowledge of JavaScript.

For scripts that run on the server side, such as business rules, it is necessary to add current.

The following script, for example, is a scripted approval rule that requests an approval from the manager of the user who opened the ticket.

```javascript
try {
    current. opened_by. manager ; } catch (err ) { }
```

For scripts that run on the client side, such as client scripts, current is not necessary. For instance, the following Highlight VIP Caller script runs on the client side.

```javascript
function onChange (control , oldValue , newValue , isLoading ) {
    //wait until there is a valid record in the field if (newValue ) {
        //get the caller object so we can access fields var caller  = g_form.
        getReference ( 'caller_id' ) ;
    }
}
```
    var callerLabel = document.getElementById('label.incident.caller_id');
    var callerField = document.getElementById('sys_display.incident.caller_id');

    // check for VIP status if (caller.vip == 'true') {
        // change the caller label to red background
        // style object is CSSStyleDeclaration, style names are not standard css names if (callerLabel)
        document.getElementById('label.incident.caller_id').style.backgroundColor = 'red';

        // change the caller's name field to red text if (callerField)
        document.getElementById('sys_display.incident.caller_id').style.color = 'red';
    } else {
        // not a VIP, remove temporary styles if (callerLabel)
        document.getElementById('label.incident.caller_id').style.backgroundColor = '';
        if (callerField)
            document.getElementById('sys_display.incident.caller_id').style.color = '';
    }
```

**Variables**

Often, you can add variables into templates, notifications, or other forms where a value is being called from the form.

For example, `${assigned_to}` is the variable for the **Assigned to** field.

As shown in the example, you can dot-walk to fields on the original record of any reference field. It is possible to dot-walk to any field on the assigned_to_record, for example, `${assigned_to.manager}`.

When you dot-walk, you can have a longer chain if you need it, as in this example: `${assigned_to.department.manager.mobile_phone}`.

Sometimes, you can select this variable from a tree picker.

**Tree pickers**

The tree picker interface has an expandable, hierarchical view that you can use to look up the following items:

- Configuration Items (CIs) that are subordinate to another, higher-level CI.
- Members of a certain group. For example, you would use a tree picker to look up a user in the Service Desk group.
- Reference elements for any hierarchical table. A hierarchical table is any table that has a parent field pointing back at itself. The Group (sys_user_group) table, for example, would be considered a hierarchical table because certain groups are children of parent groups.

The following example shows how you would use a tree picker to assign an Incident record to a user in the Database group.

You would first navigate to any Incident record and then enter Database in the **Assignment group** field.
In this example, the Database group is a parent group with multiple child groups under it. When you select the search icon ( ) next to the **Assigned to** field, a window displays reference fields in the Database group.

Reference fields have the expand icon (+) next to their name. Clicking the + expands a list of the fields on that referenced field. In this example, expanding the **Database Atlanta** or **Database San Diego** fields opens a list of user records within each child group.

You would select any one of the user records to add it as a value in the **Assigned to** field.
Note: You can configure the tree picker to pick up to 1,000 nodes when you configure the `glide.ui.group_heirarchy.max_nodes` property. To set the property, modify the dictionary entry for the field, and add `tree_picker=true` to the Attributes field. If there are multiple attributes, use a comma to separate them without any spaces between.

Configure items on forms or in lists using a slushbucket

Use a slushbucket to add, remove, or move items in a form or list. Slushbuckets allow you to select multiple items from a list of available items and to remove items from a list of selected items. Some slushbuckets provide filter and search controls for available items, such as adding items to related lists.

Use slushbuckets to personalize lists, add items to related lists, and Service Catalog list collector variables. Some slushbuckets allow users to customize the order of selections, such as when you are configuring a form or list.

The slushbucket interface has two columns: the available items on the left and the selected items on the right.

Information fields for the highlighted available item appear beneath some slushbuckets. The information fields are the same as the reference lookup for a reference field on a form. To modify which fields appear, configure the reference lookup list.

- To add items to the selection, double-click an available item on the left or select an item and click the add icon (>). The new item is added at the bottom of the selected items column on the right.
- To remove items from the selection, double-click the item on the right, or select the item and click the remove icon (<).
- To select multiple consecutive items, hold the Shift key and click the first and last item.
- To select multiple non-consecutive items, hold the Ctrl key (Command key on Mac) and click the desired items.
- To accessibly select multiple items, tab to each item and press the spacebar to select each item. Use the arrow key or tab to the Add button to move items from one list to another.
- To filter available items, create conditions using the condition builder and click Run filter.
- To search available items, enter text in the Search field. The list of available items is filtered as you type.
Filter Items

- To move items one position, select the items and click the up or down icon.
- To move an item multiple positions, select consecutive items above or below the item then click the up or down icon. In this example, to move Assigned to to the top of the selections order, complete the following steps.
  a) Hold the Shift key and click Short description then Number.
  b) Click the down icon.
Personalize List Columns

Available
- Active
- Activity due
- Actual end
- Actual start
- Additional assignee list
- Additional comments
- Approval
- Approval history
- Approval set
- Business duration
- Business service
- Change request
- Close notes
- Closed
- Closed by
- Comments and Work notes

Selected
- Assigned to
- Number
- Short description
- State
- Assignment group
- Configuration item
- Related Incidents

- Wrap column text
- Compact rows
- Active row highlighting
- Modern cell coloring
- Enable list edit
- Double click to edit

Arrange items

Cancel  OK
Set the number of slushbucket items visible in the available column

You can modify the `glide.xmlhttp.excessive` property to change the number of items that appear in the Available column of the slushbucket.

Role required: admin

1. Add the property to the System Properties (sys_properties) table.
2. Change the Type to Integer.
3. Enter a number in the Value field. The default value is 100.

**Warning:** Selecting a number significantly higher than 100 can lead to performance issues on your instance as the data is loaded into the slushbucket.

4. Save the property.

Activity streams

An activity stream is a list of entries in records and conversations. Examples of activity streams include journal fields like comments and work notes that display in task records and Connect Chat conversations. Activity streams are available in UI15 and UI16.

There are three types of activity streams.

**List activity stream**

Streams live activity information for all records on the current list. For more information, see *Activity streams in list view*. Click an item to open the record activity stream without opening the record.

**Record activity stream**

Appears in forms that are configured with the activity formatter. You can customize the activities to include.

When you follow a record to view it in the Connect Chat interface, the conversation contains the same information as the record activity stream. Comments entered in the Connect Chat window update the record activity stream.

**Visual Task Boards**

Streams live activity information for all task cards in the current task board. Click an item in the activity stream to open the task card and view the activity stream of the record.

Attachments and images

You can add and preview attachments and images in the activity stream:

- Paste an image into a journal field and enter the inline text.
- Click on an attachment to preview it. Use the download option to download the attachment locally.
- Use antivirus scanning to protect against virus infections that can be introduced by file attachments. After being uploaded, the system automatically scans all files for viruses. If a file is infected, you can't view or download the file.
@ Mentions

Get someone’s attention on a record by mentioning them with the @ character in an activity stream.

ℹ️ **Note:** Emails sent for @Mention run against live_notification table and are not added to the journal field of the parent table.

Any user can use activity stream mentions in the following places:
- On a form, in the *activity formatter* (UI16 only).
- In a list, in the *activity stream* for a specific record.
- On a Visual Task Board card, in the *card details*.
- In a Connect *record conversation*.

To mention someone, enter the @ character in a supported activity stream. Next, select a user from the suggestion list, which allows you to select any user in the instance. You can see which users have access to the record and, if presence is enabled, who is online. Enter any other text and post to the activity stream.
By default, you receive an email notification when someone mentions you. You can disable this behavior by unsubscribing from the Activity Stream @Mention Email notification on your notification preference page.

If Connect is enabled, you can receive additional notifications, depending on whether you follow the record in Connect. When someone mentions you in a record you do not follow in Connect, you receive whichever Connect notifications you enabled globally, as well as the Activity Stream @Mention Email notification. If you do follow the record in Connect, you only receive notifications according to your notification preferences for the record conversation. In this case, you do not receive the Activity Stream @Mention Email notification.

Note: The system creates a record on the Notification (live_notification) table each time a user is mentioned. The record stores the information required to generate notifications.
Create a condition statement using the condition builder

A condition builder constructs a condition statement with a series of contextually generated fields. Condition builders are used in many operations, such as creating filters, administering surveys, and administering access control.

Role required: admin

A condition consists of three parts.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field</td>
<td>A choice list based on the table and user access rights. The choice list can include fields on related tables by dot-walking.</td>
</tr>
<tr>
<td>Operator</td>
<td>A choice list based on the field type. For example, in the Incident (incident) table, the greater than operator does not apply to the Active field but it does apply to the Priority field.</td>
</tr>
<tr>
<td>Value</td>
<td>A text entry field or a choice list, depending on field type. For example, in the Incident (incident) table, the Active field offers a choice list with the values true, false, and empty, while the Short Description field offers a text entry field.</td>
</tr>
</tbody>
</table>

**Note:** The condition builder in the list filter has a different appearance in List v2 and List v3. In UI16, condition builders in forms can be configured to look and work like the List v3 condition builder.

1. To add a dependent condition, click AND or OR next to the condition.
2. To add a top-level condition:

<table>
<thead>
<tr>
<th>Version</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>• Click AND or OR on the condition builder toolbar above the conditions.</td>
</tr>
<tr>
<td>List v3</td>
<td>• Click New Criteria.</td>
</tr>
</tbody>
</table>
3. To remove a condition:

<table>
<thead>
<tr>
<th>Version</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>• Click the delete icon (X) next to the condition.</td>
</tr>
<tr>
<td>List v3</td>
<td>• Click the remove condition icon (#) next to the condition.</td>
</tr>
</tbody>
</table>

Example AND condition in List v2 filter

Example OR condition in List v3 filter
Condition builder

A condition builder constructs a condition statement with a series of contextually generated fields. Condition builders are used in many operations, such as creating filters, administering surveys, and administering access control.

Condition builder format

A condition consists of three parts:

- **Field**: a choice list based on the table and user access rights. The choice list can include fields on related tables by dot-walking.
- **Operator**: a choice list based on the field type. For example, in the Incident (incident) table, the greater than operator does not apply to the **Active** field but it does apply to the **Priority** field.
- **Value**: a text entry field or a choice list, depending on field type. For example, in the Incident (incident) table, the **Active** field offers a choice list with the values **true**, **false**, and **empty**, while the **Short Description** field offers a text entry field.

The condition builder in the list filter has a different appearance in List v2 and List v3. In UI16, condition builders in forms can be configured to look and work like the List v3 condition builder.

Condition builder actions

You can add a dependent condition by clicking **AND** or **OR** next to the condition. You can add a top-level condition by clicking **AND** or **OR** on the condition builder toolbar above the conditions (List v2) or clicking **New Criteria** (List v3). You can remove a condition by clicking the delete icon (X) next to the condition (List v2). In List v3, you click the remove condition icon (#) next to the condition.

Example AND condition in List v2 filter
Example OR condition in List v3 filter

Filtering on empty fields

Most filter operations do not return empty fields in their result set. You can create a filter that displays records with an empty field value in addition to records that match the initial filter conditions.

For example, when viewing all records that are assigned to the Hardware group, to include records with an empty Assignment group field, complete the following steps.

1. Create the filter condition (Assignment group) (is not) (Hardware).
   
   Note: This condition does not return those records where the Assignment group field is empty.

2. Click OR next to the original filter condition.
3. Create another filter condition of (Assignment group) (is empty).
4. Run the filter.

Values for date/time fields

When you filter on fields of type date/time, such as the Created field on any task record, several time-related options are available, such as Today, This week, Last 3 months, and so on.

For example, at 12:00 on June 1, a user in New York filters a list of incidents using the Created on Today condition. The resulting list shows all incidents created during the last six hours: between midnight (00:00:00) and the user's current time, noon (12:00:00), on June 1. A filter for This week returns incidents created between the previous Monday at midnight to the current day and time.

A filter for Last 3 months returns incidents between midnight on the first of the month three full months ago and the current day and time. For example, if you choose the Last 3 months filter on April 15, the results show records created since January 1 up until April 15. A filter for Last 12 months returns records created from midnight on the first of the month 12 months ago and the current day and time.
A filter for **Last week** returns incidents from midnight on Sunday the week previous ending the following Sunday at midnight. It does not include up to the present day. For example, if you choose the **Last week** filter on Thursday August 17, the results show records created Sunday August 6 up until Sunday August 13.

For the **at or before** and **at or after** filters, use midnight as a start or end point. For example, if you filter a list of incidents created **(at or after) (Yesterday)**, the resulting list shows all incidents created at midnight yesterday or later. If it is Thursday, August 7, and you filter a list of incidents created **(at or before) (Last week)**, the resulting list shows all incidents created at and before midnight on Sunday August 3, which is the end of last week.

**Operators and values available for date and time fields**

You can filter date and time fields using the operators and values listed here.

<table>
<thead>
<tr>
<th>Operator</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>after</td>
<td>Returns records after the specified time period.</td>
<td>A filter run <strong>(after) (Next Month)</strong> on April 18, 2018 will return records from June 1 and later.</td>
</tr>
<tr>
<td>at or after</td>
<td>Returns records during and after the specified time period.</td>
<td>A filter run <strong>(at or after) (Next Month)</strong> on April 18, 2018 will return records from May 1 and later.</td>
</tr>
<tr>
<td>at or before</td>
<td>Returns records during and before the specified time period.</td>
<td>A filter run <strong>(at or before) (Next Month)</strong> on April 18, 2018 will return records from May 31 and earlier.</td>
</tr>
<tr>
<td>before</td>
<td>Returns records before the specified time period.</td>
<td>A filter run <strong>(before) (Next Month)</strong> on April 18, 2018 will return records from before May 1.</td>
</tr>
<tr>
<td>between</td>
<td>Returns records between to specified dates.</td>
<td>A filter run <strong>(between) April 18, 2018 (00:00:00) and April 19, 2018 (23:59:59)</strong> will return records on or between the two dates.</td>
</tr>
<tr>
<td>is anything</td>
<td>Returns all records, including records with empty values in the specified field.</td>
<td>A list of incident records filtered on <strong>(Created) (is anything)</strong> returns all incidents.</td>
</tr>
<tr>
<td>is different</td>
<td>Returns records within a different time frame from another field.</td>
<td>A list of incident records filtered on <strong>(Created) (is different) (year) from (Closed)</strong> returns records where the values in the <strong>(Created)</strong> and <strong>(Closed)</strong> field are in different years.</td>
</tr>
<tr>
<td>is empty</td>
<td>Returns records where the specified field has no value.</td>
<td>A list of incident records filtered on <strong>Closed (is empty)</strong> returns records where the <strong>Closed</strong> field has no value.</td>
</tr>
<tr>
<td>is less than</td>
<td>Returns records where a field is within specified time frame when compared to another field.</td>
<td>A list of incident records filtered on <strong>(Closed) (is less than) (2) (hours) (after) (Created)</strong> will return results where the <strong>Closed</strong> value is less than 2 hours after the <strong>Created</strong> value.</td>
</tr>
</tbody>
</table>
**Operator** | **Definition** | **Example**
--- | --- | ---
is more than | Returns records where a field is beyond the specified time frame when compared to another field. | A list of incident records filtered on (Closed) is more than (2) (hours) after (Created) will return results where the (Closed) value is more than 2 hours after the (Created) value.

is not empty | Returns records where the specified field has a value. | A list of incident records filtered on (Closed) is not empty returns results where the Closed field has a value.

is same | Returns records where the two fields share a specified time frame. | A list of incidents filtered on (Created) is same (hour) as (Closed) returns records where the record (Created) and (Closed) fields are within the same hour.

not on | Returns records that do not match the specified value. | A filter of (not on) (Today) returns records that do not match the current date.

on | Returns records on the specified value. | A filter run (on) (Today) on April 18, 2018 will return records from April 18.

relative | Returns records with a specified time frame before or after the current time. | A filter run on (Created) (relative) (before) (5) (minutes) (ago) run at 12:00:00 returns records from before 11:55:00 of the same date.

trend | Returns records on, after and/or before a specified hour of the day, day of the week, week of the year, month, quarter, or year. | A filter of (Created) (trend) (Monday) returns records where the (Created) date falls on a Monday.

---

**Values available for date/time fields**

**Value** | **Definition** | **Example**
--- | --- | ---
Current hour/minute | Returns records matching the current hour or minute | A filter run (on) (Current hour) on April 18 (12:02:00), would return records from April 18 (12:00:00) to April 18 (12:59:59).

Last n minutes/hours/days/weeks/months/quarters/years | Returns records within the previous selected time period, starting with the beginning of that time frame. | A filter run (on) (Last 3 months) on April 18, would return records from January 1 up until April 15.

Next n weeks/months/quarters/years | Returns records within the next selected time period, including records with values up to the end of that time frame. | A filter run (on) (Next year) on April 18, 2018 will return any records with a date in 2019, including dates in 2019 after April 15.
<table>
<thead>
<tr>
<th>Value</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year ago</td>
<td>Returns records from the current time, one year ago to the end of the current month</td>
<td>A filter run (on) <strong>One year ago</strong> on April 18, 2018 (12:00:00) will return records from April 18, 2017 (12:00:00) to April 30 (23:59:59)</td>
</tr>
<tr>
<td>This week/month/quarter/year</td>
<td>Returns records with the current selected time period.</td>
<td>A filter run (on) <strong>This week</strong> on April 18, 2018 will return records from April 16 (00:00:00) to April 20 (23:59:59)</td>
</tr>
<tr>
<td>Today</td>
<td>Returns records between midnight of the current day and midnight of the next day</td>
<td>A filter run (on) <strong>Today</strong> on April 18, 2018 will return records from April 18 (00:00:00) to April 18 (23:59:59)</td>
</tr>
<tr>
<td>Tomorrow</td>
<td>Returns records between midnight (00:00:00) and the current time.</td>
<td>A filter run (on) <strong>Tomorrow</strong> on April 18, 2018 will return records from April 19 (00:00:00) to April 19 (23:59:59)</td>
</tr>
<tr>
<td>Yesterday</td>
<td>Returns records between midnight of the previous day and midnight of the current day.</td>
<td>A filter run (on) <strong>Yesterday</strong> on April 18, 2018 will return records from April 17 (00:00:00) to April 17 (23:59:59)</td>
</tr>
</tbody>
</table>

**Operators available for filters and queries**

The system provides a set of operators for use with filters, condition builders, and encoded queries. The data type of a field determines what operators are available for it.

### Operators available for condition builders

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
</table>
| AND            | (Active) (is) (True) \(\text{AND}\) (Caller) (is not empty) | ^                          | active=true^CallerISEMPTY | All records that have both of the following:  
- **Active** field is **True**  
- **Caller** field has any value |
| OR condition   | (Short description) (is empty) \(\text{OR}\) (Description) (is empty) | ^OR                        | short_descriptionISEMPTY^DescriptionISEMPTY | All records that have at least one of the following:  
- **Short description** field has no value  
- **Description** field has no value |
### Operators available for string fields

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>starts with</td>
<td>(Short description) (starts with)(SAP)</td>
<td>STARTSWITH</td>
<td>short_descriptionSTARTSWITHSAP</td>
<td>All records in which the characters &quot;SAP&quot; appear at the beginning of the value for the Short description field.</td>
</tr>
<tr>
<td>ends with</td>
<td>(Short description) (ends with) (outage)</td>
<td>% ENDSWITH</td>
<td>short_descriptionENDSWITH &quot;outage&quot;</td>
<td>All records in which the string &quot;outage&quot; appears at the end of the value for the Short description field.</td>
</tr>
<tr>
<td>contains</td>
<td>(Short description) (contains)(SAP)</td>
<td>* LIKE</td>
<td>short_descriptionLIKESAP</td>
<td>All records in which the characters &quot;SAP&quot; appear anywhere in the value for the Short description field.</td>
</tr>
<tr>
<td>does not contain</td>
<td>(Short description) (does not contain) (SAP)</td>
<td>!* NOTLIKE</td>
<td>short_descriptionNOTLIKESAP</td>
<td>All records in which the characters &quot;SAP&quot; do not appear anywhere in the value for the Short description field.</td>
</tr>
<tr>
<td>is</td>
<td>(Short description) (is)(Network storage unavailable)</td>
<td>=</td>
<td>short_description=Network storage unavailable</td>
<td>All records in which the Short description says nothing else but &quot;Network storage is unavailable.&quot;</td>
</tr>
<tr>
<td>Operator label</td>
<td>Example condition</td>
<td>Equivalent operator</td>
<td>Example query</td>
<td>Example output</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>is not</td>
<td>(Short description) (is not)(Network storage unavailable)</td>
<td>! =</td>
<td>short_description!=Network storage unavailable</td>
<td>All records in which the value for the <strong>Short description</strong> field says anything but “Network storage is unavailable.”</td>
</tr>
<tr>
<td>is empty</td>
<td>(Short description) (is empty)</td>
<td>IEMPTY</td>
<td>short_descriptionIEMPTY</td>
<td>All records in which there is no value in the <strong>Short description</strong> field.</td>
</tr>
<tr>
<td>is not empty</td>
<td>(Short description) (is not empty)</td>
<td>ISNOTEMPTY</td>
<td>short_descriptionISNOTEMPTY</td>
<td>All records in which there is any value in the <strong>Short description</strong> field.</td>
</tr>
</tbody>
</table>
| is anything    | (Short description) (is anything) | ANYTHING          | short_descriptionANYTHING | All records in which the **Short description** field is one of the following:  
  · any value  
  · empty  
  · NULL |
| is empty string| (Short description) (is empty string) | EMPTYSTRING      | short_descriptionEMPTYSTRING | All records in which there is no value in the **Short description** field. |
| less than or is| (Short description) (less than or is)(s) | <=                | short_descriptionless than or is| All records in which the string in the **Short description** field is one of the following:  
  · the first letter is any letter between “a” and “s”  
  · the exact value is “s” |
<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
</table>
| greater than or is     | (Short description)                              |                           | >=            | All records in which the string in the Short description field is one of the following:  
                                                                      • the first letter is any letter between “s” and “z”  
                                                                      • the exact value is “s” |
| between                | (Short description)                              | BETWEEN                   | short_descriptionBETWEEN | All records in which the first letter in the Short description field is “q,” “r,” “s,” or “t.” |
| is same                | (Short description)                              | SAMEAS                    | short_descriptionSAMEAS | All records in which there exist matching values for the Short description and Description fields. |
| is different           | (Short description)                              | NSAMEAS                   | short_descriptionNSAMEAS | All records in which there exist differing values for the Short description and Description fields. |

### Operators available for reference fields

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>is</td>
<td>(Caller) (is) (Don Goodliffe)</td>
<td>=</td>
<td>caller_id=9ee1b13dc610ef0f2d69cd0</td>
<td>All records in which the Caller field is no one else but Don Goodliffe.</td>
</tr>
<tr>
<td>is not</td>
<td>(Caller) (is not) (Don Goodliffe)</td>
<td>!=</td>
<td>caller_id!=9ee1b13dc6112270</td>
<td>All records in which the Caller field is populated by any user record but Don Goodliffe.</td>
</tr>
<tr>
<td>is empty</td>
<td>(Caller) (is empty)</td>
<td>ISEMPYY</td>
<td>caller_idISEMPY</td>
<td>All records in which the Caller field has no value.</td>
</tr>
<tr>
<td>is not empty</td>
<td>(Caller) (is not empty)</td>
<td>ISNOTEMPTY</td>
<td>caller_idISNOTEMPTY</td>
<td>All records in which there is any value in the Caller field.</td>
</tr>
<tr>
<td>Operator label</td>
<td>Example condition</td>
<td>Equivalent query operator</td>
<td>Example query</td>
<td>Example output</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>starts with</td>
<td>(Caller) (starts with) (Don)</td>
<td>STARTSWITH</td>
<td>caller_idSTARTSWITH</td>
<td>All records in which the name in the Caller field begins with 'Don.'</td>
</tr>
<tr>
<td>ends with</td>
<td>(Caller) (ends with) (liffe)</td>
<td>%, ENDSWITH</td>
<td>caller_idENDSWITH</td>
<td>All records in which the name in the Caller field has the letters &quot;liffe&quot; at the end.</td>
</tr>
<tr>
<td>contains</td>
<td>(Caller) (contains) (on)</td>
<td>* , LIKE</td>
<td>caller_idLIKEon</td>
<td>All records in which the characters &quot;on&quot; appear anywhere in the name for the Caller field.</td>
</tr>
<tr>
<td>does not contain</td>
<td>(Caller) (does not contain) (on)</td>
<td>!*, NOTLIKE</td>
<td>caller_idNOT LIKEon</td>
<td>All records in which the characters &quot;on&quot; do not appear anywhere in the name for the Caller field.</td>
</tr>
<tr>
<td>is anything</td>
<td>(Caller) (is anything)</td>
<td>ANYTHING</td>
<td>caller_idANYTHING</td>
<td>All records in which the Caller field is one of the following: any value, empty, NULL</td>
</tr>
<tr>
<td>is same</td>
<td>(Caller) (is same) as (Assigned to)</td>
<td>SAMEAS</td>
<td>caller_idSAMEAS</td>
<td>All records in which the same user record is referenced in the Caller and Assigned to fields.</td>
</tr>
<tr>
<td>is different</td>
<td>(Caller) (is different) from (Assigned to)</td>
<td>NSAMEAS</td>
<td>caller_idNSAMEAS</td>
<td>All records in which the user records in the Caller and Assigned to fields do no match.</td>
</tr>
<tr>
<td>is empty string</td>
<td>(Caller) (is empty string)</td>
<td>EMPTYSTRING</td>
<td>caller_idEMPTYSTRING</td>
<td>All records in which the Caller field has no value.</td>
</tr>
<tr>
<td>is (dynamic)</td>
<td>(Caller) (is (dynamic))(Me)</td>
<td>DYNAMIC</td>
<td>caller_idDYNAMIC</td>
<td>All records in which your user record populates the Caller field.</td>
</tr>
</tbody>
</table>
### Operators available for choice fields containing strings

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>is</td>
<td>(Subcategory) (is) (Email)</td>
<td>=</td>
<td>subcategory=email</td>
<td>All records in which the <strong>Subcategory</strong> is nothing else but Email.</td>
</tr>
<tr>
<td>is not</td>
<td>(Subcategory) (is not) (Email)</td>
<td>!=</td>
<td>subcategory!=email</td>
<td>All records in which the <strong>Subcategory</strong> field is populated by any value except Email.</td>
</tr>
</tbody>
</table>
| is one of        | (Subcategory) (is one of) (DB2, MS SQL Server, Oracle)                             | IN                         | subcategoryINdb2,sqlserver,oracle | All records in which the **Subcategory** field is populated by one of the following values:  
  · DB2  
  · MS SQL Server  
  · Oracle |
| is not one of    | (Subcategory) (is not one of) (DB2, MS SQL Server, Oracle)                        | NOT IN                     | subcategoryNOTINdb2,sqlserver,oracle | All records in which the **Subcategory** field is populated by anything except the following values:  
  · DB2  
  · MS SQL Server  
  · Oracle |
| contains         | (Subcategory) (contains) (Em)                                                      | LIKE                       | subcategoryLIKEem     | All records in which the characters “Em” appear anywhere in the value for the **Subcategory** field.  |
| starts with      | (Subcategory) (starts with) (Em)                                                  | STARTSWITH                 | subcategorySTARTSWITH | All records in which the characters “Em” appear at the beginning of the value for the **Subcategory** field.  |

**Note:** Not all operators are available for all reference types. Depending on the reference you select, you may see a shorter list of operators.
## Operators available for choice fields containing integers

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>is</td>
<td>(Impact) IS (1 - High)</td>
<td>=</td>
<td>impact=1</td>
<td>All records in which the value in the Impact field is nothing else but 1 - High.</td>
</tr>
<tr>
<td>is not</td>
<td>(Impact) IS NOT (1 - High)</td>
<td>!=</td>
<td>impact!=1</td>
<td>All records in which the value in the Impact field is anything but 1 - High.</td>
</tr>
<tr>
<td>Operator label</td>
<td>Example condition</td>
<td>Equivalent query operator</td>
<td>Example query</td>
<td>Example output</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>---------------------------</td>
<td>---------------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| is one of      | (Impact) is one | IN                        | impact IN 1,2 | All records in which the Impact field is populated by one of the following values:  
|                | of (1 - High, 2 - Medium) |               |               | • 1 - High  
|                |                    |               |               | • 2 - Medium |
| is not one of  | (Impact) is not | NOT IN                     | impact NOT IN 1,2 | All records in which the Impact field is populated by anything except the following values:  
|                | one of (1 - High, 2 - Medium) |               |               | • 1 - High  
<p>|                |                    |               |               | • 2 - Medium |
| is empty       | (Impact) is empty | EMPTY                     | impact IS EMPTY | All records in which the Impact field has no value. |
| is not empty   | (Impact) is not | NOT EMPTY                 | impact IS NOT EMPTY | All records in which the Impact field has any value. |
| less than      | (Impact) is less | &lt;                         | impact &lt; 2    | All records in which the Impact field has a value of 1 - High. |
| greater than   | (Impact) is greater | &gt;                        | impact &gt; 2    | All records in which the Impact field has a value of 3 - Low. |
| less than or is| (Impact) is less | &lt;=                        | impact &lt;= 2   | All records in which the Impact field has a value of 1 - High or 2 - Medium. |
| greater than or is | (Impact) is greater | &gt;=                        | impact &gt;= 2   | All records in which the Impact field has a value of 2 - Medium or 3 - Low. |</p>
<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
</table>
| between        | (Impact) (between)(1 - High) and (3 - Low) | BETWEEN | ImpactBETWEEN1@2 | All records in which the Impact field has one of the following values:  
  - 1 - High  
  - 2 - Medium  
  - 3 - Low |
| is anything     | (Impact)(is anything) | ANYTHING | impactANYTHING | All records in which the Impact field is one of the following:  
  - any value  
  - empty  
  - NULL |
| is same         | (Impact)(is same) as (Urgency) | SAMEAS | impactSAMEASUrgency | All records in which there exist matching values for the Impact and Urgency fields. |
| is different    | (Impact)(is different) from (Urgency) | NSAMEAS | impactNSAMEASUrgency | All records in which there exist differing values for the Impact and Urgency fields. |

**Note:** The operators ‘less than or is’ and ‘greater than or is’ are not supported for integer fields in the condition builder. Use a scripted condition instead.

**Operators available for date-time fields**

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>on</td>
<td>(SLA due)(on) (Today)</td>
<td>ONToday</td>
<td>sla_dueONToday@javascript:gs.daysAgoStart(0)@javascript:gs.daysAgoEnd(0)</td>
<td>All records in which the value for the SLA due field matches the date for today.</td>
</tr>
<tr>
<td>not on</td>
<td>(SLA due)(not on) (Today)</td>
<td>NOTONToday</td>
<td>sla_dueNOTONToday@javascript:gs.daysAgoStart(0)@javascript:gs.daysAgoEnd(0)</td>
<td>All records in which the value for the SLA due field is any other date but today.</td>
</tr>
<tr>
<td>Operator label</td>
<td>Example condition</td>
<td>Equivalent query operator</td>
<td>Example query</td>
<td>Example output</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>before</td>
<td>(SLA due)(before) (Today)</td>
<td>&lt;</td>
<td>sla_due&lt;javascript:gs.daysAgoStart(0)</td>
<td>which the value for the SLA due field is any date previous to today.</td>
</tr>
</tbody>
</table>
| at or before  | (SLA due)(at or before)(Today) | <= | sla_due<=javascript:gs.daysAgoEnd(0) | All records in which the value for the SLA due field is one of the following:  
  - any date previous to today  
  - today |
| after         | (SLA due)(after) (Today) | > | sla_due>javascript:gs.daysAgoEnd(0) | All records in which the value for the SLA due field is any date after today. |
| at or after   | (SLA due)(at or after)(Today) | >= | sla_due>=javascript:gs.daysAgoStart(0) | All records in which the date value for the SLA due field is one of the following:  
  - today  
  - any date after today |
<p>| between       | (SLA due) (between) (Yesterday) and (Today) | BETWEEN | sla_dueBETWEENjavascript:gs.daysAgoStart(1)@javascript:gs.daysAgoEnd(0) | All records in which the value for the SLA due field is either yesterday's or today's date. |
| trend (on or after) | (SLA due)(trend) (on or after) (Monday) | DATEPART | sla_dueDATEPARTMonday(sla_due)(javascript:gs.datePart('dayofweek', 'monday', 'GE')) | All records in which the date in the SLA due field is on any day of the week except a Sunday. |
| trend (on or before) | (SLA due)(trend) (on or before) (Monday) | DATEPART | sla_dueDATEPARTMonday(sla_due)(javascript:gs.datePart('dayofweek', 'monday', 'LE')) | All records in which the date in the SLA due field is on either a Sunday or a Monday. |</p>
<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>trend (after)</td>
<td>(SLA due)(trend)</td>
<td>DATEPART</td>
<td>sla_dueDATEPARTMonday</td>
<td>which the date in the SLA due field is on any day of the week except a Sunday or a Monday.</td>
</tr>
<tr>
<td>trend (before)</td>
<td>(SLA due)(trend)</td>
<td>DATEPART</td>
<td>sla_dueDATEPARTMonday</td>
<td>which the date in the SLA due field is on a Sunday.</td>
</tr>
<tr>
<td>trend (on)</td>
<td>(SLA due)(trend)</td>
<td>DATEPART</td>
<td>sla_dueDATEPARTMonday</td>
<td>which the date in the SLA due field is on a Monday.</td>
</tr>
<tr>
<td>relative (on or after)</td>
<td>(SLA due)(relative) (on or after)(1) (Hours)(ago)</td>
<td>RELATIVEGE</td>
<td>sla_dueRELATIVEGE@hour@ago@1</td>
<td>which the time on the SLA due field is less than or equal to one hour before the time that you entered the query.</td>
</tr>
<tr>
<td>relative (on or before)</td>
<td>(SLA due)(relative) (on or before)(1) (Hours)(ago)</td>
<td>RELATIVELE</td>
<td>sla_dueRELATIVELE@hour@ago@1</td>
<td>which the time on the SLA due field is greater than or equal to one hour before the time that you entered the query.</td>
</tr>
<tr>
<td>relative (after)</td>
<td>(SLA due)(relative) (after)(1)(Hours) (ago)</td>
<td>RELATIVEGT</td>
<td>sla_dueRELATIVEGT@hour@ago@1</td>
<td>which the time on the SLA due field is no more than an hour before the time that you entered the query.</td>
</tr>
<tr>
<td>relative (before)</td>
<td>(SLA due)(relative) (before)(1)(Hours) (ago)</td>
<td>RELATIVELT</td>
<td>sla_dueRELATIVELT@hour@ago@1</td>
<td>which the time on the SLA due field is less than an hour before the time that you entered the query.</td>
</tr>
<tr>
<td>relative (on)</td>
<td>(SLA due)(relative) (on)(1)(Hours) (ago)</td>
<td>RELATIVEEE</td>
<td>sla_dueRELATIVEEE@hour@ago@1</td>
<td>which the time on the SLA due field is exactly one hour before the time that you entered the query.</td>
</tr>
<tr>
<td>Operator label</td>
<td>Example condition</td>
<td>Equivalent query operator</td>
<td>Example query</td>
<td>Example output</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>----------------------------</td>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>is empty</td>
<td>(SLA due) (is empty)</td>
<td>ISEMP TEY</td>
<td>sla_due!ISEMP TEY</td>
<td>All records in which the SLA due field has no value.</td>
</tr>
<tr>
<td>is not empty</td>
<td>(SLA due) (is not empty)</td>
<td>ISNOTEMP TEY</td>
<td>sla_due!ISNOTEMP TEY</td>
<td>All records in which the SLA due is populated by any value.</td>
</tr>
</tbody>
</table>
| is anything    | (SLA due) (is anything) | ANYTHING               | sla_due!ANYTHING   | All records in which the SLA due field is one of the following:  
- any value  
- empty  
- NULL |
| is same        | (SLA due) (is same as (Activity due) | SAMEAS                | sla_due!SAMEASactivity_due@day | All records in which there are matching values for the SLA due and Activity due fields. |
| is different   | (SLA due) (is different from (Activity due) | NSAMEAS               | sla_due!NSAMEASactivity_due@day | All records in which there are differing values for the SLA due and Activity due fields. |
| is more than   | (SLA due) (is more than) (1) (Days) (before) (Activity due) | MORETHAN              | sla_due!MORETHANactivity_due@day| All records in which the date value for the SLA due field is two or more days previous to the date in the Activity due field. |
| is less than   | (SLA due) (is less than) (3) (Days) (before) (Activity due) | LESSTHAN              | sla_due!LESSTHANactivity_due@day | All records in which the date value for the SLA due field is no more than three days prior to the date in the Activity due field. |
### Operators available for numeric fields

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>is</td>
<td>(Reassignment count) is (0)</td>
<td>=</td>
<td>reassignment_count = 0</td>
<td>All records in which the Reassignment count is nothing else but 0.</td>
</tr>
<tr>
<td>is not</td>
<td>(Reassignment count) is not (0)</td>
<td>!=</td>
<td>reassignment_count != 0</td>
<td>All records in which the value for the Reassignment count is any number but 0.</td>
</tr>
<tr>
<td>is empty</td>
<td>(Reassignment count) is empty</td>
<td>EMPTY</td>
<td>reassignment_count EMPTY</td>
<td>All records in which there is no value in the Reassignment count field.</td>
</tr>
<tr>
<td>is not empty</td>
<td>(Reassignment count) is not empty</td>
<td>NOTEMPTY</td>
<td>reassignment_count NOTEMPTY</td>
<td>All records in which there is any number in the Reassignment count field.</td>
</tr>
<tr>
<td>less than</td>
<td>(Reassignment count) less than (2)</td>
<td>&lt;</td>
<td>reassignment_count &lt; 2</td>
<td>All records in which the value in the Reassignment count field is any number less than (but not equal to) 2.</td>
</tr>
<tr>
<td>greater than</td>
<td>(Reassignment count) greater than (2)</td>
<td>&gt;</td>
<td>reassignment_count &gt; 2</td>
<td>All records in which the value in the Reassignment count field is any number greater than (but not equal to) 2.</td>
</tr>
</tbody>
</table>
| less than or is| (Reassignment count) less than or is (2) | <=                          | reassignment_count <= 2 | All records in which the value in the Reassignment count field is one of the following:  
  - a number less than 2  
  - 2 |
<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
</table>
| greater than or is | (Reassignment count)(greater than or is)(2) | == | reassignment_count | All records in which the value in the Reassignment count field is one of the following:  
- 2  
- a number greater than 2 |
| between | (Reassignment count)(between) (1) and (3) | BETWEEN | reassignment_count | BETWEEN in which the number in the Reassignment count is either 1, 2, or 3. |
| is anything | (Reassignment count)(is anything) | ANYTHING | reassignment_count | ANYTHING in which the Reassignment count field is one of the following:  
- any value  
- empty  
- NULL |
<p>| is same | (Reassignment count)(is same) as (Reopen count) | SAMEAS | reassignment_count | SAMEAS in which there are matching numbers for the Reassignment count and Reopen count fields. |
| is different | (Reassignment count)(is different) from (Reopen count) | NSAMEAS | reassignment_count | NSAMEAS in which there are differing values between the Reassignment count and Reopen count fields. |
| greater than field | (Reassignment count)(greater than field)(Reopen count) | GT_FIELD | reassignment_count | All records in which the number in the Reassignment count field is greater than (but not equal to) the number in the Reopen count field. |</p>
<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than field</td>
<td>(Reassignment count)(less than field)(Reopen count)</td>
<td>LT_FIELD</td>
<td>reassignment_count&lt;reopen_count</td>
<td>All records in which the number in the Reassignment count field is less than (but not equal to) the number in the Reopen count field.</td>
</tr>
</tbody>
</table>
| greater than or is field | (Reassignment count)(greater than or is field)(Reopen count)                  | GT_OR_EQUALS_FIELD       | reassignment_count>=reopen_count | All records in which the number in the Reassignment count field is one of the following:  
  - greater than the number in the Reopen count field  
  - equal to the number in the Reopen count field |
| less than or is field | (Reassignment count)(less than or is field)(Reopen count)                  | LT_OR_EQUALS_FIELD       | reassignment_count<=reopen_count | All records in which the number in the Reassignment count field is one of the following:  
  - less than the number in the Reopen count field  
  - equal to the number in the Reopen count field |

**Operators available for Boolean fields**

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>is</td>
<td>(Active)is(true)</td>
<td>=</td>
<td>active=true</td>
<td>All records in which the Active field is True.</td>
</tr>
<tr>
<td>is not</td>
<td>(Active)is not (true)</td>
<td>!=</td>
<td>active!=true</td>
<td>All records in which the Active field is False, empty, or NULL.</td>
</tr>
</tbody>
</table>
## Paris    Now Platform user interface

### Operators available for email notifications

<table>
<thead>
<tr>
<th>Operator label</th>
<th>Example condition</th>
<th>Equivalent query operator</th>
<th>Example query</th>
<th>Example output</th>
</tr>
</thead>
<tbody>
<tr>
<td>is empty</td>
<td>(Active) (is empty)</td>
<td>ISEMPY</td>
<td>activeISEMPY</td>
<td>All records in which there is no value in the Active field.</td>
</tr>
<tr>
<td>is not empty</td>
<td>(Active) (is not empty)</td>
<td>ISNOTEMPTY</td>
<td>activeISNOTEMPTY</td>
<td>All records in which the Active field is either True or False.</td>
</tr>
<tr>
<td>is anything</td>
<td>(Active) (is anything)</td>
<td>ANYTHING</td>
<td>activeANYTHING</td>
<td>All records in which the Active field is one of the following: · True · False · empty · NULL</td>
</tr>
<tr>
<td>is same</td>
<td>(Active) (is same) as (Made SLA)</td>
<td>SAMEAS</td>
<td>activeSAMEASMadeSLA</td>
<td>All records in which there are matching values for the Active and Made SLA fields.</td>
</tr>
<tr>
<td>is different</td>
<td>(Active) (is different) from (Made SLA)</td>
<td>NSAMEAS</td>
<td>activeNSAMEASMadeSLA</td>
<td>All records in which there are differing values for the Active and Made SLA fields.</td>
</tr>
<tr>
<td>changes</td>
<td>(State) (changes)</td>
<td>VALCHANGES</td>
<td>stateVALCHANGES</td>
<td>All records in which the State field is updated.</td>
</tr>
<tr>
<td>changes from</td>
<td>(State) (changes from) (Awaiting User Info)</td>
<td>CHANGESFROM</td>
<td>stateCHANGESFROM</td>
<td>All records in which the State field is updated to another value after previously being Awaiting User Info.</td>
</tr>
<tr>
<td>changes to</td>
<td>(State) (changes to) (Awaiting User Info)</td>
<td>CHANGESTO</td>
<td>stateCHANGESTO</td>
<td>All records in which the State field is updated to Awaiting User Info after previously being any other value.</td>
</tr>
</tbody>
</table>
Tags

Tags are text labels that you can associate with items like records and pages. Tags enable you to group and organize the items. Tags can be visible to any user (global), visible only to specific groups or users (shared), or visible to a single user (private).

Tags are stored in the Tag (label) table. To view tags in a list, navigate to System Definition > Tags or Self-Service > My Tags.

Tag sharing levels

The tag sharing level enables other users to use the tag. The Viewable by property setting for a tag controls the sharing level.

<table>
<thead>
<tr>
<th>Sharing level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me</td>
<td>Private tag, visible only to the owner.</td>
</tr>
<tr>
<td>Groups and Users</td>
<td>Shared tag, visible to the owner and specific groups or users.</td>
</tr>
<tr>
<td>Everyone</td>
<td>Global tag, visible to everyone. This option is available to users with the admin or tags_admin role.</td>
</tr>
</tbody>
</table>

Tag name conflicts

Conflicts can occur if multiple tags have the same name.

- If a private tag and a shared or global tag have the same name, the system appends (private) to the name of the private tag. For example, Sample tag (private).
- There cannot be multiple shared or global tags with the same name. If a user attempts to create a shared or global tag with a name that is already in use, an error message appears and the system prevents the tag from being saved.

Administering tags

If you have an administrator role, you can configure and manage all tags, even tags created by other users. You can also configure notifications, auto-assignment, and Zing indexing for tags. You must have the tags_admin role for these administrative tasks.

Create a tag from the Tags list

You can create a tag directly from the Tags list.

Role required: tags_admin

1. Navigate to System Definition > Tags or Self-Service > My Tags.
2. Click New.
3. Enter a name for the tag in the Name field.
Edit tags from the Tags module

From the Tags module, you can edit all tags.

Role required: tags_admin

Note: Tag names are case-insensitive and must not include punctuation.

1. Navigate to System Definition > Tags.
2. Open a tag.
3. Make the necessary changes.
4. Click Update.

Configure tags to assign automatically

Configure the system to automatically assign a tag to records that match conditions defined in the tag record.
Role required: tags_admin, however for users with the tags_admin role to be able to create conditions for labels, you need to create the following ACLs. Creating ACLs requires the security_admin elevated role. Include tags_admin as a required role for each ACL. For more information on creating an ACL, see Create an ACL rule.

### ACLs required for the tags_admin role

<table>
<thead>
<tr>
<th>Name</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>label_table</td>
<td>read</td>
</tr>
<tr>
<td>label_table</td>
<td>write</td>
</tr>
<tr>
<td>label_table</td>
<td>create</td>
</tr>
<tr>
<td>label_auto</td>
<td>read</td>
</tr>
<tr>
<td>label_auto</td>
<td>write</td>
</tr>
<tr>
<td>label_auto</td>
<td>create</td>
</tr>
<tr>
<td>(Optional) label_table</td>
<td>delete</td>
</tr>
<tr>
<td>(Optional) label_auto</td>
<td>delete</td>
</tr>
</tbody>
</table>

Use automatically assigned tags to group high urgency incidents, overdue incidents, canceled changes, or any other set of records. The system automatically assigns the tag to records that match the criteria and removes the tag from records that no longer match the criteria.

1. Navigate to **System Definition > Tags**.
2. Open the tag that you want to assign automatically.
3. Configure the form to add the **Conditions for Labels** embedded list.
4. Create a row in the **Conditions for Labels** list.
5. Click the reference icon in the **Table** column. The Label Table list opens in a pop-up window.
6. Click **New**.
7. Enter a **Name**, select a **Table**, and add conditions for the automatic assignment of the tag.
8. Click **Submit**.
9. Click the check mark icon to save the new row.
10. Click **Update**.

**Configure notifications for tagged records**

You can enable the system to send a notification when a record with a certain tag is updated.

Role required: tags_admin

1. Navigate to **System Definition > Tags**.
2. Open a tag.
3. In the **Label Entries** related list, open the record for which you want notifications.
4. Select the **Notify onchange** check box to be notified any time the record is modified.
5. Use the **Notify when** condition builder to specify the conditions that must be true to trigger the notification.
6. Select a business rule in the **Notify script** field.
7. Save the record.

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Configure Zing tag indexing for text search

Zing text indexing is available for tags on records.
Role required: admin

No tags are indexed by default. You can enable text indexing of tags on a table-by-table basis. Private tags are never indexed.

1. Navigate to the dictionary entry for the table you want to turn on indexing for.
2. In the Attribute related list, click New.
3. Click the reference icon to see available attributes.
4. Select the Text Index Tags attribute (text_index_tags).
5. For the attribute value, enter one of the following options.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>everyone_only</td>
<td>Only tags shared with everyone are indexed.</td>
</tr>
<tr>
<td>all_shared</td>
<td>All shared tags (Everyone, Groups and Users) are indexed.</td>
</tr>
</tbody>
</table>

6. Click Submit.
7. Under Related Links, click Generate Text Index to reindex the table.

After you turn on text indexing for tags on records, records are reindexed when any of the following actions occurs.

- When you add or remove tags.
- When you modify a tag, as long as fewer than 100 records are affected. If there are more records, you must manually reindex.
- When you manually reindex an entire table (required after initial tag indexing setup).

Assigning tags

You can assign tags to records from the form or list view. You can also add tags to a homepage.

The list view provides multiple ways of assigning tags. You can assign tags with inline field editing, the action menu, the context menu, or the edit tags icon.

Note: Tag names are case-insensitive and must not include punctuation.

Add a tag to a homepage

You can add a tag to a homepage to view records to which the tag has recently been assigned.
Role required: none

You might want to do this task for tags of a Type other than Standard or Most Recent Record, as they do not appear on the Tagged Documents page.

1. Open a homepage to which you have permission to add content.
2. Click the add content icon (+).
3. Select Labels in the left column of the Add content window.
4. Select the tag you want to show on the homepage.
5. Click the appropriate Add here button.
6. Close the Add content window.

**Assign a tag from the list view using inline field editing**

You can assign one or more tags to a record directly from the list view.

Role required: none

1. Navigate to a list.
2. Personalize the list to display the **Tags** column.
3. In List v2, complete the following steps.
   a) Click in the **Add Tag** field.
   b) To assign an existing tag, begin typing the tag name, select the tag from the choice list, and press the Enter key.
   c) To create a new tag, enter a new tag name and press the Enter key.

4. In List v3, complete the following steps.
   a) Double-click in the **Tag** field.
      The Edit Tags dialog opens.
   b) To assign an exist tag, select one of the recent tags or click the lookup icon and select the tag.
   c) To create a new tag, enter a new tag name and press the Enter key.
   d) Click **X** to close the dialog.

The tag is added to the record.

**Assign a tag from a list using the action menu**

You can assign one or more tags to a record using the action menu in a list.

Role required: none

1. Navigate to a list.
2. Select the check box beside one or more records.
3. Click **Actions on selected rows** and complete the appropriate steps for the list version.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>1. Scroll to the <strong>Assign tag</strong> listing.</td>
</tr>
<tr>
<td></td>
<td>2. To assign an existing tag, select the tag listed.</td>
</tr>
<tr>
<td></td>
<td>3. To create a new tag, select <strong>New</strong>, enter the tag name, select the sharing level, and then click <strong>Save</strong>.</td>
</tr>
</tbody>
</table>
**Option** | **Description**
--- | ---
**List v3**<br>1. Select **Assign a tag** to open the Edit Tags dialog.<br>2. To assign an existing tag, select one of the recent tags or click the lookup icon and select the tag.<br>3. To create a new tag, enter a new tag name and press the Enter key.<br>4. Click x to close the dialog.

**Note:** In List v3, the sharing level defaults to **Me**. To change the sharing level, edit the tag from the form view or edit the tag record directly.

The tag is added to the record.

**Assign a tag from the list context menu**

You can assign one or more tags from the list context menu.

Role required: none

1. Navigate to a list.<br>2. Right-click a record.<br>3. To assign an existing tag, complete the appropriate steps for the list version.

<table>
<thead>
<tr>
<th><strong>Option</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>List v2</strong>&lt;br&gt;1. Select <strong>Assign Tag</strong> &gt; <strong>(Tag Name)</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>List v3</strong>&lt;br&gt;1. Select <strong>Edit Tags</strong> and select one of the recent tags or click the lookup icon and select the tag.&lt;br&gt;2. Click x to close the dialog.</td>
<td></td>
</tr>
</tbody>
</table>

4. To create a new tag, complete the appropriate steps for the list version.

<table>
<thead>
<tr>
<th><strong>Option</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>List v2</strong>&lt;br&gt;1. Select <strong>Assign Tag</strong> &gt; <strong>New Tag</strong>.&lt;br&gt;2. Enter a new tag name and select the appropriate sharing level.&lt;br&gt;3. Click <strong>Save</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>List v3</strong>&lt;br&gt;1. Enter a new tag name and press the Enter key.&lt;br&gt;2. Click x to close the dialog.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** In List v3, the sharing level defaults to **Me**. To change the sharing level, edit the tag from the form view or edit the tag record directly.
Assign a tag using the edit tags icon

You can assign one or more tags to a record using the edit tags icon in the form header.

Role required: none

1. Navigate to a form.
2. Perform the appropriate action for your version of the UI.

<table>
<thead>
<tr>
<th>UI version</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>UI16</td>
<td>1. Click the more options icon (⋮) in the form header.&lt;br&gt;2. Select Add Tag.</td>
</tr>
<tr>
<td>UI15</td>
<td>Click the edit tags icon (📝).</td>
</tr>
</tbody>
</table>

3. Click in the Add Tag field.
4. Perform one of the following actions.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign an existing tag</td>
<td>Begin typing the tag name and select the tag.</td>
</tr>
<tr>
<td>Create a new tag</td>
<td>Enter a new tag name and press the Enter key.</td>
</tr>
</tbody>
</table>

The tag is added to the record.

Editing tags

You can edit tags that you created from the list and form views, the My Tags module, and the Tagged Documents page. You can also merge tags from the My Tags module.

Note: Tag names are case-insensitive and must not include punctuation.

Edit tags from the list view

In the list view, you can edit tags that you created.

Personalize the list to display the Tags column.

Role required: none

1. Navigate to a list that contains records you have previously tagged.
2. Click the edit tag audience icon (👤) beside the tag name.
   The Tag Details dialog box opens.
3. Edit the Name field as necessary.
4. Select an option for the Viewable by field to set the sharing level.
5. Click Save.
   All records associated with the tag are updated to reflect the change.

Edit tags from the form view

From the form view, you can edit tags that you created.
Role required: none

1. Navigate to a record you have tagged.
2. Perform the appropriate action for your version of the UI.

<table>
<thead>
<tr>
<th>UI version</th>
<th>action</th>
</tr>
</thead>
</table>
| UI16       | 1. Click the more options icon (○○○) in the form header.  
            | 2. Click the edit tag audience icon (advisor) beside the tag name. |
| UI15       | 1. Click the edit tags icon (○).  
            | 2. Click the edit tag audience icon (advisor) beside the tag name. |

3. In the Tag Details dialog box, edit the **Name** field as necessary.
4. Edit the **Viewable by** field to set the sharing level.
5. Click **Save**.

All records associated with the tag are updated to reflect the change.

**Edit tags from the My Tags module**

From the My Tags module, you can edit tags you created.

- **Note**: Tag names are case-insensitive and must not include punctuation.

1. Navigate to **Self-Service > My Tags**.
2. Open a tag.
3. Make the necessary changes.
4. Click **Update**.

All records associated with the tag are updated to reflect the change.

**Edit tags from the Tagged Documents page**

You can edit tags from the Tagged Documents page.

Role required: none

1. Navigate to **Self-Service > My Tagged Documents**.
   Alternatively, in UI15 you can click Tagged Documents in the Edge.
2. Click **Edit Tags**.
   A list of tags you have created appears.
3. Open a tag.
4. Make the necessary changes.
5. Click **Update**.

All records associated with the tag are updated to reflect the change.
Merge tags

You can merge one or more tags with another tag. For example, when you merge Tag A with Tag B, Tag A is deleted and all associated records are reassigned Tag B.

Role required: A user with the admin or tags_admin role can merge any tag into any other tag.

All other users can merge tags they created into tags that are visible to them.

1. Navigate to **Self-Service > My Tags**.
2. Select the check box for each tag you want to merge with another tag.
3. Select **Actions on selected rows > Merge Tags**.
4. Enter the tag to merge other tags with.
5. Click **OK**.

Using tags

Use tags to filter records and view tagged documents. Remove a tag when it is no longer useful.

Filter records by tag

You can filter records on a table by tags you have access to.

Role required: none

Filter records by tag in any of the following ways.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Filter from the form view</strong></td>
<td>Perform the appropriate action for your version of the UI.</td>
</tr>
<tr>
<td></td>
<td>• UI16: Click the more options icon ( ), and then click the tag in the menu that opens. A new tab or window opens and displays a list of</td>
</tr>
<tr>
<td></td>
<td>records that contain the tag.</td>
</tr>
<tr>
<td></td>
<td>• UI15: Click the edit tags icon ( ), and then click the tag.</td>
</tr>
</tbody>
</table>

Filter from the list view using the Tags column

With the **Tags** column visible, click the tag name. Clicking two or more tags filters the tags together with the AND operator and shows records containing all the selected tags.

This functionality is not available in List v3.

Filter from the list view using the list filter

Click the show/hide filter icon ( ), select **Tags** from the field choice list and enter the tag name.

View tagged documents

The Tagged Documents page displays recently viewed documents or user-tagged documents in the content frame.

Role required: none

An administrator can configure the fields that appear on the tagged document cards by configuring the mobile view of the task, for example, the mobile view of the incident form. If
there is not a mobile view available for the page, the record reverts to the default view. For more information, see Create and delete views.


2. Optional: Click Show Global Tags to display global tags.

3. Perform one of the following actions:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display most recently viewed documents</td>
<td>Click Most Recent in the sidebar.</td>
</tr>
<tr>
<td>Display documents associated with a tag</td>
<td>Click the tag name in the sidebar.</td>
</tr>
<tr>
<td>Remove a tag from a record</td>
<td>Click the x in the corner of the document preview.</td>
</tr>
<tr>
<td>Open the form for a tagged document</td>
<td>Click the title of the document preview.</td>
</tr>
</tbody>
</table>

Remove a tag from a record

There are many ways to remove a tag from a record.

Role required: none

Note: Only the tag owner can delete shared tags from a record.

Perform any of the following actions.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove a tag from a record in the list view using the Tags column</td>
<td>Perform the appropriate action for your list version.</td>
</tr>
<tr>
<td></td>
<td>• List v2: Ensure that the Tags column is visible and click the remove tag icon (x) beside the tag name.</td>
</tr>
<tr>
<td></td>
<td>• List v3: Double-click the tag in the column to open the Edit Tags dialog. Click the remove tag icon (x) beside the tag name.</td>
</tr>
<tr>
<td>Remove a tag from one or more records in the list view using the action menu</td>
<td>Select the check box for one or more records, then click Actions on selected rows &gt; Remove Tag: &gt; (Tag name).</td>
</tr>
<tr>
<td></td>
<td>This functionality is not available in List v3.</td>
</tr>
<tr>
<td>Remove a tag from a record in the form view</td>
<td>Perform the appropriate action for your version of the UI.</td>
</tr>
<tr>
<td></td>
<td>• UI16: Click the more options icon (○○○) in the form header, then click the remove tag icon (x).</td>
</tr>
<tr>
<td></td>
<td>• UI15: Click the edit tags icon ((toolbar), then click the remove tag icon (x).</td>
</tr>
<tr>
<td>Remove a tag from a record in the Tagged Documents page</td>
<td>Click the remove tag icon (x) in the corner of the document preview.</td>
</tr>
</tbody>
</table>
If a tag is automatically applied to a record based on specific conditions, the tag is automatically removed when those conditions no longer apply. For more information, see *Administering tags*.

**User presence**

User presence is a UI16 feature that lets you see who is online when you are working in an instance.

Your avatar appears in the form header next to your name, and in multiple other places such as in activity streams, Visual Task Boards, live feeds, and Connect conversations. A dot on the avatar of the user represents online status.

- Green dot if the user is logged in.
- No dot if the user is not logged in.
- Orange dot if the user recently logged out.

Users can add an avatar image to their live feed profile. If no image is uploaded to the live feed profile, the avatar is the user’s initials.

> **Note:** Live Feed does not use images uploaded to User (sys_user) records.

When you are viewing a record in a form, such as an incident, you can see if other users are viewing the same record.

**User presence in a form**

If multiple users are viewing the record, the avatar is represented by the number of users. Point your cursor to the number to see the names and avatars of the users.

When you are in a Connect conversation or entering comments in an activity stream, you can see information about the activity of the other participant, for example if they are viewing or typing.
An administrator can disable user presence globally.

**Disable user presence**

You can disable user presence globally by enabling a system property.

Role required: admin

Enabling the property turns off all user presence features.

1. Navigate to `sys_properties.list`.
2. Locate the property named `glide.ui.presence.disabled`.
3. Set the Value to `true`. 
Disable live form features

User presence includes several new live form features. You can show or hide these features using the glide.ui16.live_forms.enabled property.

Role required: admin

The glide.ui16.live_forms.enabled property is included automatically with UI16 as part of the com.glide.ui.form_presence plugin. It controls the following form features:

- Live form updates
- Form presence
- Activity formatter appearance
- Attachments displaying in the activity stream

1. Enter sys_properties.list in the Navigation filter.
2. In the system properties list, search for the glide.ui16.live_forms.enabled property.
3. In the Value field, type false.

Configure time intervals for user presence

User presence shows that users are viewing a record sometimes after they have already left. The system only checks for user presence every two minutes by default. You can allow the system to check more frequently by configuring some system properties.

Role required: admin

These properties control how often the system checks for updates or caches user presence.

- glide.ui.presence.cache_seconds
- glide.ui.presence.time_back_minutes

You can configure each property to check more or less frequently. Checking more frequently might slow performance.

1. Navigate to the system properties list by typing sys_properties.list in the navigation filter.
2. Search for each of the properties to make sure they do not already exist in the list.
3. Click New.
4. To control how often the system checks for updates, configure the following property.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>glide.ui.presence.time_back_minutes</td>
</tr>
<tr>
<td>Type</td>
<td>integer</td>
</tr>
<tr>
<td>Value</td>
<td>How often in minutes you want the system to check for user presence. The default number is 2.</td>
</tr>
</tbody>
</table>

5. To control how often the system caches logged in user information, configure the following property.
Cache property

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>glide.ui.presence.cache_seconds</td>
</tr>
<tr>
<td>Type</td>
<td>integer</td>
</tr>
<tr>
<td>Value</td>
<td>How often in seconds, the system caches the user presence information. The default number is 5.</td>
</tr>
</tbody>
</table>

6. Click Submit.

User interface configuration

Change appearance, navigation menus, CSS, and utilize cutting edge interface tools.

Response time indicator

A response time indicator may appear at the bottom right of forms and in the list view for List v2. This indicator provides the processing time, including the total time and the time for each step, for a completed transaction. In List v3, the administrator can add the glide.ui.list_v3.client.timings.roles property to allow specified roles to see the response time.

The following example shows the response time for retrieving a filtered v2 list in a demo instance.

Response time in v2 lists

The response time text is:

Response time (ms): 985, Network: 22, server: 849, browser: 114

In this example, the transaction took the following amount of processing time.

- 985 milliseconds total time
- 22 milliseconds moving data across the network
- 849 milliseconds on the server
- 114 milliseconds in the browser, rendering the HTML and parsing and executing JavaScript

Use the expand option to see more details for the response time indicator.
In List v3, the response time appears on the lower left for users whose role is specified in the system property.

Response time appears on most pages. However, it does not appear for simple operations, such as paging through a set of records or changing the sort order of a list, or for the first transaction in a session.

To hide the response time in List v2 or forms, click the clock icon. Click the clock icon again to show the response time.

Point to the clock to view a tooltip with the response time.

To view a detailed breakdown of the browser processing time on forms, click browser.
Detailed response time information

Administrators can disable the response time by setting the `glide.ui.response_time` property to `false`.

**Add a property to display response time in List v3**

The response time indicator that displays in List v2 is not supported in List v3. You can add a property to show the display time in milliseconds (ms).

You determine which roles can view the response time. It appears in the lower left corner of the list footer.

![Response time in List v3 footer](image)

1. **Add a property** with the following settings.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td><code>glide.ui.list_v3.client.timings.roles</code></td>
</tr>
<tr>
<td>Description</td>
<td>For specified roles, show in milliseconds the length of time it takes for the list to load in List v3. Separate each role with a comma.</td>
</tr>
<tr>
<td>Type</td>
<td>string</td>
</tr>
</tbody>
</table>
2. Click **Submit**.

**Navigation stack**

The navigation stack is the portion of the ServiceNow suite of applications that determines where a user is redirected after the update of a record.

An administrator can cause page references to be manually inserted into the navigation stack when a link in the **Navigation Page** is clicked. This is done by modifying a module definition to include an argument of `sysparm_stack` with a string value equal to the URL reference to the page to be inserted into the stack. The administrator can also override the redirection determined by the stack by creating a business rule or editing an existing one to include `gs.setRedirect("http://redirect_page.com")`.

**Operating parameters of the navigation stack**

The navigation stack can be thought of a user's navigation history in the instance. It is updated every time a user views a new page. The navigation stack is referenced when users press the page back button. It is also referenced when a user submits or updates a record, at which point users are redirected to their last page in the navigation stack.

**Inserting pages to the navigation stack**

The administrator can insert page references manually into the navigation stack when a link in the navigation page is clicked. The module definition is modified to include an argument of `sysparm_stack` with a string value equal to the **URL reference** to the page to insert into the stack.
The following image shows the system definition for the **Incident > Create New** module. By passing an argument of *
*sysparm_stack=incident_list.do*, the list view of incidents (incident_list.do) is added to the stack. After submitting an incident, the user is directed to this page.

---

**Sysparm stack example**

**Overriding the redirection behaviors of the navigation stack with onEvent business rules**

The redirection behaviors that occur as a result of navigation stack behaviors can be overridden using onEvent business rules. This override is performed by using the function **gs.setRedirect**. Doing so overrides the redirection as determined by the navigation stack, when the specified event occurs. The function **gs.setRedirect** takes a string argument that is a URL for the page that the user is redirected to. This URL can be external, for example: **gs.setRedirect('http://www.google.com').**
Navigation action cancellation

The Request Manager allows users to cancel any navigation action they select from the application navigator by clicking another application navigator link. System properties work with settings for the table to allow navigation action cancellation.

This allows users to cancel slow loading transactions without having to wait for the previous transaction to complete.

One of the following conditions must be true for the Request Manager to cancel a transaction.

- Both the original transaction and new transaction are cancelable (both transactions have the setting `sysparm_cancelable=true`).
- The original transaction is a member of the always cancelable white list (the module is listed in the `glide.request_manager.always_cancel` system property) and the new transaction is cancelable (has the setting `sysparm_cancelable=true`).
- Both the original and new transaction produce an auto-completer query in a reference field.

Cancellation workflow

The Request Manager uses the following workflow to determine whether to cancel a transaction.
Cancel navigation actions
Navigation cancellation system properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
</table>
| glide.request_manager.cancel_other_transaction | Enables or disables automatic cancellation behaviors. When true, users can cancel one navigation action with another navigation action.  
Type: true | false  
Default value: true  
Location: sys_properties table |
| glide.request_manager.always_cancel | A comma-separated list of URIs that users can always cancel by clicking another navigation action. Typically items on this list are modules that provide read-only data such as homepages, reports, or knowledge articles.  
Type: string  
Default value: home,sys_report_template  
Location: sys_properties table |
| glide.request_manager.cancel_reference_completer | Cancels a user query in a reference field when the user enters more information. For example, if the user starts an AJAX search in the Problem number field by entering PRB and then enters PRB000, the second query cancels the first query.  
Type: true | false  
Default value: true  
Location: sys_properties table |

Use cases

There are three use cases where administrators can control user cancellation actions.

1. A user clicks a module, such as the homepage (home.do), and while waiting for the module to load decides to navigate to another module, such as the list of open incidents (incident_list.do). The system property glide.request_manager.cancel_other_transaction controls this use case.

2. A user clicks a module that displays read-only data, such as a report (sys_report_template.do?sysparm=sysid), and while waiting for the module to load decides to navigate to another module, such as the list of open incidents (incident_list.do). The system properties glide.request_manager.cancel_other_transaction and glide.request_manager.always_cancel control this use case.

3. A user starts typing a query in a reference field, such as entering PRB in the related Problem field and while waiting for the auto-completer to display results, decides to enter more information, such as PRB000. The system properties glide.request_manager.cancel_other_transaction and glide.request_manager.cancel_reference_completer control this use case.
Add sites to the always cancel white list

You can add UI pages or other links to the always cancel white list so that users can cancel actions on these pages by navigating to another module or link.

Role required: admin

User actions can always cancel items on the white list. You should only add items to the white list that provide read-only data to the user, such as a homepage or a report.

1. Enter `sys_properties.list` in the navigation filter and press the Enter key.
2. In the Go to field, select Name, enter `glide.request_manager.always_cancel`, and click Go.
3. Click the property name to open it.
4. In the Value field, add a comma-separated list of URIs you want to allow users to cancel.
5. Click **Update**.

**Prevent users from canceling module transactions**

You can explicitly prevent users from canceling the activity of a module by updating the module definition.

Role required: admin

1. Perform the appropriate action for your version of the UI:
2. Point to the application menu you want to add the module to and click the edit application (pencil) icon.

3. Right-click the application menu you want to add the module to and select **Edit Application Menu**.

4. Configure the form layout and add the field **Uncancellable by Other Modules**.

5. Select the check box for **Uncancellable by Other Modules**.

5. Click **Update**.

**Context-sensitive help**

By default, the help link available in the product opens the welcome page of the help system, allowing you to enter search criteria for the information you want to find. With context-sensitive help, you can set a base URL for an external help system. The context-sensitive system properties define the base URLs for the default and custom help systems.

The ServiceNow system provides several preconfigured help contexts connected to this link that display the exact information you need for the current list, form, or record. You can define your own help topics and configure them to appear when you click the help icon in a ServiceNow record.

Users click the help icon to open the default help pages provided in the base system. For any page that does not have context-sensitive help defined, the instance displays the help system...
welcome page. Users can use the search feature or the index to find the correct help topic. The location of the help icon depends on the user interface version you are using.

**UI15**

Click the gear icon in the banner frame to open the menu containing the help icon. The appearance of the menu and icons might be different, depending on the UI scheme you have configured for your instance.

![Context help access in UI15](image)

**UI16**

Click the help icon in the right corner of the header bar and select *Search Product Documentation* from the menu.
Context help access in UI 6

Alternatively, administrators can create custom context-sensitive help to suit the needs of their organizations. Create a help context that links the help icon to a topic describing a list, form, or specific record. You may initially want to set a base URL to direct to a help system other than the default ServiceNow help system.

Set base URLs

To create numerous help contexts that direct to a single server other than the ServiceNow help system, enter the base URL in the `help.base.default` property.
On the Help Context form, when the **ServiceNow Product Documentation** check box is cleared and you enter a value in the **URL or page name** field that does not contain the string `://`, that value is appended to the base URL defined by `help.base.default` property.
Context-sensitive help properties

To access the context-sensitive help properties, navigate to `sys_properties.list` and filter by `Name`. You can edit a property value from the list or by opening the property record.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Description</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>glide.help.default.page</td>
<td>The default URL the help icon directs to when no help context is specified. This is the base URL of the ServiceNow help system and opens to the welcome page. Do not change this value.</td>
<td><a href="http://docs.servicenow.com/">http://docs.servicenow.com/</a></td>
</tr>
<tr>
<td>help.base.default</td>
<td>The base URL for custom help contexts in which the ServiceNow Product Documentation check box is cleared, and an absolute URL is not specified. When the base URL is set, the system creates the address of a help context record by appending the target page or file name to the base URL. Custom help contexts using this base URL overwrite the help provided by default in your instance for the same table. For details, see set base URLs.</td>
<td><a href="http://docs.servicenow.com/?context=">http://docs.servicenow.com/?context=</a></td>
</tr>
<tr>
<td>help.base.servicenow</td>
<td>The base URL for help contexts in which the ServiceNow Wiki check box is selected. This is the base URL for the help provided in your instance by default. Do not change this value. For details, see Create a new help context.</td>
<td><a href="http://docs.servicenow.com/?context=">http://docs.servicenow.com/?context=</a></td>
</tr>
</tbody>
</table>

Create a new help context

You can create new help contexts to supplement or replace the default help contexts. For example, if your organization has heavily customized a form, you might create a new help
context for that form. The customized help context could link to more relevant information, such as a company knowledge base article.

1. Navigate to **System UI > Help Contexts**.
2. Click **New**.
3. Complete the Help Context form from the fields in the table.

### Help context form

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Select <strong>Form, List, or Record</strong>. If you select <strong>Record</strong>, the <strong>Table name</strong> field is replaced by the <strong>Document</strong> field.</td>
</tr>
<tr>
<td><strong>Table name</strong></td>
<td>Select the table for which the help context is being defined. If the <strong>Type</strong> is <strong>Record</strong>, this field is replaced by the <strong>Document</strong> field.</td>
</tr>
<tr>
<td><strong>Document</strong></td>
<td>Click the reference lookup icon (🔍) to open the document selection dialog box (pictured). Select the table and document (record) for this help context. This field is only visible if you have selected <strong>Record</strong> as the <strong>Type</strong>.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Language</td>
<td>Select the language of the help page to which you are linking. The choices available depend on which i18n Translation plugins you have activated. For more information, see Activate a language. This field allows you to create multiple help contexts for the same form, list, or record, each directing to a help page in a different language. For example, you might have two help contexts for Form X: one for English and the other for Spanish. If a user whose language is set to Spanish clicks the help icon while viewing Form X, the help page defined in the Spanish help context opens.</td>
</tr>
<tr>
<td>Active</td>
<td>Select this check box to have the system use the help context. This check box is selected by default for new help contexts.</td>
</tr>
<tr>
<td>ServiceNow Product Documentation</td>
<td>Indicates if this help was created by a customer or was provided by ServiceNow. Clear this check box to create custom help for your organization. Do not attempt to modify existing help topics provided by ServiceNow for your own use. The system is configured to use your custom records rather than the default help contexts, even when they are created on the same table.</td>
</tr>
<tr>
<td>URL or page name</td>
<td>Identifies the topic to display when a user clicks the help icon while viewing a form, list, or record. You can enter the complete URL of the help page or just the target file name if you set a base URL in the help.base.default system property.</td>
</tr>
</tbody>
</table>

**Note:** If you reconfigure the fields on the form, you see the available fields Plugin ID and System Property Base URL. Do not use these fields. They are for internal use only.

4. Click Submit.

**Help context types and prioritization**

You can create a help context with the type **Form**, **List**, or **Record**, and link it to a particular table in your ServiceNow instance. If you have multiple help contexts, prioritization determines which help contexts apply to what a user views.
Help context types

When a user clicks the help icon, the system analyzes the relevant help contexts to determine which help page to display.

- **Record-level help** applies to only one specific record, not the list or form for that table.
  
  For example, if a **Record** type help context exists for the **Validate Number** record in the Business Rule table, the help icon only directs to the page specified when a user views that record.

- **List-level help** applies to the list for a table. If no form-level help is defined, list-level help also applies to the form for the same table.
  
  For example, if a **List** type but not a **Form** type help context exists for the Business Rule table, the help icon directs to the page specified by the **List** type help context when a user views any list or record (if record-level help is not defined for it) in the Business Rule table.

- **Form-level help** applies to the form for a table. If no list-level help is defined, the form-level help also applies to the list for the same table.
  
  For example, if a **Form** type but not a **List** type help context exists for the Business Rule table, the help icon directs to the page specified by the **Form** type help context when you view any record (if record-level help is not defined for it) or list in the Business Rule table.

- If both list- and form-level help are defined for a table, the appropriate help is displayed for the list and the form.

  For example, if a **List** type and a **Form** type help context exist for the Business Rule table, the help icon directs to the page specified by the **List** type help context when you view a record in the Business Rule table. The help icon directs to the page specified by the **Form** type help context when a user views any record (if record-level help is not defined for it) in the Business Rule table.

**Important:** If you create a help context for a base table list or record, the help system opens that target topic for any list or record in a table that extends the base table if no other help context is created in that extended table.

Help context prioritization

When there are several matching help context records, the following rules determine which help context is used, in descending order of priority.

1. A customer-created help context is used instead of a default help context provided in the instance for the same table.

2. A help context that matches the user’s language setting is used instead of a help context in the default language of the instance. See the **Language** field on the **Help Context form**.

3. A help context for a closer table in an extended table hierarchy is used instead of a help context for a further table.

  Consider the case of the Linux Server (cmdb_ci_linux_server) table, which has the following parentage: cmdbi_ci > cmdb_ci_hardware > cmdb_ci_computer > cmdb_ci_server > cmdb_ci_linux_server. If help contexts exist for both the cmdb_ci_server table and the cmdb_ci table, the help icon directs to the page specified by the cmdb_ci_server help context when you view a record in the cmdb_ci_linux_server table.
Embedded help and guided tours

Embedded help and guided tours provide just-in-time assistance to your users within the instance. Some content is provided in the base system, and an administrator can add or modify content.

Embedded Help (com.glide.embedded_help), Guided Tour (com.glide.guided_tours), and Guided Tour Designer (com.glide.sn_tourbuilder) are active by default in all instances. You can use these applications to create customized content for your organization.

Listen to this 25-minute podcast for a discussion of how the Embedded Help and Guided Tour features help users.

Embedded help

Embedded help provides targeted help content to a user in a UI page, based on their role. Some embedded help content comes with the base instance. Your organization can add or replace embedded help content.

Note: Embedded help is only available in UI16. It is not compatible with UI15. For more information, see Activate UI16.

The Embedded Help plugin (com.glide.embedded_help) is active by default for all new and upgraded instances. Embedded help content appears in the right sidebar when the user clicks the help icon. If embedded help exists for the current UI page, the help icon has an indicator.
Work on Service Catalog tasks

1. Open the catalog task to work on and
   look at the state in the Approval field.
   Verify that the request was approved
   before you begin work.

2. Change the state to Work in Progress
   and click Update.

3. Complete the work described in the
   task.

4. In the task record, enter worknotes
   about the completed work. If
   necessary, update items in the
   Variables section.

5. Click Close Task in the form header.
   The task is completed and the next task
   automatically changes to Open state.

Help

Related Information

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countries. Other company names, product names, and logos may be trademarks of the respective companies with which they are associated.
If there is no embedded help for a list or form, the sidebar displays links to the User Guide and the documentation site search. Click Search Documentation to search for documentation about that feature.

Users with the embedded_help_admin or admin role can add help to the page. They can also edit custom content that appears for a page. The following image shows what the admin sees when there is no help article, and how to open an existing article. If you want to edit base system help content, follow the steps in Add custom embedded help from a copy.

Embedded help administrator features in the help pane

Embedded help is displayed based on the user's role. If the content has no associated role, all users see it. If the role is different than admin, users with the specified role and above see the content. For example, content with the itil role appears for itil, itil_admin, and admin.

**Working with embedded help content**

You can add new embedded help content or replace content. Replacing content involves deactivating the existing topic and adding a topic.

Following are some of the reasons for your organization to add or replace embedded help content.

- To provide help for custom applications.
- To provide more specific instructions or embedded videos to describe your business process.
- To provide embedded help content where none exists for a page.
- To provide embedded help content in languages other than English (default).
- To provide different content for different roles.
The UI page name identifies embedded help content. To find the page name, look for the table name in the URL for that view. For example, the page name for the list view of Assessment Metric Types is `asmt_metric_type_list` and is found in this address: `instancename.service-now.com/nav_to.do?uri=%2Fasmt_metric_type_list.do%3Fsysparm_userpref_module%`. The page name for the form view is `asmt_metric_type`.

You cannot edit the content in a base system topic. In base system topics, the read-only ServiceNow Help check box is selected. If you edit the content and try to save changes, you see an error message. To change the information that appears in a base system topic, make a copy of the topic, which clears the ServiceNow Help check box. Modify the topic with your content and save it. Customized content takes precedence over ServiceNow help content and is displayed when a user opens help for that UI page.

### Embedded help and domain separation

If your organization uses domain separation, you can create custom embedded help for each domain. To associate help content with a domain, the administrator configures the Help Content form to include the Domain field. When custom content is created, the author selects the domain to which the content applies.

Considerations include the following list:

- Content with no specified domain is in the global domain.
- If domain-specific content does not exist for a user in a domain, the user sees the global help content.
- Users in the global domain only see global help content. An administrator who wants to test domain-specific help must impersonate a user in that domain.

### Embedded help process

The ServiceNow datacenter contains the Content Delivery Network (CDN) where embedded help content is stored. Topics in the local (instance) Embedded Help Content `[sys_embedded_help_content]` table are populated from the CDN. Help content in the CDN is refreshed every 30 days.

When a user accesses a UI page, the embedded help process displays a custom topic if one exists for the user's role. If there is no custom topic, the following steps are performed.

1. Checks the browser cache first, and displays the content if found in the cache. It then checks the Embedded Help Content `[sys_embedded_help_content]` table for the corresponding embedded help topic with the role and qualifier, if applicable.
   - If a topic is found, it checks the date in the Last sync field. If the date is 15 or more days old, it places a request in the Embedded Help Queue `[sys_embedded_help_queue]` table with the last sync date and the resource ID. If a topic is not found, it places a request in the Embedded Help Queue `[sys_embedded_help_queue]` table with the current date and the resource ID.

2. Within a minute of the page being viewed, the system processes the request and checks the CDN. In the first case, it checks whether the topic was updated since the Last sync date. In either case, after a minute, refresh the page to see the content.
   - If the topic was updated, it pulls the updated topic into the table and updates the Last sync date.
Paris       Now Platform user interface

- If the topic was not updated, it displays the local cached or database topic, and updates the Last sync date.

3. If the topic was not in the local database, it pulls the topic into the table if it exists on the CDN. If it does not exist, there is no action.

The administrator can modify the default 15-day synchronization duration in system properties

Embedded help system properties

Embedded help is active by default on your instance. The administrator can change system properties to modify how the instance interacts with embedded help.

The administrator navigates to Embedded Help > Properties to change these properties.

### Embedded help system properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>com.glide.embedded_help.auto_close</td>
<td>Auto-closes the help pane when the user clicks Start a Tour or Back To Guided Setup.</td>
</tr>
<tr>
<td></td>
<td>• Type: true</td>
</tr>
<tr>
<td></td>
<td>• Default value: true</td>
</tr>
<tr>
<td>com.glide.embedded_help.cdn_timeout</td>
<td>Duration in milliseconds at which a content pull from the Content Delivery Network (CDN) is timed out.</td>
</tr>
<tr>
<td></td>
<td>• Type: integer</td>
</tr>
<tr>
<td></td>
<td>• Default value: 2000</td>
</tr>
<tr>
<td>com.glide.embedded_help.enabled</td>
<td>Enables the embedded help plugin for activation.</td>
</tr>
<tr>
<td></td>
<td>• Type: true</td>
</tr>
<tr>
<td></td>
<td>• Default value: true</td>
</tr>
<tr>
<td>com.glide.embedded_help.enable_video</td>
<td>Enables users to see embedded videos in help content. The administrator can embed video and a description, but if this property is false, the video and description are hidden in the help pane.</td>
</tr>
<tr>
<td></td>
<td>• Type: true</td>
</tr>
<tr>
<td></td>
<td>• Default value: true</td>
</tr>
</tbody>
</table>

**Note:** When you embed video content, enclose the video embed code and description inside a `<div class="video">` tag. If you disable the property, the content inside the `<div class="video">` tag is hidden when the content is displayed.
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>com.glide.embedded_help.sync</td>
<td>Enables the instance to look in the CDN for updated content when a user accesses a UI page. The instance checks the Last sync date in the topic against the specified frequency to determine whether to look in the CDN for updated content.</td>
</tr>
<tr>
<td></td>
<td>· Type: true</td>
</tr>
<tr>
<td></td>
<td>· Default value: true</td>
</tr>
<tr>
<td></td>
<td>If the property is disabled (false), the embedded help content is never synced with CDN topic updates.</td>
</tr>
<tr>
<td>com.glide.embedded_help.sync_frequency</td>
<td>Specifies how many days must pass from the Last sync date in the topic for the embedded help process to look for updated content in the CDN.</td>
</tr>
<tr>
<td></td>
<td>· Type: integer</td>
</tr>
<tr>
<td></td>
<td>· Default value: 15</td>
</tr>
<tr>
<td>com.glide.embedded_help.sync_self_hosted</td>
<td>Specifies whether a self-hosted instance syncs content with the CDN.</td>
</tr>
<tr>
<td></td>
<td>· Type: true</td>
</tr>
<tr>
<td></td>
<td>· Default value: false</td>
</tr>
<tr>
<td>com.glide.embedded_help.url</td>
<td>Lists the location from where embedded help is dynamically retrieved.</td>
</tr>
<tr>
<td></td>
<td>· Type: string</td>
</tr>
<tr>
<td></td>
<td>· Default value: varies</td>
</tr>
<tr>
<td>com.glide.embedded_help.version</td>
<td>Specifies the instance version for which help is displayed.</td>
</tr>
<tr>
<td></td>
<td>· Type: string</td>
</tr>
<tr>
<td></td>
<td>· Default value: Jakarta</td>
</tr>
<tr>
<td></td>
<td>If blank, displays the help for the version the instance is currently running.</td>
</tr>
</tbody>
</table>

The following system property is available by navigating to the (sys_properties) table.
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>com.glide.embedded_help.guided_setup.persist_actions</td>
<td>Enables Guided Setup actions in the embedded help panel that are based on states to display on all pages. An example is the Mark as Complete action. The default behavior (false) is to only show actions on the initial Guided Setup page.</td>
</tr>
</tbody>
</table>
  - Type: true | false
  - Default value: false

**Embedded help planning**

Before writing custom embedded help, plan the content and note the information used in the Embedded Help form. Careful planning ensures that the topic appears for the right page and role.

Each UI page can display embedded help, specified in the Page field as shown in the following example.
Embedded help topic for the Service Catalog home page
In planning for embedded help topics, consider how the following fields are used and note the values that you need for your custom topics.

Page
Identify and note the UI page name which is found in the URL when the page is displayed as shown. If the page name begins with a dollar sign, such as $mid_server_user, include the dollar sign in the page name. Before you write an embedded help topic for the page, search for the page name to locate a file you can copy.

Modifier
- **Normal** content appears for any user with the appropriate role who navigates to the page.
- **Setup** content appears when the page is accessed from a link in Guided Setup.

Many embedded help topics in the base system are for Guided Setup. You can copy Setup content and change the **Modifier** to **Normal** to quickly provide help for all users.

Qualifier
Identify pages you want custom help for that are used in many applications. For example the home.do page opens for every Homepage module and for many Dashboard modules. The embedded help administrator can use qualifiers to customize content for a common page in the instance.

Role
Specify the lowest level role to provide access to this embedded help topic. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page.

For example, if you add embedded help content for the itil role that describes your business process for entering incidents, the itil_admin role also sees the content. If you write a different topic with the itil_admin role, the itil_admin sees that content instead of the itil content.

Product
Write content only for the **Enterprise** topic. You can copy an **Express** topic and change this field to **Enterprise** if appropriate.

Version
Base system content is typically specified to the current software version. If you are editing the content for a custom application or to provide information relevant to your organization business process, select **All**.

Domain
If your organization uses domain separation and customizes help content, specify the domain the content applies to.

ServiceNow Help
If the check box is selected, this field indicates a base system topic. You cannot edit a base system topic, but you can create a copy to add custom content.

Content
You can use the formatting tools to format the content. The following list describes the limitations.
- You cannot include images in embedded help content.
- To embed video, you must code the video information in the source code `<<<` view. Video content from YouTube and Vimeo are supported.
- To add a related information link, you must use a full URL, not a relative URL.
Best practice is not to use the highlight text tool, as the color may make text unreadable depending on the theme the user has selected.

*Use embedded help qualifiers*

The embedded help administrator can use qualifiers to customize content for a common page in the instance.

**Role required: embedded_help_admin**

The `home.do` page is opened for every Homepage module and for many Dashboard modules. The specified query parameters in the URL define which homepage to open.

Imagine that your organization wants to provide specific instructions for the SLA homepage. You can write custom embedded help content and use a qualifier to accomplish that goal. Create the qualifier, and then associate it with custom embedded help content that you write.

1. To get the information for the qualifier, open the module in a new browser window and copy the query parameter. Notice that the query parameter uses underscores between words instead of hyphens or dashes.

   ![URL example](https://myinstance.service-now.com/home.do?sysparm_view=SLA)

   The query parameter in the URL

   ![Link type argument](https://myinstance.service-now.com/home.do?sysparm_view=SLA)

   The query parameter in the link type argument.

   You can also select the query parameter from the **Arguments** field on the module link type. To see the module link type, click the pencil icon beside the module in the application navigator, and then click the **Link Type** tab.

2. Navigate to **Embedded Help > Help Qualifiers**, and then click **New**.

3. Complete the form.

   **Embedded help qualifier form**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
   | Path      | Enter the page to display the embedded help content. Do not include `.do`. For example, for the SLA homepage, enter `home`.

---

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<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Query params</td>
<td>Enter the query parameters or the link argument using the format id=query_parameters.</td>
</tr>
<tr>
<td></td>
<td><strong>Warning:</strong> If the query parameter contains more than one word, use underscores between words instead of hyphens or dashes. If you use hyphens or dashes, the system uses only the first word in the parameter and ignores the rest.</td>
</tr>
<tr>
<td>Fragment</td>
<td>Enter the #&lt;string&gt; at the end of the URL. This is rarely found in the URL of a page in the instance. If you want custom help for a page that ends with #&lt;string&gt;, place it into this field.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> The proven practice is to include at least a query parameter. If you do not, the custom help appears for every home.do page. You can use either the query parameter, the fragment, or both.</td>
</tr>
<tr>
<td>Qualifier</td>
<td>Enter the qualifier to use, for example sla_homepage. Record the qualifier to use in the embedded help content record.</td>
</tr>
<tr>
<td></td>
<td><strong>Warning:</strong> If the query parameter contains more than one word, use underscores between words instead of hyphens or dashes. If you use hyphens or dashes, the system uses only the first word in the parameter and ignores the rest.</td>
</tr>
</tbody>
</table>

4. Click **Submit**.
5. Follow the steps in *Add custom embedded help content* to create the content, and include the following information.
   - **Name** and **Page**: The page you created the qualifier for, for example, home.
   - **Qualifier**: The qualifier you entered, for example sla_homepage.

   **Note**: You can also copy an existing embedded help topic and enter the qualifier in the copied record.

6. Test the qualifier by opening the page you added the content for, and then opening the help panel.
## Embedded help roles

Embedded help content can be targeted to users with a specified role who access the UI page. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page.

For example, if you add embedded help content for the itil role that describes your business process for entering incidents, the itil_admin role also sees the content. If you write a different topic with the itil_admin role, the itil_admin sees that content instead of the itil content.

## Embedded help role priority

The embedded help role priority is stored in the Embedded Help Role Priority (sys_embedded_help_role) table. Each role is assigned a default priority order number based on the role name in the Roles (sys_user_role) table.

### Default embedded help priority order numbers

<table>
<thead>
<tr>
<th>Order number</th>
<th>Role name</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>admin</td>
</tr>
<tr>
<td></td>
<td>Examples: admin, chat_admin, pa_admin, survey_admin</td>
</tr>
<tr>
<td></td>
<td>Exception: itil_admin</td>
</tr>
<tr>
<td>100</td>
<td>manager or itil_admin</td>
</tr>
<tr>
<td></td>
<td>Examples: itil_admin, catalog_manager, content_manager, sla_manager</td>
</tr>
<tr>
<td>300</td>
<td>itil (only)</td>
</tr>
<tr>
<td>1000</td>
<td>All other roles or no role (ESS user)</td>
</tr>
<tr>
<td></td>
<td>Examples: approver_user, financial_management_user, personalize_form, template_editor</td>
</tr>
</tbody>
</table>

The priority executes from the lowest number to the highest, meaning that embedded help content with no role displays only if no other content is available for the UI page and the user's role. All base system content is targeted to a role unless the content is intended for all users, including ESS users. When you add a role, such as a role for a custom application, it is automatically added to the Embedded Help Role Priority (sys_embedded_help_role) table with the appropriate default order. You can modify the order of priority as needed.

If a page requires different help content for different roles, separate topics must be added. For example, users with any role can access the incident.do page, and it opens with a view appropriate for their role.

The following list describes how content for different roles can be targeted for the Incident form.

### Admin
Provides information and links to help with configuring the Incident form.

**itil_admin**
Describes how to monitor the progress of the incident.

**itil**
Describes how to work on an incident.

**No role**
Explains what the user can review and modify in the Self-Service view of the Incident form.

### Modify embedded help role priority
You can modify the default order of priority that is assigned to a role in the Embedded Help Role Priority (sys_embedded_help_role) table. The priority order determines what embedded help content a user accesses on a UI page, based on roles assigned to the user.

Role required: embedded_help_admin or admin

When you add a role, such as a role for a custom application, it is automatically added to the Embedded Help Role Priority (sys_embedded_help_role) table with the appropriate default order. You can modify the role priority, including adding priority numbers between the default priority numbers, if appropriate.

1. Navigate to **Embedded Help > Role Priority** and locate the role to modify the priority.
2. Double-click the value in the **Order** column to open the list editor.
3. Enter the new priority order number and click the green check mark to save it.

### Embedded help internationalization
Embedded help internationalization provides the ability for you to localize your embedded help content to a variety of languages to meet global user needs. You can write your embedded help content in a language of your choice and decide what languages to display.

Existing embedded help content records are written in English by default. You can translate the English embedded help content provided with the base system into other languages to meet your needs. You can also create custom embedded help content in the language of your choice.

### Understanding localized embedded help content
To translate English embedded help content into another language or to create embedded help content in a language other than English, your working session must be configured to the language in which you want to write. For example, you must be working in a French session if you want to write embedded help content in French. Refer to **System localization** for more information.

Configure embedded help content to display in the language of your choice by accessing the **Language** field on the Embedded Help Queue (sys_embedded_help_queue) table. Depending on the foreign language translations activated on your instance, you can choose which language to display your embedded help content.

If embedded help content is available in a particular language and users are working in an instance with that language, they will see available embedded help in the desired language.
Working with localized embedded help content

When a user requests an embedded help content record, the associated embedded help queue record populates accordingly and the language specified in the embedded help queue record is set to the current session language.

When embedded help content is available in a user’s session language, content will be shown in that same language. If embedded help content is not available in the user’s session language, than English content is shown. However, if you do not want to see English content in a non-English session, you can configure the sys_property to False (default is True).

Embedded help content prioritization

Displaying embedded help content in the user’s session language takes priority over all other mechanisms, such as role, whether content is user-created, and the latest content version.

When a user is in a non-English working session, the priority for embedded help content display is as follows:

1. Working-session language (other than English) content displays, if available.
2. User-created content displays when working-session language content is not available.
3. Version-related content displays when working-session language and user-created content are not available.

For example, if an admin user is in a French working session and requests embedded help content, but French content is not available for the admin role, the same-language content for a lower role is displayed if available.

If there is no embedded help content for the French admin role, but there is content for the French itil role and English admin role, the French itil role takes priority over the English admin role. The French-language content will display at the itil-role level.

Create internationalized embedded help

Translate provided English embedded help content into other languages or create custom embedded help content in the language of your choice.

Role required: embedded_help_admin or admin

All embedded help content records are in English by default. To create a non-English embedded help content record, there must first be an English content record in the Embedded Help (sys_embedded_help_content) table. The English embedded help content record is parent to all other language embedded help content records. Once you create a non-English embedded help content record, it resides in the Translated Texts (sys_translated_text) table.

To translate provided English content into another language, create a copy of the English content record and save the edited, non-English, copy record. The new record is saved to the Translated Texts (sys_translated_text) table. Refer to Add custom embedded help from a copy to translate available embedded help content.

To create a non-English custom embedded help content record, your working instance must be configured to the same language you intend to write in. You create custom non-English embedded help content when English embedded help content is not available to copy.
After creating a non-English embedded help content record, you must create the same content record in English and store it in the Embedded Help (sys_embedded_help_content) table. The English embedded help content record is parent to all other languages.

1. Navigate to **Embedded Help > Help Content**.
2. Open the embedded help topic to copy.
   You can also open an embedded help topic by selecting **Edit Help Article** from the menu in the embedded help pane.
3. Update the fields as appropriate.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The embedded help topic name.</td>
</tr>
<tr>
<td>Page</td>
<td>The UI page this topic corresponds to. Typically, you do not change the page name.</td>
</tr>
</tbody>
</table>
| Modifier   | - **Normal** content appears for any user with the appropriate role who navigates to the page.   
            - **Setup** content appears when the page is accessed from a link in Guided Setup. |
| Role       | The role that the topic is written to assist. Users assigned to the role see the content when they navigate to the associated UI page.  
            All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page. For more information, see *Embedded help roles*. |
| Active     | Specifies whether this content displays for the UI page. Clear the check box to prevent the content from being available. |
| Product    | **Enterprise** is the default, and should not be changed. |
| Qualifier  | The qualifier that provides custom embedded help for a common UI page.  
            For example, the `home.do` page is opened for every Homepage module and for many Dashboard modules. Create the qualifier before you enter it into this embedded help record. |
<p>| Version    | The version this topic is appropriate for. If you are editing the content for a custom application or to provide information relevant to your organization business process, select <strong>All</strong>. |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last sync</td>
<td>The last date and time that the CDN was checked for updated content. When a user accesses this UI page, the platform determines whether the last sync date and time are more than 15 days ago. If it is, the CDN is checked for updated content and the date is refreshed. <strong>Note:</strong> The administrator can change the last sync duration in system properties.</td>
</tr>
<tr>
<td>Order</td>
<td>The order defaults based on the role, and determines what content to display when the user has an assigned role. For more information, see <a href="#">Embedded help roles</a>.</td>
</tr>
<tr>
<td>Domain</td>
<td>Specify the domain this content is used for, if applicable. This field appears in the form if the administrator configured the form to display it.</td>
</tr>
</tbody>
</table>

4. In the **Content** field, update the text using the HTML formatting tools as needed. If you add a link, enter the full URL to the web page. A good practice is to select **New window (_blank)** as the **Target**.

   **Note:** Do not add images in an embedded help topic. Images are removed from the content section when the record is saved.

   To add an embedded video, see [Embed video content in help topics](#).

5. Optional: To add another line below tables, videos, or related links, click the newline icon (#).
6. Click **Copy** in the form header.
   The edited topic is saved and the list redispays. The **ServiceNow Help** check box is cleared in the saved topic.

**Add custom embedded help from a copy**

To customize embedded help for your organization, you can edit a topic in the base system and save it as a copy.

Role required: embedded_help_admin or admin

In base system topics, the read-only **ServiceNow Help** check box is selected. When you create a copy, the **ServiceNow Help** check box is cleared, allowing you to modify the content.

When a user navigates to a UI page for which custom content exists, the custom content displays instead of the base system content.

1. Navigate to **Embedded Help > Help Content**.
2. Open the embedded help topic to copy.
   You can also open an embedded help topic by selecting **Edit Help Article** from the menu in the embedded help pane.
3. Update the fields as appropriate.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The embedded help topic name.</td>
</tr>
<tr>
<td>Page</td>
<td>The UI page this topic corresponds to. Typically, you do not change the page name.</td>
</tr>
<tr>
<td>Modifier</td>
<td>- <strong>Normal</strong> content appears for any user with the appropriate role who navigates to the page.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Setup</strong> content appears when the page is accessed from a link in Guided Setup.</td>
</tr>
<tr>
<td>Role</td>
<td>The role that the topic is written to assist. Users assigned to the role see the content when they navigate to the associated UI page. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page. For more information, see <em>Embedded help roles</em>.</td>
</tr>
<tr>
<td>Active</td>
<td>Specifies whether this content displays for the UI page. Clear the check box to prevent the content from being available.</td>
</tr>
<tr>
<td>Product</td>
<td><strong>Enterprise</strong> is the default, and should not be changed.</td>
</tr>
<tr>
<td>Qualifier</td>
<td>The qualifier that provides custom embedded help for a common UI page. For example, the <code>home.do</code> page is opened for every Homepage module and for many Dashboard modules. Create the qualifier before you enter it into this embedded help record.</td>
</tr>
<tr>
<td>Version</td>
<td>The version this topic is appropriate for. If you are editing the content for a custom application or to provide information relevant to your organization business process, select <strong>All</strong>.</td>
</tr>
<tr>
<td>Last sync</td>
<td>The last date and time that the CDN was checked for updated content. When a user accesses this UI page, the platform determines whether the last sync date and time are more than 15 days ago. If it is, the CDN is checked for updated content and the date is refreshed.</td>
</tr>
<tr>
<td>Order</td>
<td>The order defaults based on the role, and determines what content to display when the user has an assigned role. For more information, see <em>Embedded help roles</em>.</td>
</tr>
</tbody>
</table>
4. In the Content field, update the text using the HTML formatting tools as needed. If you add a link, enter the full URL to the web page. A good practice is to select New window (_blank) as the Target.

Note: Do not add images in an embedded help topic. Images are removed from the content section when the record is saved.

To add an embedded video, see Embed video content in help topics.

5. Optional: To add another line below tables, videos, or related links, click the newline icon (#).

6. Click Copy in the form header.

The edited topic is saved and the list redisplays. The ServiceNow Help check box is cleared in the saved topic.

Add custom embedded help content

You can create a new custom embedded help topic, for example, if you have a custom application and you want to provide help to users.

Role required: embedded_help_admin or admin

When you write content for your users, keep the following limitations in mind.

- You cannot include images in embedded help content.
- To embed video, you must code the video information in the source code <!--> view. Video content from YouTube and Vimeo are supported.
- To add a related information link, you must use a full URL, not a relative URL.
- Best practice is not to use the highlight text tool, as the color may make text unreadable depending on the theme the user has selected.

1. Navigate to Embedded Help > Help Content.
2. Click New.
3. Complete the form.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| Modifier    | Select the modifier, typically Normal.  
  - Normal content appears for any user with the appropriate role who navigates to the page.  
  - Setup content appears when the page is accessed from a link in Guided Setup.                                                                 |
| Role        | Select the role that the topic is written for. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page. For more information, see Embedded help roles |
| Active      | Select the check box to make this content appear. Clear the check box to prevent the content from being available, for example, to have someone review it before it is accessed on the UI page.                        |
| Product     | Enterprise is the default, and should not be changed.                                                                                                                                                           |
| Qualifier   | The qualifier that provides custom embedded help for a common UI page. For example, the home.do page is opened for every Homepage module and for many Dashboard modules. Create the qualifier before you enter it into this embedded help record. |
| Version     | Select a version, if different from the current version of your instance. To provide content for a custom application or information relevant to your organization business process, select All.          |
| Order       | Change the default role, if needed. The order defaults based on the selected role. For more information about default order priority numbers, see Embedded help roles.                                    |
| Domain      | Specify the domain this content is used for, if applicable. This field appears in the form if the administrator configured the form to display it.                                                               |

4. In the **Content** field, enter the text using the HTML formatting tools as needed. If you add a link, enter the full URL to the web page. A good practice is to select **New window (_blank)** as the **Target**.

**Note:** Do not add images in an embedded help topic. Images are removed from the content section when the record is saved.

To add an embedded video, see *Embed video content in help topics.*
5. Optional: To add another line below tables, videos, or related links, click the newline icon (#).
6. Click Submit.

**Embed video content in help topics**

You can embed a link to video content in a custom embedded help topic. YouTube and Vimeo video content is supported.

Role required: embedded_help_admin or admin

You cannot use the insert/edit video icon in the HTML editor to embed the video. You must enter the source code.

**HTML editor icons**

The administrator can disable the ability for users to see embedded video in the *Embedded help system properties*.

1. Complete the following steps to obtain the embed code for the video.
   a) Navigate to the location of the video on YouTube or Vimeo.
   b) Open the Share option for the video.
      In YouTube, the text appears below the video. In Vimeo, click the share icon beside the video.
   c) Under Embed, select the code and paste it into a text editor.
   d) Modify the code to enclose it in a `<div>` and remove elements that do not get rendered in the embedded help content page.
      For example, here is the embed code for a YouTube video. The modified code also contains a title for the embedded video enclosed in a `<p>` tag.

```
<iframe width="560" height="315" src="https://www.youtube.com/embed/bqh-5yew2yQ" frameborder="0" allowfullscreen></iframe>
```

After modification, the code looks like this.

```
<div class="video"><iframe src="https://www.youtube.com/embed/bqh-5yew2yQ" allowfullscreen=""></iframe>
<p class="p">Video: Work at Now</p></div>
```

Vimeo embed code has more attributes. Strip them out so it looks like the following example. Notice the difference between YouTube and Vimeo for the `allowfullscreen` attribute.

```
<div class="video"><iframe src="https://player.vimeo.com/video/67392563" frameborder="0" allowfullscreen=""></iframe>
<p class="p">Video: Work at Now</p></div>
```
2. Navigate to Embedded Help > Help Content, and then open the custom help topic to embed a video.
3. Click the source code icon (<>).
4. Position your cursor at the end of the line above the location of the video.
5. Press the Enter key to move to a blank line enter the embed code you modified.
6. Click OK, and then click Update.
7. To test that the video appears, open the page that displays the content you just updated, and then open the help panel.

Guided tours

Use the Guided Tour Designer to create tours that demonstrate to users how to use a feature. For example, an administrator can create a task demo with callouts to demonstrate how to perform the task.

Guided tours help train and onboard users within the ServiceNow user interface (UI). Each tour contains a series of interactive steps that help users complete online tasks within their browser window. Administrators can create tours for ServiceNow applications, service portals, and custom applications. For example, you can create a tour to represent a training model for specific policies and processes, such as creating an incident or reviewing change requests.

Watch this five-minute video to learn about creating guided tours that help users learn how to perform tasks in ServiceNow.

Guided tours use a series of steps that may span multiple pages. You can create purely informational steps that users read through and acknowledge, which result in no change to the ServiceNow instance. Alternatively, you can provide users with an interactive experience where they click through and actively work with the application at hand. For example, an “Introduction to Incidents” tour may simply show them the key features of the Incidents table, while a “Create your first incident” tour may actually walk them through creating a real incident, which results in a new record in the Incidents list.

Note: The Guided Tour Designer is only available in UI16. The designer is not compatible with UI15. For information about how to activate the UI16 plugin, see Activate UI16.

Several guided tours are provided in the base system for particular applications, for example, Performance Analytics. As an administrator, you can edit existing tours or create tours. You can also assign one or more roles to a tour to control access.

The guided tours feature uses these two plugins: Guided Tour (com.glide.guided_tours) and Guided Tour Designer (com.glide.sn_tourbuilder).
Navigating to guided tours

Guided tours run on two types of UI: Standard and Service Portal. Tours launch differently when accessed based on each tour type as follows.

**Standard Forms and Lists UI:**

Users access a guided tour by navigating to a page that has one. If they have one or more of the roles that the tour is targeted to, they can click the icon so the GTD panel opens to show the *Take a Tour* button. If more than one tour is available to a user on a page, the *Select Tour* choice list appears so they can select which tour to launch.

Tours on **Custom UI pages/applications** can be accessed in the same way. This is only applicable for custom pages which are opened in the navigator. The tours are not visible if the user opens a Custom UI page without the navigator.

![Select Tour](image)

**Service Portal UI:**

Users access a guided tour by navigating to a page that has one. When a user accesses a Service Portal page that has a guided tour on it, no GTD panel is present. Instead, the menu item appears on the banner indicating a tour is available. If a guided tour is available on a page on the service portal, a color indicator appears to the right of the *Tours* menu. When the user clicks *Tours*, all available tours for the page appear.

If a page has no Service Portal Header Menu, the Tours menu item is not accessible to the user. In this case, the tour is accessible to users only via auto-launch. See *Configure auto-launch for guided tours*.

When you add at least one role to a tour, it limits the audience to those users who have that role. For more Service Portal guided tour information, see *Activate guided tours*.

Guided Tour Designer support

The Guided Tour Designer (GTD) supports most of the standard platform UI areas and their content, such as lists, forms, and the elements they reference. It also supports Service Portal pages, including those that have custom UI elements.
The GTD does not currently support the following areas.

Standard Forms and Lists UI:
- Flow Designer
- Agent Workspace
- Pop-up windows
- Connect Chat and Embedded Help on the GTD sliding panel
- Select2 elements
- SVG elements
- Custom Tags
- Standard UI pages that have custom UI elements

Service Portal:
- Service Portal pages that contain IFRAMES
- The Service Portal Branding Editor, which also contains IFRAMES
- Select2 elements
- SVG elements
- Custom Tags

Guided tour example and outline

Guided tours are composed of the following components that function as building blocks for the tours that you create.

Guided tour components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Shows an introductory message to your users.</td>
</tr>
<tr>
<td>Step</td>
<td>A discrete component of a guided tour that implies an order. A step can provide a definition, an instruction, or both.</td>
</tr>
<tr>
<td>Callout</td>
<td>Shows the definition and instruction about the current step in the tour. The callout includes the instruction to proceed to the next step. It points to the element that the instruction describes.</td>
</tr>
<tr>
<td>Element</td>
<td>The objects that the tour points to, such as a record in the database, or a widget on a page. Elements require formatting so that the tour can link to them.</td>
</tr>
<tr>
<td>Trigger</td>
<td>Moves the tour to the next step. Triggers include pressing the Enter key, clicking or right-clicking a UI element, or clicking a <strong>Next</strong> button in the callout.</td>
</tr>
<tr>
<td>Conclusion</td>
<td>Shows a closing message to your users at the end of the guided tour.</td>
</tr>
</tbody>
</table>
Guided tours require careful planning before entering the tour into the instance. You can create an outline and include any assumptions to guide you when you create the guided tour. List each step, callout, and trigger.

**Sample guided tour outline: Set a vacation delegate**

<table>
<thead>
<tr>
<th>Step</th>
<th>Callout</th>
<th>Trigger</th>
</tr>
</thead>
<tbody>
<tr>
<td>This tour assumes that the user has navigated to <strong>User Administration &gt; Delegates</strong>. The UI page is sys_user_delegate_list.do.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Open the Delegate form to enter a new record. | • Points to the **New** button in the Delegates list view.  
• Text: Click **New** to set up a delegate who receives your notifications while you are on vacation. | Click the element: **New** button |
| Describe the **User** field. | • Points to the **User** field.  
• Text: Your name defaults as the user who wants to delegate to another user. If you are setting up a delegate for someone else, you can select a different user. | **Next** button |
| Select the delegate | • Points to the **Delegate** field.  
• Text: You specify who you want to delegate to. Type the user’s name, and select it when it appears. | **Next** button |
| Set the start date | • Points to the **Starts** field.  
• Text: Enter the date and time to start forwarding notifications. Click away from the field to proceed. | Change the Value: **Starts** field |
| Set the end date | • Points to the **Ends** field.  
• Text: Select the date and time to stop forwarding notifications. Click away from the field to proceed. | Change the Value: **Ends** field |
| Describe the delegate options | • Points up from below the **Meeting invitations** field.  
• Text: If you do not want these notifications forwarded to your delegate, you can clear any of these fields. | **Next** button |
Enable guided tours

Enable guided tours for Service Portal pages as well as the standard platform UI.

Role required: admin

The Guided Tour Designer was first introduced in the Jakarta release. For new instances that were created in Jakarta and beyond, guided tours are active by default. For instances that originate from pre-Jakarta, guided tours are inactive by default.

With the Paris release, you can also enable guided tours to run on Service Portal pages. When you upgrade your instance to Paris, the following results occur:

- For instances that are new in Paris, the Guided Tours for Service Portal feature is active by default.
- For pre-Paris instances that you upgrade to Paris, the Guided Tours for Service Portal feature is inactive by default.

**Note:** The Service Portal application provides a framework that enables you to customize your portal so that your users can access specific platform features in a custom context. You can create a guided tour for a Service Portal page to guide your users through its content step by step.

1. In the application navigator, enter `sys_properties.list`
2. From the System Properties list, find the following properties and set their values to True.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>com.snc.guided_tours.standard_ui.enable</td>
<td>Enables guided tours across your instance to run on the standard platform UI.</td>
</tr>
<tr>
<td>com.snc.guided_tours.sp.enable</td>
<td>Enables guided tours across your instance to run on Service Portal pages. You can create and publish tours for standard UI pages regardless of this property setting.</td>
</tr>
<tr>
<td>com.snc.guided_tours.custom_ui.enable</td>
<td>Enables guided tours across your instance to run on the Custom UI pages.</td>
</tr>
</tbody>
</table>

You can create, update, and play guided tours that reference both standard platform UI elements and tours that reference custom UI elements on a Service Portal page. Your users can play these tours.

Start planning, outlining, and drafting your guided tours. If you are drafting Service Portal guided tours, refer to these items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided tour callout steps</td>
<td>Guided tours must be able to recognize every element that they point to so they can locate it after a callout step is created on the element. Therefore, Service Portal page creators must ensure that every custom element they create has a unique name to help validate it as a record in the database. For example, if you create two widgets on a Service Portal page, you must assign them with unique names, such as Widget1 and Widget2. You can customize the elements further by appending additional attributes to the HTML and unique values to their properties. For example, the system currently uses <code>data-gtd-eid</code> and <code>data-id</code> attributes to identify the elements as unique.</td>
</tr>
<tr>
<td>Service Portal pages</td>
<td>In the base system, you can only launch tours from pages that use the SP Header Menu. Manually launched tours do not display on pages with custom header menus. If your guided tour is on a Service Portal page that does not use the SP Header Menu, you must configure your tour for auto-launch so the tour is visible to your users. To ensure this type of tour is visible to your users, see Configure auto-launch for guided tours. If your Service Portal uses Page Route Maps, tours may not show when expected. For example, your users may not see a tour when expected if the tour is configured for a redirected page. For more information, see Redirect a reference to a page ID.</td>
</tr>
<tr>
<td>Service Portal branding</td>
<td>When you update the branding for a Service Portal page, the callouts in the guided tour for that page also update accordingly. For example: You update your Service Portal panel background theme color to yellow, and its primary color to red. Result: Your guided tour callout panel background becomes yellow and the callout text field becomes red.</td>
</tr>
</tbody>
</table>

### Service Portal guided tour callout colors

You can customize your guided tour callout colors or use the guided tour defaults.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Default</th>
<th>Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided tour callouts use the following Service Portal properties:</td>
<td>To set the callout color independently of the Service Portal colors, apply the following CSS variables:</td>
<td></td>
</tr>
</tbody>
</table>
Designing guided tours

Use these tips to help you create effective guided tours for your users.

**Note:** The Guided Tour Designer is only available in UI16. The designer is not compatible with UI15. For information about how to activate the UI16 plugin, see [Activate UI16](#).

### Planning a guided tour

Before you begin outlining the details of a guided tour, answer the following questions.

- What is the purpose of the tour? Do you want to use callouts that provide detailed user interface descriptions so your users can better understand the feature? Or do you want the user to learn how to perform a task, such as how to create a new incident? It is important that you consider these questions and perhaps do some research before you begin to plan the tour so that you can properly break down the overall objective into discrete steps.
- Where should the tour be available? If you intend to guide your users to complete tasks that they might perform daily, such as ordering an item from the Service Catalog or creating an incident, it makes sense to make the tour available on your production instance. If you intend to train users to explore these tasks without creating actual records in the system, consider making the tour available on a non-production instance for training purposes instead. Both scenarios are valid.
- What should you name your tour? When you create a tour, you are prompted to provide a tour name. The name must be unique and intuitive so your users can understand the purpose of the tour. For example, use “Create a New Incident” or “Review the Incident List” as possible tour names.
- What assumptions are you making regarding what the user already knows about the page or task? Do all users who can take the tour have the same level of understanding? Use this information to decide how much description to provide at the beginning of the tour so that any user who takes the tour understands the content.
- If the purpose of the tour is to perform a task, how can you personalize the instructions so that each user who takes the tour creates a different record? For example, if the tour walks users through creating a group called Facilities, you can prevent subsequent users from getting a duplicate name error by instructing them in a callout to assign a unique value to the group Name field.

In planning your tour, you can also address these additional questions.

- What page should the tour start on?
- What steps are important to accomplishing the objective?
Guided tour plan

Review the following sample plan for a guided tour whose objective is to explore the Service Portal home page.

Note this key information you will need to provide and the fields values you will use as you create a guided tour.

- Tour Name: Service Portal Overview
- Goal: Users should have a good understanding of how to navigate key elements of the Service Portal home page
- Portal Name: Service Portal
- Starting Page: Service Portal: ID Index
- Roles: All

Sample guided tour plan: Service Portal home page overview

<table>
<thead>
<tr>
<th>Step</th>
<th>Callout</th>
<th>Trigger</th>
</tr>
</thead>
</table>
| Introduction | • Title: Service Portal Overview  
• Text: Welcome to this guided tour of your new Service Portal home page. | Next button   |
| 1          | • Points to this element: How can we help?  
• Placement: Below  
• Text: We begin with the How can we help? search bar. If you cannot find what you are looking for, enter it here, click the Search icon, or press Enter on your keyboard. For now we will take a look at some other areas first. | Next button   |
| 2          | • Points to this element: Order Something  
• Placement: Top  
• Text: If you would like to order something, such as a new phone, select Order Something. | Next button   |
<table>
<thead>
<tr>
<th>Step</th>
<th>Callout</th>
<th>Trigger</th>
</tr>
</thead>
</table>
| 3    | Points to this element: Knowledge Base  
Placement: Top  
Text: If you would like to search the knowledge base, select Knowledge Base. | Next button |
| 4    | Points to this element: Get Help  
Placement: Top  
Text: If you would like to get help for an issue, select Get Help. | Next button |
| 5    | Points to this element: Community  
Placement: Top  
Text: If you would like to ask your colleagues a question, select Community. | Next button |
| 6    | Points to this element: Knowledge in title bar  
Placement: Left  
Text: You can also check the knowledge base, order something, look at requests you have logged, and check other options up here in the title bar. | Next button |
| 7    | Points to this element: Your name  
Placement: Left  
Text: View your profile or log out by clicking your name. | Next button |
| 8    | Points to this element: Logo top-left  
Placement: Below  
Text: Navigate back to your Service Portal home page by clicking your company logo. | Next button |
Selecting triggers

If the purpose of the tour is to introduce your users to the features of a page so that they can become familiar with the product, such as a custom dashboard, use the Next button as the trigger. If the purpose is to accomplish a task, such as creating a record, consider the following.

- To populate a field with a lookup element, such as a reference field or a date field, do not use a trigger that opens the lookup window. The tour ends when the lookup window opens. Use one of the following triggers:
  - **Next** button: The user types the value or looks it up and selects it, and then clicks **Next**.
  - **Change Element Value** trigger: After the user selects the value and clicks outside the field, the trigger moves to the next step.

- For some UI elements, you can use the **Right click the Element** trigger. Typically, the right-click action is used to open a menu, however, you cannot place a callout on a right-click menu option. You can use this trigger in a descriptive guided tour where you want to describe right-click menu options. Put the descriptive information into the callout text, and tell your users to right-click the element to look at the menu. Following is an example of this type of callout.

When the user right-clicks the element, in this case a field label, this instruction disappears, and the next one appears.
• The **Mouse over the Element** trigger is similar to the **Right click the Element** trigger. When the user points to the element, the callout disappears. For example, if you demonstrate that a hint appears when you point to a field label, the callout step disappears before the hint text appears. This type of trigger can seem disruptive to the guided tour flow.

**Using callouts**

You must place a callout on top of an element to interact with it. The element is highlighted in blue when it is selected as the target. In the following example, it looks like the callout is pointing to the context menu icon, but notice that the header bar is highlighted blue.

![Incorrect callout placement for the context menu](image)

This example depicts the correct placement of the callout for the context menu. Notice that the context menu icon is highlighted blue.

![Correct callout placement for the context menu](image)

The following tips may also be helpful:

• When you place a callout on a form that contains tabs, consider that a user may not have the tab open for viewing. Create a new callout that instructs the user to first open the tab before proceeding with the rest of the tour.

• Minimize callouts on fields that are associated with dynamic content. A delayed page refresh may prematurely end the tour if the user cannot find the associated tour element.

• When you guide a user through pop-up windows, add your callout to the originating page on or near the pop-up icon. Within the callout instructions, guide your user through the steps intended for the pop-up window, because callouts cannot be added to the pop-up window.

• While the color of a callout is static in the standard platform UI, you can customize callouts on Service Portal. Consider using this capability to ensure a consistent look-and-feel between your callouts and your Service Portal pages. For more information on guided tours that you create on Service Portal pages, see *Request guided tours*. 

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Auto-launching your tour

Auto-launch a tour if you want your users to take the tour on their first page visit.

You may choose to auto-launch multiple tours from a single starting page. In this case, you can apply the auto-launch order to each tour successively so that your users begin the second tour upon their second page visit, their third tour upon their third page visit, and so forth. Use this option if you intend to start your users with an introductory tour and add increasing levels of complexity or different areas of focus with follow-up tours.

Testing your tour

To ensure that your guided tour meets your intended objective, you can test it in these ways.

- Impersonate a role to verify the tour through the eyes of the intended user. By impersonating a user that holds a role targeted by the tour, or multiple users if the tour targets multiple roles, you can experience the tour just as the user does.
- Send the tour URL link to your colleagues to review the tour and provide feedback. If the feedback is valuable, modify your tour accordingly. For more information about tour feedback, see Create a guided tour.
- After the tour is published, review any tour failures due to errors that you see from the Guided Tours Overview page. Review these failures to provide you with insight into which users experienced problems with the tour, on which step the tour failed, and what the error message was. You can then use this information to troubleshoot and resolve issues.

Guided tour triggers

Each callout in a guided tour step has a defined action that triggers the next step to occur. You specify the trigger for each callout. Only applicable triggers appear based on the UI element the callout points to.

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next Button</td>
<td>Places a Next button in the callout, which the user clicks to progress to the next step. This trigger is useful for the following steps:</td>
</tr>
<tr>
<td></td>
<td>- The callout describes the element it points to and the user does not have to click a UI element.</td>
</tr>
<tr>
<td></td>
<td>- To enter information in a reference or date picker field. Users can use the lookup function, enter the data, or select it from a list. They can proceed when they have completed the entry for the step.</td>
</tr>
<tr>
<td>Click the Element</td>
<td>Progresses to the next step when the element that the callout points to is clicked.</td>
</tr>
<tr>
<td>Mouse over the Element</td>
<td>Progresses to the next step when the user points the cursor at the element.</td>
</tr>
<tr>
<td>Right-click the Element</td>
<td>Progresses to the next step when the element that the callout points to is right-clicked.</td>
</tr>
</tbody>
</table>
### Press Enter Key
Proresses to the next step when the user presses the Enter key. Use this trigger to acknowledge that the user has entered something, such as in a text box.

### Change Element Value
Progresses to the next step when the user enters or selects a value in a field and clicks outside the field.

### Press any key
Progresses to the next step when the user presses any key.

---

**Guided Tour Designer interface**

The Guided Tour Designer (GTD) is a simplified way to create a guided tour. You can drag a callout to the element, and enter the step instructions and trigger in one step. You can test the steps as you build them, and modify them as needed.

**Note:** The Guided Tour Designer is only available in UI16. The designer is not compatible with UI15. For information about how to activate the UI16 plugin, see [Activate UI16](#).

The GTD has the following features:

---

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The icons on the upper right are used to copy a link to the tour so you can share it with another user, such as a tester.

**Callouts (B)**

When you build a tour, drag and drop the callout at the desired position on the page element. The callout pointer must touch the element you are assigning it to.

**Steps (C)**

When you hover over a step, it appears in the current view. If the step belongs to a previous page, then the **Not found in current view** message appears. In this example, the first step does not appear in current view. To change this step, you can click the back arrow on the upper left and open the list view where the step appears.

**Note:** Do not put more than one interaction with a field in a step. Each step should describe or provide an interaction with just one field or other object.

**Step interaction (D)**

As pictured, when you point to a step, its corresponding number in the page is enlarged. Click the step to edit the text or change the trigger. Drag it to a different position as needed. Click the (-) icon to delete it.

If you make a mistake with a step, such as pointing it to the wrong element, you must delete it. Then you can add a new step with the correct information and drag it into place.

**Tour action buttons (E)**

Click **Exit** to close the GTD. The browser tab or window closes and changes you made are automatically saved.

Click **Play** to open the instance and designated UI page in a new browser tab or window and proceed through the steps. When you finish, close the tab or window to return to the GTD.

**Create a guided tour**

After you outline the guided tour, use the Guided Tour Designer (GTD) to enter the steps using callouts and triggers.

Role required: guided_tour_admin or admin

**Note:** The Guided Tour Designer is only available in UI16. The designer is not compatible with UI15. For information about how to activate the UI16 plugin, see **Activate UI16**.

This task is an example that illustrates how to create a guided tour for assigning a vacation delegate.

1. Navigate to **Guided Tour Designer > Create Tour**.
2. Complete the fields on the form.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a name for the tour that describes what the user accomplishes by completing it. For example, in this case, <em>Set a vacation delegate.</em></td>
</tr>
</tbody>
</table>
### Field | Description
--- | ---
**Tour Type** | Select:
- Standard UI for tours that start from system platform content, such as a list or a form.
- Service Portal for tours that start from a Service Portal page.
- Custom UI for tours that start from Custom UI page.

**Note:** When you select Service Portal, a Portal option appears, where you choose a record from the Service Portals table.

**Starting Page** | Select the page the tour starts on.
- If your Tour Type is Standard UI, your choices include pages that show lists and forms.
- If your Tour Type is Service Portal, your choices include Service Portal pages.

**Note:** In the base system, you can only launch tours from pages that use the SP Header Menu. Manually launched tours do not display on pages with custom header menus.
- If your Tour Type is Custom UI, your choices include pages that show Custom UI pages.

You can begin typing the UI page name to show a list of matching pages, and then select it from the list.

**Roles** | If the tour can be accessed by all the roles, then select All.
- If the tour can be accessed by specific roles, then select Specific.

Select the roles that can access this guided tour and move them to the Roles that can view the tour list from Available Roles list.

**Note:** When you add at least one role to a tour, it limits the audience to only those users who have that role.

3. **Click Create.**
   The Guided Tour Designer opens in draft status in a new tab or window. In this example, no records are displayed in the list as new delegates are created.
4. Click **Create Introduction**.
   a) Enter an optional introductory title for your guided tour, such as **Cover your approvals during your vacation**.
   b) Type a message to your end users introducing the goal of the demo, such as **Join this tour to learn how to create a vacation delegate**.

You can edit and delete introductions, conclusions, and callouts at any time while your tour is in draft status. You can also insert HTML markup into your Conclusions, Introductions, and callouts.

5. Complete the following steps to add a tour step with a callout and trigger.
   a) Drag a callout shape from the upper right corner of the screen and drop it on top of the UI element.

   The element is highlighted when the callout is positioned correctly. When you release the callout, it locks into the position.

   ![Callout Example](image-url)
b) Once the callout is placed at the right position, Create Step page appears.

c) Enter the instructions in the **Text** box on the panel at the right.

d) Change the direction of the callout by selecting the appropriate option under **Placement**.
   Only placement options that you can use for the selected element are enabled in the options.

e) **Select the trigger** under **Choose action** field. Only triggers that you can use for the selected element appear in the list.
Optional: To apply text formatting, such as bold or italic, add HTML tags around the text to format.
For example, enter `Click <b>New</b> to set up a delegate....` You can add other HTML tags, including tags for images.

Optional: To make the step skippable to the user, select the check box next to the **Skippable**. User can skip the step and move on to the next step in case the tour fails at that step.

Click **Save**.
Your first step label appears.

When your end users click the label, they see your first step instructions rendered as a message.
6. Continue adding steps until you have completed the tour. The tour is saved as you save each step.

7. Click **Create Conclusion**.
   Enter a message to your end users that concludes the demo, and summarizes what they accomplished. For example, enter **Congratulations! You just created a delegate to take care of things while you're on vacation. Have fun!**.

8. Click **Save**.
   Your Conclusion message appears after your last tour step, showing the final result of the tour. When users click **Complete**, the tour ends.
9. To test the steps, click **Preview** at any time. Make any final revisions to the tour until you are satisfied.
   Note the steps that are not working properly or that need correction. Edit the tour or the steps as described in *Edit a guided tour*.

10. To share your draft or published tour with internal colleagues for review, you can:
   a) Click the Copy URL icon to copy the tour URL.
   b) Send the URL to reviewers.

11. Click **Publish** to make your guided tour visible to your end users.
Each guided tour is allotted with a unique tour ID when it is created. The tours appear in alphabetical order if you set property (com.snc.guided_tours.sort) to true. When users access a starting page of the guided tour, they can access the tour from the following.

- If the tour type is Standard UI, they can click **Take a Tour** in the GTD pane.
- If the tour type is Service Portal, they can click **Tours** on the banner of the page.

### Edit a guided tour

You can modify the settings of a guided tour, such as the roles that access the tour. You can also edit, add, delete, and reorganize the guided tour steps, and apply additional formatting to the instructional text.

Role required: guided_tour_admin or admin

Use the Guided Tour Designer (GTD) to add, delete, and reorganize guided tour steps. Use the Guided Tour form only to perform tasks you cannot do easily from the GTD. For demonstration purposes, we begin with edits to the form that appears when you open the guided tour record, and continue with edits you can make in the GTD itself. You can invoke the GTD from the Edit with Designer button located in the form.

1. Navigate to **Embedded Help > Guided Tour Designer > Guided Tours**, and open the tour to edit.
2. In the Guided Tour form, take any of the following actions.

   - Edit the name.
   - Enter a different page name in the **Context** field. For example, if the form page is listed and you want the user to start on the list view to enter a new record.
   - Choose a different tour type. If the tour type is Standard UI, the **Type** field cannot be changed. If the tour type is Service Portal, both the SP Portal and SP Page values can be changed.
   - Enter or edit the **Description**.
   - Start a Service Portal tour from a specific widget, record, or view within a page instead of the page itself. You can enter URL parameters that point to the item in the **Add Additional URL Parameters** field. For example, enter the section of the URL that contains the sys-id of a widget, or type parameters for a specific record or view, such as sys_id=abc123&view=myView.
   - Clear the **Active** check box to disable the guided tour, which sets it to read-only status, where it cannot be edited, and renders it invisible to end users. If you want to use the tour in the future but keep it unavailable to end users, consider setting it back to draft status for further revision. Select the check box to re-enable the tour.

3. To view the starting page for the tour while you test and refine its steps, click **Edit with Designer** in the form header.

   The starting page opens in the GTD in a new tab or window.

4. Having exited the form view, you can perform any of the following steps in the GTD.

<table>
<thead>
<tr>
<th>To</th>
<th>Do this</th>
</tr>
</thead>
</table>
| Edit the text or trigger in a step | Navigate to the UI page the step is in and click the step in the list on the right. For example, if the tour starts in the list view but you want to edit a step in the form, open the form. The steps in the current view are numbered inside a red circle.  
Complete your changes and click **Save**. |
| Delete an introduction, step, or conclusion | Click the # icon. |

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To | Do this
---|---
Place the callout on a different page element | 1. Click the icon to delete the step with the incorrect placement.  
   2. Create a step on the correct page element.  
   3. Drag the step into the correct position in the order of steps.  

Apply text formatting in the step instructions | In the Guided Tour Steps related list, click the step number.  
   1. Scroll to the Content HTML formatter.  
   2. Edit the content and apply formatting as appropriate.  
   3. Click Update.

Rearrange steps | Drag the steps to the desired order.

Test the tour | Click **Preview** if the tour is in draft status. Click **Play** if it is published. The page opens in a new list or tab and you can test each step. Note any steps that need corrections.

Change the guided tour status | If the tour is in draft status, click **Publish**. If the tour is published, click **Draft**. Consider setting the tour to draft status until you are finished editing it.

### Guided Tour Designer accessibility

The Guided Tour Designer has accessibility features so that users can design tours using screen readers and keyboard navigation.

For the most part, accessibility functionality is the same for the Guided Tour Designer accessibility is the same as platform accessibility. See [Enabling accessibility features](#).

**Use the Guided Tour Designer with accessibility enabled**

The Guided Tour Designer has extended the accessibility features of the ServiceNow platform.

Role required: guided_tour_admin or admin

**Note:** The Guided Tour Designer is only available in UI16. The designer is not compatible with UI15. For information about how to activate the UI16 plugin, see [Activate UI16](#).

1. If accessibility features are not enabled, navigate to **User Administration > User Preferences** and enable the preference `glide.ui.accessibility`.
2. Navigate to **Application > Module**.
3. Navigate to **Guided Tour Designer > Create Tour**.
4. Tab to the **Tour Name** field and enter a unique name for the guided tour.
5. Tab to the **Application Page Name** field. Enter part of the name to open a list of pages to scroll through and choose from.
6. Tab to the Roles this tour is for slushbucket and use skip links to select roles.

7. Click Create.
   
The selected application page opens in the Guided Tour Designer.

8. Tab to the field you want to add a step to. Tab again and then press Enter to open the Editing window for the Guided tour step.
   
The editing window has the following features:
   
   - An icon for placing the callout. Press Enter to open a list to choose the callout's placement. Only viable callout locations are enabled.
   - The number of the guided tour step and how many steps have been created. When you create your first step this is step 1/1.
   - A text box to instruct the user what to do at this step.
   - A choice list to select the trigger. under Choose action field. Only triggers that you can use for the selected element appear in the list.
   - Cancel and Save buttons.

9. Continue adding steps until you have completed the tour.
   
The tour is saved as you save each step.

Tab to the panel on the right side to edit the name of the tour, copy the tour's URL, and rearrange the tour's steps.

Use a view with a guided tour

You can assign a list or form view to a guided tour step if you are changing from the Default view view to a different view, such as Self-Service.

Role required: guided_tour_admin or admin

To assign a view to a tour step, you must know the view name. The name you see in the context menu View option is the title of the view. Look up the view name before you assign it to a tour step.

1. Complete the following steps to locate the view name.

   a) Navigate to System UI > Views.
The first two columns are **Name** and **Title**.

b) Locate the view by its **Title**, and note the value in the **Name** column.

2. Navigate to **Embedded Help > Guided Tours**.
3. Open the tour to be modified with a view.
4. In the **Guided Tour Steps** related list, open the tour step to add a view.
5. In the Tour Step form section, enter the view name in the **View** field.
6. Click **Update**.
7. Complete the following steps to test the tour with the view.
   a) In the Guided Tour form, click **Edit with Designer**.
   b) In the Guided Tour Designer tab or window, click **Play** below the list of steps.
   c) Verify that the step you modified displays the correct view.

**Guided Tours dashboard**

The Guided Tours Overview dashboard provides statistics related to guided tour usage.

To access the Guided Tours dashboard, navigate to **Guided Tour Designer > Guided Tours Overview**. The dashboard has two tabs:

- **User Engagement**: Shows the number of users actively working with Guided Tours and trends over time.
- **Tour Statistics**: Shows trends and patterns for user engagement so you can analyze tour completions and tour failures and build more successful tours.

You can view reports by selecting options in the interactive filter based on the guided tour type (Platform, Service Portal, and Custom) and the guided tours present in the instance. The statistics provided in the User Engagement and Tour Statistics tabs change based on the options selected in the interactive filter.

**User Engagement**

The User Engagement tab displays the following widgets.

<table>
<thead>
<tr>
<th>Widget</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tour Views</td>
<td>Number of user views of guided tours per day.</td>
</tr>
<tr>
<td>Tours Completed</td>
<td>Number of tours completed by users per day.</td>
</tr>
<tr>
<td>Unique Users Views</td>
<td>Number of individual users viewing guided tours per day.</td>
</tr>
<tr>
<td>Unique User Completion</td>
<td>Number of individual users who have completed guided tours per day.</td>
</tr>
<tr>
<td>Daily Engagement</td>
<td>Trends and patterns of user engagement with guided tours per day over a period of time. You can save this graph in PNG or JPEG format by hovering over the graph and choosing the relevant format from the context menu.</td>
</tr>
<tr>
<td>Widget</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Disengaged Users</td>
<td>Number of users who disabled the auto launch feature for the guided tour per day over a period time. You can see the number of viewers not interested to look at the guided tours while using the application. You can save this graph in PNG or JPEG format by hovering over the graph and choosing the relevant format from the context menu.</td>
</tr>
</tbody>
</table>
Tour Statistics

The Tour Statistics tab displays a list of tours sorted by context. The tab has the following widgets.

<table>
<thead>
<tr>
<th>Widgets in Tour Statistics tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tour Views</td>
<td>Number of tour views abandoned, completed, dismissed, and failed over a period of time. Click the related color in the bar graph to view further details.</td>
</tr>
<tr>
<td>Tour Completions</td>
<td>Number of tours completed across Guided Tour Types and Guided Tours over a period of time. Click the related color in the bar graph to view further details.</td>
</tr>
<tr>
<td>Tour Failures</td>
<td>Number of tours failed in Guided Tour Types and Guided Tours over a period of time. Click the related color in the bar graph to view further details.</td>
</tr>
<tr>
<td>Top 10 Tour Completions</td>
<td>Number of completed tours by tour name.</td>
</tr>
<tr>
<td>Top 10 Tour Failures</td>
<td>Number of failed tours by tour name.</td>
</tr>
<tr>
<td>Top 10 Tour Dismissals</td>
<td>Number of dismissed tours by tour name.</td>
</tr>
</tbody>
</table>
Configure auto-launch for guided tours

Configure one or more tours to launch automatically when a user lands on a page.

Role required: guided_tour_admin and embedded_help_admin, or admin

You can choose to configure auto-launch for any guided tour starting page. Choose this option if you want to ensure that users take the tour on their first page visit.

1. Navigate to Embedded Help > Guided Tour Designer > Configure Auto Launch.
   The Configure Auto Launch page appears, showing tiles for each page on which one or more tours are configured. You can filter the tiles by part or all of the page name, and sort the tiles by name, or by the most recently edited tours.

2. Select a tile that represents the page where you want a tour to launch automatically.
The tour for the page appears as a row on the Configure Auto Launch screen.
You can enable or disable auto-launch on the tour whether it is in draft or published status. When you enable auto-launch:

- Tours in published status launch automatically when users access the starting page associated with the tour.
- Tours in draft status do not launch automatically. When a tour in draft state is configured for auto-launch and is published later on, it starts auto-launching.

3. Click the **Auto Launch** toggle so it switches to the right.

The toggle color changes to green, indicating auto-launch is enabled on the tour. If you want to disable auto-launch, switch the toggle to the left.
4. Configure auto-launch for more than one tour on a page. 
If you have more than one tour enabled on a page, they appear as additional rows. For further context on multiple pages, see *Designing guided tours*.

<table>
<thead>
<tr>
<th>Order</th>
<th>Title</th>
<th>Roles</th>
<th>Status</th>
<th>Auto Launch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Incident Management - Form Layout</td>
<td>admin</td>
<td>Published</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Incident Form Guided Tour 1: Standard UI</td>
<td>admin</td>
<td>Published</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incident Form Guided Tour 2: Standard UI</td>
<td></td>
<td>Draft</td>
<td></td>
</tr>
</tbody>
</table>

a) Repeat steps 2–3 for additional tours that you want to enable for auto-launch. The tours move to the top of the list in the order that you enable them.

b) Drag rows to reorder the tours so they appear in the order you want users to see when they visit the page successive times. For example, the first tour may provide an overview of a page while the second tour guides the user through a specific task.

When users access a page that has a guided tour enabled for auto-launch, the tour begins immediately. If they stop the tour by clicking the X icon on a tour step, a message appears that provides them the option to stop both the current tour and other tours from auto-launching the next time they access the page.
<table>
<thead>
<tr>
<th>Name</th>
<th>Unit</th>
<th>Key</th>
<th>Frequency</th>
<th>Indicator source</th>
<th>Publish on Scorecards</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of incidents resolved by first assignee</td>
<td>%</td>
<td>true</td>
<td>Daily</td>
<td>true</td>
<td>true</td>
</tr>
<tr>
<td>Average age of last update of open incidents</td>
<td>Days</td>
<td>true</td>
<td>Daily</td>
<td>true</td>
<td>true</td>
</tr>
<tr>
<td>PK: Daily Updates</td>
<td>#</td>
<td>false</td>
<td>Daily</td>
<td>Analytics, Data Collector, Executions</td>
<td>false</td>
</tr>
<tr>
<td>Benchmark: % of emergency changes</td>
<td>%</td>
<td>false</td>
<td>Daily</td>
<td>true</td>
<td>true</td>
</tr>
<tr>
<td>% of incidents resolved on same day opened</td>
<td>%</td>
<td>false</td>
<td>Daily</td>
<td>false</td>
<td>false</td>
</tr>
<tr>
<td>Benchmark: % of duplicate cis</td>
<td>%</td>
<td>false</td>
<td>Daily</td>
<td>Benchmark, NODB, Health, Scorecard</td>
<td>true</td>
</tr>
<tr>
<td>Benchmark: Total time to resolve an incident</td>
<td>Hours</td>
<td>true</td>
<td>Daily</td>
<td>Benchmark, Incident, Resolved</td>
<td>true</td>
</tr>
</tbody>
</table>
Domain separation in guided tours

With the ServiceNow Platform, service providers (SPs) can provide their customers with faster onboarding, meet compliance, and protect their data using domain separation. You can create and modify guided tours that apply to specific domains in your instance as well as tours that are available to users globally.
Create domain-separated guided tours

Once you create a guided tour, you can specify a domain to which it applies. You can also copy the tour so that you can modify it for a specific domain.

Role required: guided_tour_admin or admin. To use domain separation in guided tours, Request domain separation.

**Note:** The Guided Tour Designer requires UI16. For more information, see Activate UI16.

1. Navigate to Embedded Help > Guided Tour Designer > Guided Tours.
2. Click the gear icon to personalize list columns and add the Domain and Overrides columns. The **Domain** column indicates the domain to which a tour belongs, either Global, or the domain specified for the tour.
3. Click the gear icon next to the user name to open **System Settings**.
4. Enable the **Show domain picker in header** option.
   This option is enabled when the switch appears green and is toggled to the right.

5. Use the domain picker to select the domain to add the modified tour.

6. Select the guided tour.
   You can edit the tour here or simply

7. Click **Update** to create the domain-specific version of the tour.

In the specified domain, the saved version of the tour overrides the original for users in that domain. You can edit this tour to be specific for that domain. For more information, see *Edit a guided tour*. 
Overview help pages

The overview help feature included with the base system displays slides with introductory information on new features offered in the ServiceNow® platform. An administrator can hide the option from the help menu.

To learn about the latest features in your version, click the What's New link in the UI16 help sidebar.

The Overview Help Page (sys_ui_overview_help) table contains the records for each panel that appears, including images, icons, descriptions, and condition statements that control display. By default, the instance displays panels describing notable features of the current release, but users can modify this page to display panels for customized features in their own instance and then define who can see these panels.

Users scroll through the panels by clicking the buttons provided or by clicking the directional arrows at the bottom of the page, depending on how the page was configured.

Note: Administrators can edit the default help page to modify, add, or delete existing panels from this page to match the features in your system.
More Powerful Visual Task Boards

Visual Task Boards are faster and more customizable than ever before.
Work with thousands of cards and change filter conditions on the fly.

Get Started
Hide the What's New option

Administrators can hide the What's New option using a system property. To find the property, type `sys_properties.list` in the application navigator. Find the `glide.product.show_what_is_new` property and change the value to `false`.

Create custom overview help

You can edit existing overview help pages to display your own custom panels to selected users. Role required: admin

1. Navigate to System UI > Overview Help and edit the help page for your version.
2. Modify the Overview Help Page form using the fields in the table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Unique title of this page.</td>
</tr>
<tr>
<td>Subtitle</td>
<td>General introduction for the subject of this page. This content appears as the description of the first panel that users see.</td>
</tr>
<tr>
<td>Application</td>
<td>Scope of this help page. All overview help pages are created in the global scope, so that they are visible from anywhere in the system. This field is read-only.</td>
</tr>
</tbody>
</table>

3. Save the page.
Overview Help Page form

4. Click **New** in the **Overview Help Panel** related list and complete the form using the fields in the table.
5. Click **Submit**.

**Overview help panel fields**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Unique name for this panel. This name is the title of the panel shown to users.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>Page</td>
<td>Names the overview page to which this panel is connected.</td>
</tr>
<tr>
<td>Order</td>
<td>Controls the sequence of the panels in the page. When using icon buttons, the button for the lowest order number appears on the left, and the button for the highest order number appears on the right. When icon buttons are disabled, the lowest order number panel begins the scrolling sequence.</td>
</tr>
<tr>
<td>Roles</td>
<td>Names all the user roles that are entitled to see this panel.</td>
</tr>
<tr>
<td>Condition</td>
<td>Defines the conditions under which this panel is viewable. For example, you can configure this panel to display only when a specific plugin is activated.</td>
</tr>
</tbody>
</table>
| Image   | Background image to use when this panel is displayed. Supported image formats are:  
  - .jpg  
  - .png  
  - .bmp  
  - .gif  
  - .jpeg  
  - .ico  
  - .svg |
| Icon    | Icon used as the access button for this panel from the page. This field is read-only. You cannot specify an icon for your custom panels. |
| Is title | Controls the display of the title on the initial slide. The field is not used for panels. |
| Show title | Controls the display of the title on the initial slide. This field is read-only and is not available for panels. |
| Text    | Text describing what is shown in the image for this panel. This content appears below the panel title. |

**Example of adding a panel to an existing overview help page**

This example adds panels to the existing overview help page that display only for users with specific roles and when a specific plugin is activated.

**Role required: admin**

You can create a panel that displays a screenshot of auditing gauges to users with the `sn_audit.manager` role, when the GRC: Audit Management plugin is activated. Create another panel visible only to users with the `activity_admin` role that displays a view of the Custom tab in the Workflow Editor. Add the panels to the overview help page for the current version. Use...
the condition on a panel to specify the plugin and a slushbucket to select the roles required for access.

1. Navigate to System UI > Overview Help.
2. Open the help page for the current version.

![Overview help page record](image)

3. In the Overview Help Panels related list, click New.
4. Create a panel with these values:
   - **Title**: Custom Orchestration Activities. The title is the label that appears on the panel when it is displayed to the user.
   - **Order**: 20. This order number is the lowest for any of the panels in this page, and means that this button appears on the left side of the page.
   - **Roles**: activity_admin. Only users with this role are able to see this panel.
   - **Image**: This is a view of the Workflow Editor and the Custom tab that best introduces the feature to users.
   - **Text**: Enter a description of the feature, emphasizing the highlights in this version. In this example, the text describes the ability to create activities and share them in the ServiceNow store.
Workflow editor panel

5. Save the record.
6. Create another panel with these values:
   - **Title**: Assessment Reports. The title is the label that appears on the panel when it is displayed to the user.
   - **Order**: 60. This order number is the highest for any of the panels in this page, and means that this button appears on the right side of the page.
   - **Roles**: assessment_admin. Only users with this role are able to see this panel.
   - **Image**: This is an example of a bubble chart that you want the assessment administrators to see.
   - **Text**: Enter a description of the chart to display to the users, emphasizing the advantages of this type of chart.
Assessment reports panel

7. Save the record.
8. Log in as a user with the assessment_admin role.
9. Click the help icon in the form header, and then click **What’s New** in the help sidebar. The overview help page for the current version appears, with the control button for the auditing dashboard displayed for the user in the order configured.
Overview help page for the assessment administrator

10. Click the button to display the assessment report panel. The image you selected for your custom panel appears with the title and description you defined.
11. Log out and log in again as a user with the activity_admin role.
12. Click the help icon in the form header, and then click **What’s New** in the help sidebar. The overview help page for the current version appears, with the control button for the Workflow Editor tabs displayed for the user in the order configured.
13. Click the button to display the Orchestration activities panel.
   The image you selected for your custom panel appears with the title and description you defined.
System user guide

The system user guide enables you to create end user help documentation that is specific to the policies and procedures of your organization. A default help page is provided in the base system that displays UI16 help documents for system navigation and other basic operations.

The user guide provides the tools for designing help portal pages containing feature-specific help documents. You can create custom help pages and deploy them in various ways using controls in the system. User guide documents are grouped in relevant sections on a help page, using a two-column format. You can display the sections and the documents within them in any order. You can display a section on more than one help page. The user guide is supported in UI16 and UI15.
A default help page is provided in the base system that displays help documents for system navigation and other basic operations. This page is accessible from the help icon in the header bar for UI16 users. To make this page available to users of other supported UI versions, you must create a programmatic entry point.

Note: The default help page can be used as a template for your own help content. To personalize pages, sections, or documents in the User Guide, simply edit the ServiceNow® records to suit your needs. Remember that any records you customize are not updated when you upgrade your instance to a new version. Review any changes on a development system first and then decide whether to accept the updated content into your customized User Guide.
Basic user guide help page
Create user guide help

User guide help documents are grouped in appropriate sections on the page and listed in a configurable order. Add your sections to a help page.

Create all your help documents from within the section record. This allows you to refine their titles, adjust their placement, and decide if they are appropriate for the section.

Role required: admin

1. Create a page.
   b) Complete the form.

   Help page field definitions

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Page identification used by the system to create a help URL.</td>
</tr>
<tr>
<td>Application</td>
<td>Application scope for this help page. This field is read-only and defaults to the Global scope.</td>
</tr>
<tr>
<td>Title</td>
<td>Display title for this page.</td>
</tr>
</tbody>
</table>

c) Click Submit.

![Help Page screen capture](https://example.com/help-page-screenshot.png)
2. Create help page sections and associate them with the page.
   a) Navigate to **System User Guide > Administration > Help Page Sections** and click **New**.

   ![Help Section Notification](image)

   b) Give your section a unique and concise title, and then click **Submit**. The view returns to the list of sections.

   c) Create additional sections for your help page.

   d) Navigate to **System User Guide > Administration > Help Pages** and open your new page.

   e) In the **Page to Sections** related list, click **New**.

   f) Complete the form.

   **Page to Section field definitions**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column</td>
<td>Column location on the page for this section. The first column is designated as 0 and the second column is designated as 1. There must be at least one entry for column 0 for the sections to display.</td>
</tr>
<tr>
<td>Order</td>
<td>Order in which the sections display in the columns on the page. If no order number is defined, the system lists the sections in alphabetical order.</td>
</tr>
<tr>
<td>Application</td>
<td>Application scope for this record. This field is read-only and defaults to the <strong>Global</strong> scope.</td>
</tr>
</tbody>
</table>
3. Create one or more documents.
   a) Navigate to **System User Guide > Administration > Help Page Sections**.
   b) Open a section record you created.
   c) In the Help related list, click **New** to create a help document for that section.
   d) Complete the form.

Help document field definitions

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Document number generated automatically by the system.</td>
</tr>
<tr>
<td>Section</td>
<td>Section in which this document appears.</td>
</tr>
<tr>
<td>Order</td>
<td>Listing order for this document in the selected section.</td>
</tr>
<tr>
<td>Published</td>
<td>Date this document was created.</td>
</tr>
<tr>
<td>Updated</td>
<td>Date this document was last updated.</td>
</tr>
<tr>
<td>Short description</td>
<td>Brief description of the content of this document. This description is used as the title for the document on the help page.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Text</td>
<td>Document content, including graphics and tables. You can format your entry, create bulleted or numbered lists, and attach images.</td>
</tr>
</tbody>
</table>
To view your queue and take a survey:
1. Navigate to Self-Service > My Assessments & Surveys.
2. Click Take Survey on a survey card to open the questionnaire.

My Assessments and Surveys

Groups
- Assigned to: [Name]
- Due Date: [Date]

Vendor
- Assigned to: [Name]
- Due Date: [Date]

Service Desk Satisfaction Survey
- Assigned to: [Name]
- Due Date: [Date]
e) Click **Submit**.

f) Repeat the process to create the necessary help documents for that section.

---

**User guide help URLs**

You can create entry points in your instance for help generated with the system user guide by providing the correct address parameters in the target URL.

Help pages generated with the user guide can be displayed to end users from configurable entry points in the system, including *application modules* and *UI actions*. To create these entry points, you must express a target URL using these parameters:

**URL entry points for displaying user help**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Provides</th>
</tr>
</thead>
<tbody>
<tr>
<td>$h.do</td>
<td>Processor that renders the banner frame at the top of the page.</td>
</tr>
</tbody>
</table>
Manage audio files

You can upload and store .mp3 or .ogg audio files. Once uploaded, you can reference audio files using HTML.

Role required: image_admin

The Database Storage for Audio Files (com.glide.db_audio) feature must be activated to store audio files. The plugin is activated by default on new instances. For upgraded instances, you can activate the plugin if you have the admin role. For more information on activating a plugin, see Activate a plugin.

1. Navigate to System UI > Audio Files.
2. Click New.
3. Enter a Name for the audio file, including the file extension.
4. Add the Audio file.
5. Save the record.
6. Optional: Complete the following steps to reference audio files using HTML.
   a) Use the `<audio>` HTML tag and set the `src` attribute to the name of the file as set by the Name field of the Audio record.
   b) Use the `controls` attribute to display the audio controls.

   Use the following HTML:

   ```html
   <audio src="Beep.mp3" title="Beep" control="control"/>
   ```
Storing images in the database

Administrators and users with the image_admin or content_admin role can upload and store images in the database. These images are saved in the Images (db_image) table. Uploading an image to the database allows it to be referenced from HTML fields by appending the name of the image to the URL of the instance.

Note: The db_image table is a public table that does not have any security restrictions. Unauthenticated users have full access to images uploaded to the db_image table.

Images vs attachments

If you want to access an image from a record, or if you want to prevent users from appending the image name to the URL of the instance, upload it as an attachment instead. When you upload an image as an attachment, the image is saved in the Attachments (sys_attachment) table. See Administering attachments and Add and manage attachments for more information.

Acceptable image file types

Upload image files with the following extensions:

- .gif
- .jpg
- .png
- .bmp

Note: The system does not support uploading zip files that contain .bmp images.

If you upload an image that may not be supported in Internet Explorer browsers, a warning message appears.

The system does not support uploading images in the .ico format through this interface. Microsoft Internet Explorer requires the .ico format for favorite icons. To upload an .ico image, attach the .ico image to a record instead of using the standard image upload interface.

To understand how to insert an image into a form record, see the Insert an image into your article, incident, or other form record blog post in the Now Community.

Update an existing image

You can change an existing image to an updated version.

Role required: image_admin or content_admin

1. Navigate to System UI > Images.
2. In the Images list, click the name of the image to be replaced.
3. In the Image field, click the (Update) link.
4. Click Browse and navigate to the desired image file.
5. Click Open, and then click OK.

The new file is uploaded into the instance database, replacing the previous file. It is used in all locations that reference the file name.
Upload one or more images

You can upload one image or multiple images at one time.

Role required: image_admin or content_admin

1. To upload one image at a time, complete the following steps:
   a) Navigate to System UI > Images to see the list of images stored in the database.
   b) Click New to add a new image.
   c) Complete the form.

<table>
<thead>
<tr>
<th>Field</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter the file name by which to reference the image in HTML.</td>
</tr>
<tr>
<td>Active</td>
<td>Select the check box to allow the image to be referenced in HTML.</td>
</tr>
<tr>
<td>Category</td>
<td>Select a category in which to organize the image file.</td>
</tr>
<tr>
<td>Image</td>
<td>Select Click to add... to upload an image. If an image is already uploaded, click (Update) to upload a new version of the image or (Delete) to remove the image.</td>
</tr>
<tr>
<td>Format, Size bytes, Height, and Width</td>
<td>View current image metadata. This information is automatically populated when the image is uploaded.</td>
</tr>
</tbody>
</table>
2. To upload multiple images at once, complete the following steps:
   a) Create a .zip file that contains only acceptable image file types.
   
   **Note:** The system does not support uploading zip files that contain .bmp images.

   b) Navigate to **System UI > Image Zip Upload**.
   c) Click **Choose File** then select the file.
   d) Click **Upload**.
A message indicates that the files are uploaded to the database, and the images list is sorted by updated date in descending order (the uploaded images appear first).
If the .zip file contains a folder structure, the resulting image names are the path name with underscores in place of the slashes. For example, if the .zip contains myimages/image1.gif then the resulting image is named myimages_image1.gif.

Image names cannot exceed 100 characters in length, including folder structure. Files with excessively long names are rejected.

Uploads are logged in the system. View system logs to see whether files are uploaded or rejected.

Restrict file extensions

Use the glide.ui.strict_content_types to restrict the image file extensions that appear in the UI.

Role required: admin

1. Enter sys_properties.list in the Navigation filter.
2. Verify that the property does not exist by searching for the property name.
3. Click New.
4. Complete the system property using the following table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>glide.ui.strict_content_types</td>
</tr>
<tr>
<td>Type</td>
<td>string</td>
</tr>
<tr>
<td>Value</td>
<td>Comma-separated list of acceptable image file names. Use any of the following file types: ico,gif,png,jpg,jpeg,bmp,js,css,htm,html,ogg,mp3,eot,woff,woff2,svg,ttf,swf,cur,map</td>
</tr>
</tbody>
</table>

Note: Any files that use a file extension that is not included in the list of values appear broken in the UI.

User preferences

Individual users can configure many UI features, such as the number of rows per page in a list or whether the response time displays at the bottom of a v2 list or form.

These user customizations are stored as records in the User Preference (sys_user_preference) table, and are updated each time the user changes the setting.

The UI displays according to each user’s preferences.

For example, by default the response time may appear at the bottom of v2 lists and forms. If a user hides the response time, a user preference record is created showing the response time indicator as hidden. During the user’s future sessions, the response time indicator is hidden. If the same user later displays the response time, the user preference record is updated appropriately and future sessions open with the response time indicator visible.

Navigate to User Administration > User Preferences for a list of user preference records. Click a preference name to display that preference in form view.
**User Preferences form**

**User preference fields**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of the feature or functionality.</td>
</tr>
<tr>
<td>Description</td>
<td>An optional short description of the feature or functionality.</td>
</tr>
<tr>
<td>System</td>
<td>Shows whether this record indicates the system-wide default (TRUE), or not (FALSE).</td>
</tr>
<tr>
<td>Type</td>
<td>Shows the data type of entry accepted for the Value. For example, you can select string or integer.</td>
</tr>
</tbody>
</table>
### Field Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>Shows the name of the user for whom the setting is customized. If User is blank, the record is for a system-wide default.</td>
</tr>
<tr>
<td>Value</td>
<td>The current setting for this record. Compare this value to the User field and System field to determine whether the value shown is a system-wide default or a specific user’s preference.</td>
</tr>
</tbody>
</table>

Records for the system-wide value, which applies to users who have not customized the feature, have these values: **System=True** and **User=blank**. For each user who customizes the features, a separate record is created with these values: **System=False** and **User=<username>**. As a result, the same customizable UI feature may have multiple user preference records.

For some features, the system-wide record does not appear in the User Preferences module initially. The system-wide record may be added to the User Preferences list when a user record is created for the same feature.

When an administrator manually changes a user’s preference value through this module, the user's next session uses the administrator's setting. However, the user can customize the features again through the UI, which updates their user preference record. If the administrator deletes the user preference record for a particular user, that user's next session uses the system-wide value for that feature. When the user later customizes the feature, the system creates a user preference record for the user.

### Global user preferences

Create global preferences to set a default preference for your users. To make a preference the default, create a preference, check the **System** check box, and leave the **User** field blank. The preceding image is an example of a global preference. This preference is applied to all users. This preference is overridden for a specific user by creating a preference with the same name that has a value in the **User** field.

**Note:** You should never have more than one preference with the same name set as a global user preference.

### User preferences and update sets

User preference records for system-wide values, also called the default or global values, are stored in update sets. Any changes are implemented when you import the update set and affect all users who have not customized the feature. User preference records for specific users are not stored in update sets, so user customizations are retained when you import an update set.

### Troubleshooting user-specific UI differences

If a user encounters an unexplained behavior in the user interface, an administrator can check their user preferences. Navigate to **User Administration > User Preferences**. Search for the user name to find all that user’s records. Delete the record that affects the behavior in question.

The system-wide preference is active during the user’s next session. If the user customizes the behavior, a new user preference record is created and used for subsequent sessions.
User preference settings

User preferences primarily track the way individual users interact with various features so that new sessions activate the user's last settings. For example, user preferences track whether the user activates the tabbed or scrolling interface for multi-section forms. Other user preference records enable users with the admin role to adjust certain feature settings.

View settings

To view the user preference settings, navigate to User Administration > User Preferences.

User preference list

This table describes user preference records in the base system.

<table>
<thead>
<tr>
<th>User preference record</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Only</td>
<td>User action sets and updates the value. Manual changes through the User Preference record don't affect the user experience.</td>
</tr>
<tr>
<td>Admin Only</td>
<td>The administrator can change the value through the User Preference record to modify the user experience.</td>
</tr>
<tr>
<td>Admin or User</td>
<td>User action sets and updates the value, but the administrator can change the user experience by manually updating the User Preference record.</td>
</tr>
<tr>
<td>System Only</td>
<td>The system sets and updates the value. Administrators should not modify these records.</td>
</tr>
</tbody>
</table>

This table provides the default value and a description for each preference. The Updated By column indicates how the preference is set.
## User preferences

<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
</table>
| `<table>.autocomplete.c`    | Search   | Admin Only       | If the `glide.ui.ref_ac.startswith` property (System Properties > All Properties) is set to false, `autocomplete.contains` determines whether reference fields for the named table use a `contains` or a `starts with` search to provide autocomplete text.  
**True** = use a `contains` search to autocomplete reference fields.  
**False** = use a `starts with` search to autocomplete reference fields.  
**Type:** True/False  
**Default value:** False |
| `<table>.db.order`          | List Sort| Admin or User    | For the identified table, indicates which column is used to sort the records in a list. This record updates automatically each time the user changes the sort order for the table.  
**Type:** String  
**Default value:** User selection or the Number column if the user doesn’t select a column. If the Number column is empty, the Name field is used to sort the records. |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
</table>
| `<table>.db.order.direction` | List Sort | Admin or User | For the identified table, indicates whether the list shows records in ascending (ASC) or descending (DESC) order by the field identified in `<table>.db.order`. This record is updated each time the user changes the sort direction for the table.  
**Type:** String  
**Default value:** None |
| `bsm_map.default_ci` | BSM      | User Only    | Contains the sys_id of the last configuration item the user viewed in the business service management (BSM) map. This record updates automatically each time the user views a new configuration item in the BSM map.  
**Type:** String  
**Default value:** None |
| `ci_manage_relationships_filter_hint.cmdb_ci` | CMDB     | Admin Only   | Constrains what appears in the **Available CIs** list when defining a relationship for a configuration item. The value is in the format of an encoded query string.  
**Type:** String  
**Default value:** locationANYTHING^operational_status
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
</table>
| ci_manage_relationships              | CMDB                   | Admin Only   | Constrains what appears in the **Available User** list when defining a relationship for a configuration item. The value is in the format of an encoded query string.  
**Type:** String  
**Default value:** `active=true` |
| ci_manage_relationships              | CMDB                   | Admin Only   | Constrains what appears in the **Available Groups** list when defining a relationship for a configuration item. The value is in the format of an encoded query string.  
**Type:** String  
**Default value:** `active=true` |
| collapse.<related table>.<related field> | Forms                 | User Only    | Indicates that a related list is collapsed. The same related list is collapsed when the user's next session begins. This record updates automatically whenever the user expands or collapses the same related list.  
**True** = collapse the identified related list.  
**False** = expand the identified related list.  
**Type:** String  
**Default value:** None |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>collapse.section.&lt;sys_id&gt;</td>
<td>Forms</td>
<td>User Only</td>
<td>Indicates the sys_id of a form section that is collapsed. The same form section is collapsed when the user's next session begins. This record updates automatically whenever the user expands or collapses the same section of the same form.</td>
</tr>
<tr>
<td>glide.debugger.log_messages_limit</td>
<td>Admin or User</td>
<td>Specifies the maximum number of messages to be displayed in the script debugger Session Log UI.</td>
<td></td>
</tr>
<tr>
<td>glide.debugger.console.cached_stmt_limit</td>
<td>Admin or User</td>
<td>Specifies the maximum number of statements to be cached in the browser for Script Debugger Console.</td>
<td></td>
</tr>
<tr>
<td>glide.debugger.log.transaction.count</td>
<td>Admin or User</td>
<td>Specifies the maximum number of transactions displayed in the script debugger Session Log UI.</td>
<td></td>
</tr>
<tr>
<td>glide.ui11.use</td>
<td>UI11</td>
<td>Admin or User</td>
<td>Indicates whether UI11 is active for this user. UI11 is no longer available.</td>
</tr>
<tr>
<td>glide.ui.navpage_state</td>
<td>Menus</td>
<td>System Only</td>
<td>DO NOT MODIFY. Indicates the user's UI11 configuration. Type: String Default value: None</td>
</tr>
<tr>
<td>Preference</td>
<td>Category</td>
<td>Updated by</td>
<td>Details</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------</td>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| glide.ui.javascript_editor | UI       | Admin or User     | Indicates whether the JavaScript editor and formatting controls are enabled or disabled for the user. The JavaScript editor icon (_Enable Script Editor_) and formatting controls are available only in instances where the Syntax Editor plugin is active. This record updates automatically when a user clicks the icon to enable or disable script editing. For more information, see JavaScript syntax editor.  
  
  **True** = enable script editor.  
  **False** = disable script editor.  
  **Type**: True/False  
  **Default value**: True (if syntax editor feature is active)  

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<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>glide.ui.response_time</td>
<td>UI</td>
<td>Admin or User</td>
<td>Determines whether the response time information is expanded or collapsed at the bottom of a list or form. This record updates automatically whenever the user clicks the response time indicator icon at the bottom of a v2 list or form. True = expand the response time information. False = collapse the response time information. Type: String False: False</td>
</tr>
<tr>
<td>homepage</td>
<td>Homepages</td>
<td>Admin or User</td>
<td>Indicates which dashboard appears when a user first logs in to the instance or clicks the homepage icon ( ). The value indicates the sys_id of the selected dashboard. Type: String Default value: None</td>
</tr>
<tr>
<td>Preference</td>
<td>Category</td>
<td>Updated by</td>
<td>Details</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| knowledge.search.sort.field | List Sort       | Admin or User     | Determines the sort order for results when searching the knowledge base. This record updates each time the user selects a different Sort by option in the search results header. Available options are: Number of Views (views), Relevancy (relevancy), and Last Modified (sys_updated_on).  
**Type:** String  
**Default value:** Views                                                                 |
| list_edit_double            | Lists           | Admin or User     | Indicates what action opens the list editor in List v2. This record updates automatically when the user personalizes any v2 list and changes the Double click to edit setting. For more information, see List editor administration. This preference does not apply to v3 lists. Single-click list editing is not supported in List v3.  
**True** = open the list editor when the user double-clicks a field in a v2 list.  
**False** = open the list editor when the user single-clicks a field in a v2 list.  
**Type:** True/False  
**Default value:** True |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
</table>
| list_edit_enable           | Lists    | Admin or User | Indicates whether the list editor is available for editing fields directly in a list. This record updates automatically when the user personalizes any list (gear icon above the first column in the list) and changes the Enable list edit setting. This preference doesn’t apply to v3 lists.  
  True = enable use of the list editor.  
  False = disable use of the list editor.  
  Type: True/False  
  Default value: True |
| live_message.feed.last_display | Survey   | Admin or User | Stores the last feed the user viewed: My Feed (sysparm_feed_type=myfeed) or Company Feed (sysparm_feed_type=company_feed).  
  This record updates automatically each time the user selects a different feed.  
  Type: String  
  Default value: sysparm_feed_type=company_feed |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>live_tag.feed.order</td>
<td>Live</td>
<td>Admin or User</td>
<td>Tracks the user’s choice of sorting for tag display. This record updates automatically when a user selects a different Tag Option in Live. Available options are Order by Created (sys_created_on) and Order by Last Activity (last_activity). Type: String Default value: None (defaults to sys_created_on)</td>
</tr>
<tr>
<td>menu.&lt;identifier&gt;.expanded</td>
<td>Menu</td>
<td>User Only</td>
<td>Indicates the sys_id of a section of the application navigator menu that is open (expanded) for the user. The same section is open when the user’s next session begins. This record updates automatically each time the user expands or collapses the same section of the application navigator. Type: String Default value: None</td>
</tr>
<tr>
<td>mobile_rowcount</td>
<td>Mobile</td>
<td>Admin or User</td>
<td>Indicates the number of rows displayed in a list on a mobile device. This record updates automatically each time the user chooses a different number of rows per page from the mobile screen. Type: Integer Default value: 20</td>
</tr>
<tr>
<td>Preference</td>
<td>Category</td>
<td>Updated by</td>
<td>Details</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| mobile_use_full.android | Mobile   | Admin or User | Indicates which user interface appears on the user's Android mobile device. This record updates automatically each time the user clicks the gear icon above the mobile homepage to display the full desktop interface, or clicks the cell phone icon in the welcome bar to display the mobile interface.  
  **True** = display the full desktop interface on Android mobile devices.  
  **False** = display the mobile interface on Android mobile devices.  
**Type**: True/False  
**Default value**: False |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>mobile_use_full.iphone</td>
<td>Mobile</td>
<td>Admin or User</td>
<td>Indicates which user interface appears on the user's iPhone mobile device. This record updates automatically each time the user clicks the gear icon above the mobile homepage to display the full desktop interface or clicks the cell phone icon in the welcome bar to display the mobile interface. True = display the full desktop interface on an iPhone mobile device. False = display the mobile user interface on an iPhone mobile device. Type: True/False Default value: False</td>
</tr>
<tr>
<td>module</td>
<td>Menus</td>
<td>User Only</td>
<td>Records the sys_id of the last module the user accessed. Type: String Default value: sys_id</td>
</tr>
<tr>
<td>owned_by_indicator.form</td>
<td>Update Sets</td>
<td>Admin Only</td>
<td>Shows or hides the update indicator icon in form headers when customer updates to that form are being tracked by update sets. True = show the customer updates indicator icon. False = hide the customer updates indicator icon. Type: True/False Default value: False</td>
</tr>
<tr>
<td>Preference</td>
<td>Category</td>
<td>Updated by</td>
<td>Details</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| recent.impersonations | Administration | User Only    | **DO NOT MODIFY.** Shows who the administrator most recently impersonated. For more information, see [Impersonate a user](#). Type: String  
Default value: None |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>report.expanded</td>
<td>Reporting</td>
<td>Admin or User</td>
<td>Works with the UI property <strong>List of roles (comma-separated)</strong> that can expand the report header to determine whether the report header is open when viewing a report. For users whose role permits them to access the report header, the <strong>report.expanded</strong> user preference indicates whether reports open with the header expanded or collapsed. Expanding the report header reveals the report builder which is used to modify the report definition. This user preference record updates automatically each time the user expands or collapses the report header. If the user’s role doesn’t have permission to view the report header, the report header is never accessible, regardless of this user preference setting. <strong>True</strong> = expand the report header when displaying a report. <strong>False</strong> = collapse the report header when displaying a report. <strong>Type:</strong> String <strong>Default value:</strong> True</td>
</tr>
<tr>
<td>Preference</td>
<td>Category</td>
<td>Updated by</td>
<td>Details</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------</td>
<td>------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| rowcount        | Lists        | User Only  | Indicates the maximum number of rows that display on a single page in a list. This value also determines the maximum number of records that display in a list report on a dashboard. This record updates automatically when a user chooses a different number.  
Type: Integer  
Default value: 20 |
| sys_update_set  | Update Sets  | User Only  | DO NOT MODIFY. Indicates the update set that is currently active. This value update automatically when a user selects a different update set.  
Type: GUID  
Default value: sys_id of default update set |
| tabbed.forms    | Forms        | User Only  | Indicates whether forms that contain more than two sections use a tabbed interface or a scrolling list of sections. This setting applies to all forms. It’s not set on a form-by-form basis. This record updates automatically when a user clicks the Toggle Tabs icon in the banner bar. For more information, see Configuring the form layout.  
True = display multi-section forms as tabs.  
False or blank = display multi-section forms as a scrolling list of sections.  
Type: True/False  
Default value: False |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>table.compact</td>
<td>Lists</td>
<td>User Only</td>
<td>Indicates whether lists appear with more or less blank space above and below each row. This setting applies to all lists. It's not set on a list-by-list basis. This record updates automatically when a user personalizes any list and changes the <strong>Compact rows</strong> option. <strong>True</strong> = reduce the blank space above and below each row in a list to show more rows on the screen at one time. <strong>False</strong> = add blank space above and below each row in a list to improve readability. <strong>Type:</strong> True/False  <strong>Default value:</strong> False</td>
</tr>
<tr>
<td>Preference</td>
<td>Category</td>
<td>Updated by</td>
<td>Details</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>-------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>table.wrap</td>
<td>Lists</td>
<td>User Only</td>
<td>Indicates whether long text in a list is wrapped onto multiple lines or truncated. This setting applies to all lists. This setting is not set on a list-by-list basis. This record updates automatically when a user changes the Wrap column text option in the List v2 personalization interface or the Wrap longer text in list columns option in the UI16 system settings. True = wrap long text in a list. All text is seen in list view, but each row may occupy more vertical space. False = don't wrap the long text in a list. Text is truncated in list view, but each row takes less vertical space. Full text can be seen in form view. Type: True/False Default value: True</td>
</tr>
<tr>
<td>Preference</td>
<td>Category</td>
<td>Updated by</td>
<td>Details</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------</td>
<td>------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| top_searches.period   | Homepages  | User Only  | Indicates the default time period (hour, day, week, or month) covered by top searches widgets on a dashboard. When this record exists for individual users, it indicates the current time period for the Top Searches — All widget. The time period setting for top searches widgets on individual tables is stored in the top_searches.period.<table> user preference. For more information, see Top Searches homepage.  
Type: String  
Default value: Day |
| top_searches.period.<table> | Homepages  | User Only  | Indicates the time period (hour, day, week, or month) covered by top searches widgets for the specified table. This record updates automatically when a user chooses a different time period in a top searches widget for the specified table. If no record exists for a specific table, top searches widgets for that table use the time period set in the top_searches.period user preference where System=true.  
Type: String  
Default value: Day |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ts.match</td>
<td>Text Search</td>
<td>Admin or User</td>
<td>Indicates whether the task record should be returned by a global text search in which the search text exactly matches a task number. This record updates automatically when a user clicks the Search tips and preferences link on the search results page and changes the Return task record if searching for exact number setting. For more information, see Global text search finds records from multiple tables. True = return the task record. A link is provided for full search results. False = return full search results, even if the search term matches a task number. Type: True/False Default value: True</td>
</tr>
</tbody>
</table>

Global text search finds records from multiple tables.

True = return the task record. A link is provided for full search results.

False = return full search results, even if the search term matches a task number.

Type: True/False

Default value: True
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
</table>
| ts.remember.expanded    | Text Search    | Admin or User    | Indicates whether to remember which search groups were expanded and collapsed during the previous search. The search groups available depend on the user's access rights and selections. This record updates automatically when the user clicks the Search tips and preferences link on the search results page and changes the **Use remembered expand/collapse preferences** setting.  
**True** = remember the expand/collapse setting and use it for subsequent searches.  
**False** = do not remember the expand/collapse setting.  
Expand all groups for subsequent searches.  
Type: String  
Default value: True |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
</table>
| ts.show_empty_groups    | Text Search   | Admin or User     | Indicates whether global text search results include groups with no matches. The search groups available depend on the user's access rights. This record updates automatically when the user clicks the Search tips and preferences link on the search results page and changes the Show groups with no search matches setting.  

**True** = include empty groups when displaying global text search results.  

**False** = hide empty groups when displaying global text search results.  

**Type**: String  

**Default value**: True
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
</table>
| ts.show_negative_result_in | Text Search | Admin or User | Indicates whether group headers in the global text search results page should identify tables that had no matches. The search groups available depend on the user's access rights. This record updates automatically when the user clicks the **Search tips and preferences** link on the search results page and changes the **In search group header, list tables with no search matches** setting. 
True = show tables that returned no matches in the group header.  
False = hide tables that returned no matches in the group header.  
Type: String  
Default value: True |
<table>
<thead>
<tr>
<th>Preference</th>
<th>Category</th>
<th>Updated by</th>
<th>Details</th>
</tr>
</thead>
</table>
| ts.show_search_groups       | Text Search       | Admin or User   | Indicates whether the global text search results page includes check boxes that let the user indicate which groups to search and display. The search groups available depend on the user’s access rights and settings. This record updates automatically when the user clicks the Search tips and preferences link on the search results page and changes the Show selectable search groups setting.  
**True** = show the check boxes for enabling or disabling individual search groups.  
**False** = hide the check boxes for enabling or disabling individual search groups.  
**Type:** String  
**Default value:** True |
| user.can.logout             | Security          | Admin Only      | Indicates whether users see a Logout button. If this is False, users are automatically logged out when their session times out. For more information, see Remove the Logout button. This user preference does not apply to UI16.  
**True** = show the Logout button, which enables manual logout.  
**False** = hide the Logout button, which disables manual logout.  
**Type:** True/False  
**Default value:** True |
### Remove the welcome splash screen

You can create a user preference to turn off visibility to the welcome splash screen that introduces a new version of the ServiceNow® platform. This preference is useful if you are waiting to roll out features that are described in the welcome content.

Role required: admin

1. Navigate to **User Administration > User Preferences**.
2. Click **New**.
3. Enter the following values.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Remove the welcome splash screen</td>
</tr>
<tr>
<td>Name</td>
<td>overview_help.visited.helsinki</td>
</tr>
<tr>
<td>System</td>
<td>Select this field</td>
</tr>
<tr>
<td>Type</td>
<td>string</td>
</tr>
<tr>
<td>Value</td>
<td>true</td>
</tr>
</tbody>
</table>

4. Click **Submit**.
   The welcome splash screen is marked as **Visited** for every user.

### Configure available keyboard shortcuts

Administrators can configure which keyboard shortcuts are available to users.

For a list of available keyboard shortcuts, see [Keyboard shortcuts](#). You can enable or disable keyboard shortcuts universally by searching for the `glide.ui.keyboard.shortcuts.enabled` user preference. Then select the System checkbox and set the value to False.

You can also use the user preferences to determine which keyboard shortcuts are available to users and what the key combinations are.

Role required: admin

1. Navigate to **User Administration > User Preferences**.
2. From the search bar, select **Name**.
3. Type *keyboard* to do a contains search for all user preferences containing keyboard in the name.

4. To allow users to use keyboard shortcuts while typing in a field, set the value for the `glide.ui.keyboard.shortcuts.allow_in_input_fields` user preference to true.

5. Disable any of the following keyboard shortcuts by changing the value to False.

### Keyboard shortcuts

<table>
<thead>
<tr>
<th>User preference</th>
<th>Description</th>
<th>Keyboard shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>glide.ui.keyboard.shortcuts.main_frame</td>
<td>Move keyboard focus to the main content on the page.</td>
<td>ctrl+alt+p</td>
</tr>
<tr>
<td>glide.ui.keyboard.shortcuts.global_search</td>
<td>Move keyboard focus to the global search bar in the banner frame.</td>
<td></td>
</tr>
<tr>
<td>glide.ui.keyboard.shortcuts.impersonator</td>
<td>Open the impersonator window.</td>
<td></td>
</tr>
<tr>
<td>glide.ui.keyboard.shortcuts.navigator_filter</td>
<td>Move keyboard focus to the filter in the application navigator.</td>
<td></td>
</tr>
<tr>
<td>glide.ui.keyboard.shortcuts.navigator_toggle</td>
<td>Toggle the application navigator open or closed.</td>
<td></td>
</tr>
</tbody>
</table>

6. Use the value for any user preference that ends with `key_combo` to change the key combination for that particular keyboard shortcut.

### View management

A view defines the elements that appear when a user opens a form or a list, and you can switch the view from the default for lists and forms.

When the system displays a form or list it usually displays only a subset of the fields belonging to the underlying table. For example, this is the Incident form in the Self-Service View:
Self service view

This is the Incident form in the **Metrics View**: 
Metrics view
Administrators and users with the personalize role have permission to perform the key tasks related to views:

- create views for any list and form
- determine which view is visible by default
- delete views they have created
- create and modify view rules determining which views are available depending on the values of the fields of the underlying table
- create rules that determine which views pertain to specific user roles

Users with the admin or view_changer roles can change views.

Views included with the base system

Several views are included with the base system, including the Default view and Advanced view.

**Warning:** Do not delete any of the base system views.

Switching views

To switch between list views, click the list context menu at the top left corner of the list, and then select **Views > (Desired View).**

To switch between the list view in list v3, click the context menu, then select **Change view > (Desired View).**

To switch between form views, click the context menu at the left side of the form header, and then select **Views > (Desired View):**
Switching views submits the form, which saves all changes and triggers any `onSubmit` client scripts that apply. You cannot switch form views on a new form that has not been saved yet.

When a user switches views, the selected view is saved as a user preference so the user sees the same view by default when the form opens. When a user has a view saved as a user preference and then opens a URL to a record that specifies another view, the form displays in the view saved in the user preference, not the URL. For example, if a user selects the Mobile view on an Incident record and then tries to open the following link, which specifies the visual task board view, the form still opens in the Mobile view: https://{instance}/nav_to.do?uri=incident.do?sys_id={sys_ID}sysparm_view=vtb

The `sysparm_view` parameter specifies the view to be used for a list or a form, and can be overwritten by a user’s stored preference for a view. You can override this behavior by setting the `sysparm_view_forced` parameter to `true`.

**Create and delete views**

Administrators can create views and delete any views they have created. You can create or delete views from either the list view or the form view.
Role required: admin

1. Navigate to the application or module you want to create or delete the view for.
2. If you are creating a view for a list, perform the appropriate action for your list version.

<table>
<thead>
<tr>
<th>Version</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>List v2</td>
<td>Right-click the header and select Configure &gt; List Layout.</td>
</tr>
<tr>
<td>List v3</td>
<td>Open the context menu and select List Layout.</td>
</tr>
</tbody>
</table>

3. If you are creating a view for a form, open a record, then right-click the header and select Configure > Form Layout.

4. Under the List View section, select the view on which you want to base your new view.
   The fields visible for that view appear in the Selected list.

5. From the choice list, select New.
   The Create New View form appears.

6. Enter the descriptive name of the view.
   View names should be unique and cannot use special characters or spaces, only the characters A-Z, a-z, 0-9 and _.

7. Click OK.
   The fields in the Available column are the same as the first view you based the new view on.

8. Select the fields to appear in this view by adding or removing the fields from the Selected column. You can also adjust the order they appear on the form by moving the fields up or down.
   If you are creating a view for a form, you can select a form section and configure the fields for that section. You can also create views in the same manner when you configure a related list.

9. To delete a view, navigate to System UI > Views.
10. Click the view to delete.
11. Click Delete on the form header.

   **Warning:** In the views list, you may see multiple entries formatted as rpt-temp<sys_id><user>. The instance creates these views to store the current state of reports. Avoid deleting these records, as it may impact the state of active reports.

   **Warning:** Do not delete the base system views.

**Create a view rule**

When a user switches views, the selected view is saved as a user preference so the user sees the same view by default when the form opens. You can override this functionality to force a specified view to be used.

Role required: admin

View rules do not apply to users who have no role. View rules do not always apply if there are existing user preference entries on the instance. Delete the user preference entry and clear the system cache to make sure the respective view rule applies. You can clear the system cache by appending cache.do to the instance URL. For example, instance_name.service-now.com/cache.do.
**Note:** Clearing the system cache can affect overall performance, and degrade system response times. Do not run cache flushes during business hours, and do not trigger cache flushes automatically.

1. Navigate to **System UI > View Rules**.
2. Click **New**.
3. Complete the form, using the fields in the table.

### View rule form

<table>
<thead>
<tr>
<th>Field</th>
<th>Input value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Specify an identifying name for the rule. This field is case-sensitive and must match exactly the view name.</td>
</tr>
<tr>
<td>Active</td>
<td>Select this option to apply the view rule according to the conditions you specified. If unchecked, the view rule is not be applied.</td>
</tr>
<tr>
<td>Advanced</td>
<td>Select this option to specify a code-based condition instead of using the condition builder. Selecting this option displays the <strong>Script</strong> field and hides the <strong>Match conditions</strong>, <strong>Conditions</strong>, and <strong>View</strong> fields.</td>
</tr>
<tr>
<td>Match Conditions</td>
<td>Select whether <strong>Any</strong> or <strong>All</strong> of the conditions need to be met. The system hides this field when you create an advanced View Rule.</td>
</tr>
<tr>
<td>Conditions</td>
<td>Use the condition builder to determine when the view is applied. The system hides this field when you create an advanced View Rule.</td>
</tr>
<tr>
<td>Application</td>
<td>Displays the application to which the View Rule record belongs.</td>
</tr>
<tr>
<td>Table</td>
<td>Select the table on which this view rule will be applied. The list shows only tables and database views that are in the same scope as the view rule</td>
</tr>
<tr>
<td>Device type</td>
<td>Select which interface this view rule applies to.</td>
</tr>
<tr>
<td>View</td>
<td>Enter the name of the View you are creating a rule for. The system hides this field when you create an advanced View Rule.</td>
</tr>
<tr>
<td>Script</td>
<td>Enter a script to determine when to display a particular view. The system only displays this field when you create an advanced View Rule.</td>
</tr>
</tbody>
</table>

4. Click **Submit**.

**Control when the system displays a view**

Administrators can create rules that determine the conditions for when the system should display a form or list in a specified view. Administrators can also restrict views by user role.
Role required: admin

1. Navigate to **System UI > View Rules**.
2. Click **New**.
3. Complete the form.

**View rule form**

<table>
<thead>
<tr>
<th>Field</th>
<th>Input value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Specify an identifying name for the rule. This field is case-sensitive and must match exactly the view name.</td>
</tr>
<tr>
<td>Active</td>
<td>Select this option to apply the view rule according to the conditions you specified. If unchecked, the view rule is not be applied.</td>
</tr>
<tr>
<td>Advanced</td>
<td>Select this option to specify a code-based condition instead of using the condition builder. Selecting this option displays the Script field and hides the Match conditions, Conditions, and View fields.</td>
</tr>
<tr>
<td>Match Conditions</td>
<td>Select whether Any or All of the conditions must be met. The system hides this field when you create an advanced View Rule.</td>
</tr>
<tr>
<td>Conditions</td>
<td>Use the condition builder to determine when the view is applied. The system hides this field when you create an advanced View Rule.</td>
</tr>
<tr>
<td>Application</td>
<td>Displays the application to which the View Rule record belongs.</td>
</tr>
<tr>
<td>Table</td>
<td>Select the table on which this view rule is applied. The list shows only tables and database views that are in the same scope as the view rule.</td>
</tr>
<tr>
<td>Device type</td>
<td>Select which interface this view rule applies to.</td>
</tr>
<tr>
<td>View</td>
<td>Enter the name of the View you are creating a rule for. The system hides this field when you create an advanced View Rule.</td>
</tr>
<tr>
<td>Script</td>
<td>Enter a script to determine when to display a particular view. The system only displays this field when you create an advanced View Rule.</td>
</tr>
</tbody>
</table>

4. Click **Submit**.

**Restrict view by role**

You can use a script to control the form view used by different roles.

**Caution:** The customization described here was developed for use in specific instances, and is not supported by ServiceNow Technical Support. This method is provided as-is and should be tested thoroughly before implementation. Post all questions and comments regarding this customization to our community forum.
Name: Restrict View by Role

Type: System UI > View Rules

Table: Any

Description: Generally the view used on a form is controlled by either specifying the sysparm_view parameter in the url or module properties, or by inheriting the view from the previous form or list. Sometimes this does not apply, such as when opening a referenced field form from a record producer. In this case, you may want to control the view of the form based on roles. This script assumes there is a view called ess available to the current table.

Parameters:

- **view** - A string containing the name of the current view.
- **is_list** - A Boolean value indicating whether this is a list view.

Script:

```javascript
(function overrideView(view, is_list) {
  // Force non-itil users to use the ess view
  if (gs.hasRole("itil")) {
    return;
  }
  if (view.startsWith("ess")) {
    return;
  }
  // do not change view if it starts with sys_ (e.g. sys_ref_list)
  if (view.startsWith("sys_")) {
    return;
  }
  answer = "ess"; // set the new view to answer
  })(view, is_list);
```

Navigation handler

A navigation handler is a scripted view rule and runs each time data from the specified table is requested in the form view.

Create a navigation handler

The Navigation Handler (sys_navigator) table contains the navigation handlers on your instance. Access this table by entering sys_navigator.list in the filter navigator. Navigation handler records contain a Table field to specify which table the navigation handler applies to, and a Script field containing the scripted view rule.

The following script comes from navigation handler included with the HR plugin. The script forces records from the table in the Table field to use ESS view for users with no roles, and default view for all other users.

```javascript
var now_GR = new GlideRecord(hr.TABLE_CASE);
if (now_GR.get(g_uri.get('sys_id'))) {
  if (!gs.getUser().hasRoles()) {
    g_uri.set('sysparm_view', 'ess');
  } else {
    g_uri.set('sysparm_view', '');
  }
}
```
Run navigation handlers before or after view rules

Use the `glide.ui.view_rule.check_after_nav_handler` system property to control the order in which view rules and navigation handlers are applied. Set the property value to `True` to process view rules after navigation handlers. If the system property does not exist in your instance, the navigation handler always takes precedence.

The system property only overrides the navigation handler if the navigation handler scripted function does not return an answer. In the example script above, the property has no effect. This is because this navigation handler always returns an answer due to the `answer` line being outside of the `if` statement.

To force the navigation handler script in the preceding example to honor view rules, take the following steps:

1. Create the `glide.ui.view_rule.check_after_nav_handler` system property.
2. Set the value of the property to `true`.
3. Update the navigation handler script to only return an `answer` when the view must be changed or forced.

This example is a modified version of the previous script. In this case, the `answer` line only occurs when the user has no roles. If the user has roles, `answer` is never reached, and view rules on the same table, if any, are applied.

```javascript
var now_GR = new GlideRecord(hr.TABLE_CASE);
if (now_GR.get(g_url.get('sys_id'))) {
    if (!gs.getUser().hasRoles()) {
        g_url.set('sysparm_view','ess');
        answer = g_url.toString('hr_case.do');
    }
}
```

Welcome pages

The welcome page contains instructions and any important information you would like to convey to your customers each time they log in to use the system.

The base system login page content is customizable by the administrator of the system.

Welcome page sections

Welcome pages can contain different sections, including:

- **Welcome**: General information
- **Using**: Some tips and tricks for using the system
- **Login**: Login information
- **Demonstration**: Information about logging in to a base system demo system
More Information: A link to the ServiceNow documentation

View, create, and configure the welcome page sections by navigating to System UI > Welcome Page Content. You can edit any item by clicking its short description. Sections that are not needed can be removed.

Welcome page section fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Description</td>
<td>A description of the section.</td>
</tr>
<tr>
<td>Active</td>
<td>Mark the section active to display it on the welcome page. Inactive sections are not visible.</td>
</tr>
<tr>
<td>Display order</td>
<td>A number representing the order in which sections are displayed. Lower numbered sections are displayed above higher numbered sections.</td>
</tr>
<tr>
<td>Application</td>
<td>The application to which the section belongs.</td>
</tr>
<tr>
<td>Language</td>
<td>The section appears when the logged in user's language matches this value. If no user is logged in, the guest user's language preference is used.</td>
</tr>
<tr>
<td>Condition</td>
<td>The section appears on the welcome page when the script in this field evaluates to true.</td>
</tr>
<tr>
<td>Published</td>
<td>The published date of the section.</td>
</tr>
<tr>
<td>Text</td>
<td>The content of the section.</td>
</tr>
</tbody>
</table>

Selecting a language on the welcome page

Users can select a language on the welcome page in the login section, enabling them to start their session in the language of their choice.
Note: Before a user logs in, the welcome page is displayed in the default language of the guest user.

Create company-specific welcome page content

You can create company-specific welcome page content.

Role required: admin

1. Navigate to System UI > Welcome Page Content.
2. To create a new section, click New.
3. Enter the following in the Condition field, where Company is the name of the company whose users see this section.

   \[ gs.getUser().getCompanyRecord().name.toString() == "Company" \]

4. Complete the form.
5. Click Submit.

Enabling accessibility features

You can configure accessibility features globally or for specific users. Users can also individually enable user preferences for themselves to meet their specific accessibility needs.

The platform includes features that support Web Content Accessibility Guidelines (WCAG) 2.0 level A to make the interface more accessible to all users. These features improve the user experience when accessing the instance with screen readers and keyboard navigation.

Accessibility features are not enabled by default because some features are user specific. Administrators have the flexibility to enable features globally or for individual users.

All of these options can be configured globally or for specific users.

- Enable the accessibility option.
- Disable the list editor feature.
- Enable the high contrast theme.
- Use skip links.
- Disable first field focus

Enable accessibility mode

Enable accessibility mode on your instance.

Administrators can enable accessibility mode for specific users by navigating to User Administration > User Preferences and searching for the glide.ui.accessibility user preference. For more information on configuring user preferences, see User preferences.

1. Navigate to User Administration > User Preferences.
2. Click the gear icon ( ) in the banner frame to open the System Settings window.
3. From the General tab, select the Accessibility enabled option.
   Accessible tooltips on forms is enabled automatically the first time you enable accessibility mode.

Alternatively, enable accessibility mode using the Enable Accessibility skip link. For more information on skip links, see Use skip links.

Enable the high contrast theme

In UI16, administrators can enable the Contrast UI theme for users who need a greater contrast in color.

Role required: admin

Individual users can enable the contrast theme for themselves by navigating to the Theme tab of the system settings menu. From the Theme tab, select the Contrast UI theme.

1. Navigate to User Administration > User preferences.
2. Click New then configure the following fields.
User preferences fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>glide.css.theme.ui16</td>
</tr>
<tr>
<td>System</td>
<td>Make sure that the check box is cleared.</td>
</tr>
<tr>
<td>User</td>
<td>Name of the user you want to enable the contrast UI theme for. Add a user preference for each user you want to enable the theme for.</td>
</tr>
<tr>
<td>Type</td>
<td>string</td>
</tr>
<tr>
<td>Value</td>
<td>The sys_id of the contrast UI theme. You can find the sys_id by navigating to System UI &gt; Themes. Then right-click Contrast UI and click Copy sys_id.</td>
</tr>
</tbody>
</table>

3. Click Submit.
   The user may have to sign out and sign back in for the theme to take effect.

Disable first field focus

When a form loads, the system automatically sends focus to the first field on the form. For accessibility reasons, you can disable this option so that focus starts on the first element on the top of the page.

Sending focus to the first field on a form is useful to most users however, it presents challenges for users with certain disabilities. For example, a user using the system with a screen reader may not realize there is additional content above the field that receives focus.

Role required: admin

1. Navigate to User Administration > User Preferences.
2. Search for glide.ui.accessibility.focus_first_field.
3. Set the Value field to false.
4. Optional: To change this setting for a specific user, clear the System check box, then add a user in the user field.
   Set up a new preference for each user you want to configure this option for.

Enable the accessible form tooltips feature

The accessible tooltips user preference adds a tooltip icon that users can tab to, to view a tooltip for a field.

Some fields on forms have associated tooltips that contain additional information. By default, these tooltips are accessible by pointing to the field label or mandatory indicator asterisk. However, a user who relies on keyboard navigation cannot point to the field to access the tooltip. The accessible form tooltip feature solves this problem by adding a keyboard-accessible icon next to each field that has a tooltip. Tabbing or pointing to the icon shows the tooltip.

Administrators can enable accessible form tooltips for specific users by navigating to User Administration > User Preferences and searching for the glide.ui.accessibility.accessible.tooltips user preference. For more information on configuring user preferences, see User preferences.
Accessibility must be enabled for the accessible form tooltips user preference to work.

1. Click the gear icon (⚙️) in the banner frame to open the System Settings window.
2. From the General tab, select the **Accessibility enabled** option.
   The Accessible tooltips on forms option is enabled automatically the first time you enable accessibility mode.
3. Optional: Clear the **Accessible tooltips on forms** option to disable the accessible tooltips. If you disable accessibility mode and re-enable it, Accessible tooltips on forms will remain disabled.

### Configure a Windows 64-bit host to use 32-bit NVDA with Java applications

The NVDA Assistive Technology screen reader is a 32-bit application that, when the Java Access bridge has been enabled, reads aloud Java applications built to support accessibility. If you encounter a problem using NVDA to access Java applications on a 64-bit Windows host, you must configure the Java Access bridge.

**Role required:** local or domain administrator on the host Windows machine

The following example assumes:

- The 32-bit and 64-bit Oracle Java jdk versions 8u171 are being installed in the default location.
- A Windows command prompt with administrative privileges is used to execute command line utilities.
- Executable statements are prefixed with the `PROMPT>` string.

#### Note:
- The above configuration was used on a Windows 7 VM host to test the NVDA and JAWS screen readers.
- This example refers to Java version 8u171. If you are using a later version of Java, substitute that version.

1. Go to the [Oracle Java SE downloads page](https://www.oracle.com/java/technologies/javase-jdk8-downloads.html) and download the Oracle Java jdk for 32-bit and 64-bit Windows environments:
   - 32-bit: jdk-8u171-windows-i586.exe
   - 64-bit: jdk-8u171-windows-x64.exe

   To access and download the files listed in the above example, go to the [Oracle Java SE jdk download page](https://www.oracle.com/java/technologies/javase-jdk8-downloads.html).

2. Install the 64-bit version of the Oracle Java jdk in the default location.
   ```
   PROMPT> jdk-8u171-windows-x64.exe
   ```

   Verify that the installation process installed the following:
   - Java 64-bit jdk in the C:\Program Files\Java\jdk1.8.0_171 directory.
   - WindowsAccessBridge-64.dll in the C:\Windows\System32 directory.
3. Enable the Java Access bridge for 64-bit applications using the 64-bit jabswitch application located in the 64-bit Java jdk bin directory.

```
PROMPT> cd "C:\Program Files\Java\jdk1.8.0_171\bin"
PROMPT> jabswitch -enable
```

4. Copy the `WindowsAccessBridge-64.dll` located in the `C:\Windows\System32` directory to the 32-bit `C:\Windows\SysWOW64` directory.

```
PROMPT> cd C:\Windows\System32
PROMPT> copy WindowsAccessBridge-64.dll C:\Windows\SysWOW64
```

Verify that the copied `WindowsAccessBridge-64.dll` exists in the 32-bit `C:\Windows\SysWOW64` directory.

5. Install the 32-bit version of the Oracle Java jdk in the default location.

```
PROMPT> jdk-8u171-windows-i586.exe
```

Verify that the installation process installed the following:
- Java 32-bit jdk in the `C:\Program Files (x86)\Java\jdk1.8.0_171` directory.
- WindowsAccessBridge-32.dll in the `C:\Windows\SysWOW64` directory.

6. Enable the Java Access bridge for 32-bit applications using the 32-bit jabswitch application located in the 32-bit Java jdk bin directory.

```
PROMPT> cd "C:\Program Files (x86)\Java\jdk1.8.0_171\bin"
PROMPT> jabswitch -enable
```

7. Restart the NVDA Assistive Technology software using the NVDA shortcut pinned to the task bar, pinned to the start menu, or located on the desktop. You can also use the **Start > All Programs > NVDA > NVDA** menu selection.

8. On an administrative command prompt terminal, launch the Edge Encryption Interactive Installer.

```
PROMPT> java -jar <edge encryption interactive file name>.jar
```

### Using accessibility features

Accessibility features include keyboard navigation, color and style settings, using a screen reader, and search methods.

### Keyboard accessibility

The Now Platform is designed to be as accessible as possible without user modification or setting changes. Users can tab through the platform UI without enabling accessibility. However, without accessibility enabled, tabbing goes from input to input and skips other items on a form, such as reference icons.

Tab-through provides the following options:
- Use skip links to shift focus to different parts of the page without tabbing through every element.
- On edit pages such as forms, the keyboard focus starts at the first editable field on the page.
If the glide.ui.accessibility.focus_first_field user preference is enabled, page focus starts at the first input field at the top of the page content section. In a table, this field is usually the search option. In a form, the field is the first input field in the form.

Use tab-through and arrow keys to move items around in a slushbucket.

When focused on tabs, use right/left arrow keys to switch tabs.

Arrows keys work within menus to navigate between entries.

On tab-through for a list, the option to enable the Edit table data inline appears, so you can use the list editor, rather than opening the form.

- When inline edit mode is enabled, screen focus shifts to the first cell in the table.
- Press the Escape key while a cell is selected to exit inline edit mode. Focus remains on the cell.
- Press the spacebar to open the context menu for the selected item.
- Use the arrow keys (in addition to tabbing) to move around the list in inline edit mode.

Properties pages, such as System Properties > UI Properties, include an icon with the property name. Screen readers read the property name when the icon is in focus.

Fields on a form include a tooltip icon. Screen readers read the tooltip when the icon is in focus.

In the application navigator when accessibility is enabled, tabbing moves you through each element for every module, including the Edit application/module and Add to favorites icons. Use the arrow keys to move through the application navigator without focusing on these additional elements.

If accessibility mode is enabled, a help icon appears with the HTML field. The help icon indicates how to access and escape the HTML field toolbar.

Use skip links

Skip links allow users to quickly navigate to the main content on a page, list, or form, bypassing icons, banner text, navigation links, and other elements. Skip links are not visible until you tab to them.

The user interface includes skip links to the navigation menu, and the main content pane. If accessibility is not enabled, users can also use skip links to activate accessibility.

- Enable Accessibility: Enables accessibility. This skip link only appears if the user has not yet enabled accessibility. Pressing enter prompts you to reload the page with accessibility mode enabled.
- Skip to navigator: Skips to the navigation filter in the application navigator.
- Skip to main content: Skips to the main content page.

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**Edit table data inline:** Skips to the first field in a table. When the field is selected, press Enter to edit the field. Press the spacebar to open the field context menu. Press the Escape key to exit inline edit mode.

Skip links are usually the first item in the tab order for a page or frame.

- Use the Tab and Shift+Tab keys to move forward and back through the skip links and other selectable fields.
- When a skip link receives focus, press Enter to select the link.

**Color and style accessibility**

There are several color and style changes that make the platform more accessible.

**Enable the Contrast UI theme**

In the system settings, on the themes tab, select the Contrast UI theme. The Contrast UI theme provides a higher contrast range of colors for the platform UI.

In Service Portal, you can apply the Stock — High Contrast theme to a portal for a higher contrast color range. Portal users can enable a contrast theme using the **Accessibility** option in the User Profile widget.

**Patterned charts and graphs**

View charts and graphs that rely heavily on color with patterns in addition to colors. Navigate to **System settings > General**, then select **Data visualization patterns enabled**.
Users by Location

- 27, Boulevard Vitton, Paris = 63 (10.64%)
- 3 Whitehall Court, London = 48 (8.29%)
- Paradise Road, Richmond, London = 39 (6.71%)
- 30 Katharinenstr, Hamburg = 32 (5.52%)
- Bockenheimer Landstraße 223, Frankfurt = 28 (4.82%)
- (empty)

Data visualization patterns enabled
Screen reader accessibility

Screen elements in the platform have enhancements that make them accessible to screen readers.

Use NVDA, JAWS, or VoiceOver for non-visual access to the platform.

Skip links allow you to tab straight to the main content instead of tabbing through all the other elements on the page.

When a page reloads or search results display, screen readers inform the user.

Important images and field indicators (for example, status indicators for avatars in list v3) have alternative text for screen readers to read.

To reduce confusion when tabbing through modules, the edit application/edit module and add to favorites icons are accessible to screen readers by tabbing. To skip the Edit application/module and Add to favorites icons, use the up and down arrows on the keyboard.

In Service Portal, users can add alternative text to containers in their own portal for screen readers to read.

Elements such as links or button are listed as such for screen reader awareness.

Properties pages, such as System Properties > UI Properties, include an icon with the property name. Screen readers read the property name when the icon is in focus.

Forms include accessible tooltips that screen readers read when the tooltip is in focus.

Accessibility search methods

There are several ways to search for information in the user interface.

- When a list opens, focus starts in the search field. Press the Tab key or the shift+tab keys to navigate away from the search, or start typing while focus is in the search field.
- List views include a Go to search field in the list title bar. Using the * wildcard character in the search text allows you to perform a contains search rather than a starts with search. This type of query may take longer to run but can save keystrokes. You can also use several other wildcards with list searches.
- The navigation filter in the application navigator filters the applications and modules that appear in the navigator based on the entered text. Tab through or use skip links to navigate directly to the navigation filter. To open a module, click the module name, or press the Down Arrow to highlight the module name, and then press Enter.

See Available search options for more information about these search methods.

View card details in a task board

With accessibility mode enabled, tab through cards in a task board. Use the card details button to view task card details.

Enable accessibility from the General tab of the system settings menu.

Role required: none

2. Open an existing task board.
3. Press the Tab key to navigate through the board to get to a task card.
4. Press the Tab key to navigate through the card until the Open Card Details button appears.
5. Press Enter to open the card.
6. To exit the card, press Escape.

Map pages

Map pages display ServiceNow data graphically on a Google map page based on location data that you provide.

You can create as many map pages as required to define the types of data to display, the links to show, and the appearance of the map. After creating the map pages, you can create modules to display the map pages.

Note: Map pages are subject to the non-production access limitations. See Set up Google Maps API for details.

Map locations

Locations are used by various applications to locate users, facilities, or configuration items (CI) and are stored in the Location (cmn_location) table. You can configure different levels of location
in a parent-child hierarchy. For example, an email server might be associated with a location of Second Floor, whereas the email business service might be associated with New York City.

Each level of this hierarchy contains a separate location record, with the next higher level specified as a parent. In this example each location is selectable as a hierarchy from reference fields:

### Location hierarchy

The location is also used to generate a full identifier in the **Full name** field, which is available by configuring the form as follows.

![Location hierarchy diagram]

#### Location Full name

### How locations are defined

To create a location, navigate to **User Administration > Locations** and click **New**.

**Define a location**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of the location. This name is the display value that the system uses when referencing this location on a form.</td>
</tr>
<tr>
<td>Street</td>
<td>The street address of the location.</td>
</tr>
<tr>
<td>City</td>
<td>The city of the location.</td>
</tr>
<tr>
<td>State / Province</td>
<td>State or province of the location.</td>
</tr>
<tr>
<td>Zip / Postal Code</td>
<td>The zip or postal code of the location.</td>
</tr>
<tr>
<td>Country</td>
<td>The country of the location.</td>
</tr>
<tr>
<td>Contact</td>
<td>Name of a user who is the contact for this location.</td>
</tr>
<tr>
<td>Phone</td>
<td>The phone number for the location.</td>
</tr>
<tr>
<td>Fax phone</td>
<td>The fax number for the location.</td>
</tr>
</tbody>
</table>
Latitude and longitude

When a Company or Location record is created, or has one of its address fields changed [street, city, state, zip or country], the get_lat_long business rule is triggered. This business rule uses the GoogleMapsHelper script include to create sys_geocoding_request records.

A scheduled job called Process Geocoding Request runs every 10 minutes, and processes sys_geocoding_request records. Process Geocoding Request uses Google Map service to populate the latitude and longitude fields of the changed or created Company and Location records.

After the latitude and longitude are populated, Map Pages can be defined that display locations in an interactive map.

Note: Latitude and longitude are expressed as a floating point data type. Previous releases expressed this information as a string. During an upgrade, the system converts the data where possible.

Set up Google Maps API

You enable the geolocation feature using the appropriate entries from a Google Maps API for Business license, or a Google Maps Javascript API Key.
Role required: admin

You can generate maps using basic JavaScript, and they are flexible enough to display even the most complicated of queries. These maps use standard Google Maps API for Business or Google Maps Javascript API Key mapping features, including various link types to records in your instance. Use of this feature requires installation of the Google Maps plugin.

Map page

1. Google Maps APIs for Business licenses are no longer available from Google, so, depending on whether have an existing license, use one of the following procedures.
### Existing Google Maps API for Business license available?

<table>
<thead>
<tr>
<th>Existing license available</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. In the <strong>System Properties &gt; Google Maps</strong> property form:</td>
</tr>
<tr>
<td></td>
<td>- In the <code>google.maps.client</code> field, enter the Client ID for your organization. This ID is from Google and starts with <code>gme-</code>, such as <code>gme-mycompanyname</code>.</td>
</tr>
<tr>
<td></td>
<td>- In the <code>google.maps.private.key</code> field, enter the private key for Google Maps API for Business. An example of an encoded key is <code>vNIXE0xscrmjlyV-12Nj_BvUPaw=</code>. The Now Platform® requires this key to retrieve accurate driving time estimates from Google for some Geolocation features.</td>
</tr>
<tr>
<td></td>
<td>- Fill out the remaining values on the form.</td>
</tr>
<tr>
<td></td>
<td>2. Configure your maps using the property definitions from the table.</td>
</tr>
</tbody>
</table>

**Note:** See the [Getting Started Guide](https://developers.google.com/maps/gmp-get-started) on the Google website for details on obtaining a key, using the API, and relevant terms of service.

### No license available

<table>
<thead>
<tr>
<th>No license available</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Obtain a Google Maps Javascript API Key from Google.</td>
<td></td>
</tr>
<tr>
<td>2. In the <strong>System Properties &gt; Google Maps</strong> property form, enter the API key into the <code>google.maps.key</code> field.</td>
<td></td>
</tr>
<tr>
<td>- Geolocation in the Now Platform® uses the API Key, which Google Maps also uses for Geolocation and map view billings.</td>
<td></td>
</tr>
<tr>
<td>3. Fill out the remaining values on the form.</td>
<td></td>
</tr>
<tr>
<td>4. Configure your maps using the property definitions from the table.</td>
<td></td>
</tr>
</tbody>
</table>

To learn more about Google Maps API for Business, and Google Maps Javascript API Key, see [https://developers.google.com/maps/gmp-get-started](https://developers.google.com/maps/gmp-get-started).

2. After you complete and save the configuration, create Map pages, or use the default pages included with the plugin.

Map pages define what data appears on the map, and the appearance of the links. For a tutorial on how to view all of the markers that link to your records, see the [Display Map Markers on Google Maps](https://developers.google.com/maps/gmp-get-started) blog post on theNow Community.
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>google.maps.auto_close</td>
<td>If true, automatically closes a map information window before opening a new one.</td>
</tr>
<tr>
<td></td>
<td>- Type: true/false</td>
</tr>
<tr>
<td></td>
<td>- Default value: true</td>
</tr>
<tr>
<td></td>
<td>- Location: System Properties &gt; Google Maps</td>
</tr>
<tr>
<td>google.maps.client</td>
<td>Client ID for Google Maps API for Business.</td>
</tr>
<tr>
<td></td>
<td>- Type: string</td>
</tr>
<tr>
<td></td>
<td>- Default value: gme-servicenow</td>
</tr>
<tr>
<td></td>
<td>- Location: System Properties &gt; Google Maps</td>
</tr>
<tr>
<td>google.maps.private.key</td>
<td>Private key for Google Maps API for Business. This key activates the geolocation feature, which locates users in the system precisely,</td>
</tr>
<tr>
<td></td>
<td>using data from their mobile devices.</td>
</tr>
<tr>
<td></td>
<td>- Type: string</td>
</tr>
<tr>
<td></td>
<td>- Default value: empty</td>
</tr>
<tr>
<td></td>
<td>- Location: System Properties &gt; Google Maps</td>
</tr>
<tr>
<td>google.maps.version</td>
<td>Version number of the current installation of Google Maps API for Business.</td>
</tr>
<tr>
<td></td>
<td>- Type: string</td>
</tr>
<tr>
<td></td>
<td>- Default value: current version number</td>
</tr>
<tr>
<td></td>
<td>- Location: System Properties &gt; Google Maps</td>
</tr>
<tr>
<td>google.maps.key</td>
<td>Google Maps API for Business or Google Maps Javascript API. Key that ties to the URL of the server. This key authorizes development use of</td>
</tr>
<tr>
<td></td>
<td>Google Maps API.</td>
</tr>
<tr>
<td></td>
<td>- Type: string</td>
</tr>
<tr>
<td></td>
<td>- Default value: empty</td>
</tr>
<tr>
<td></td>
<td>- Location: System Properties &gt; Google Maps</td>
</tr>
<tr>
<td>google.maps.latitude</td>
<td>Starting latitude of the map. This value determines the starting position displayed in Google Maps.</td>
</tr>
<tr>
<td></td>
<td>- Type: string</td>
</tr>
<tr>
<td></td>
<td>- Default value: 36.008522</td>
</tr>
<tr>
<td></td>
<td>- Location: System Properties &gt; Google Maps</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| google.maps.longitude  | Starting longitude of the map. This value determines the starting position displayed in Google Maps pages.  
  - Type: string  
  - Default value: -95.221764  
  - Location: System Properties > Google Maps |
| google.maps.max_items  | Maximum number of items to display on the map.  
  - Type: integer  
  - Default value: 500  
  - Location: System Properties > Google Maps |
| google.maps.table      | Table used by the map. The table needs the following fields: name, longitude, latitude.  
  - Type: string  
  - Default value: cmn_location  
  - Location: System Properties > Google Maps |
| google.maps.zoom       | Starting zoom level of the map (1 is the lowest)  
  - Type: string  
  - Default value: 4  
  - Location: System Properties > Google Maps |

**Create a map page**

Your ServiceNow instance provides several default map pages. You can also create custom map pages with the script examples described in this page.

Role required: admin

The default map page record displays critical incidents on a Google map page.
1. Navigate to **System Map Page > Map Pages**.
2. Click **New**.
3. Complete the form using the fields in the table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a unique name to identify the map.</td>
</tr>
</tbody>
</table>
Create a map page module

You can create a new application module for desktop or smartphone users to display a Google map page.

Role required: admin

1. Navigate to System Definition > Modules and click New.
2. Select the appropriate application for the module.
   For example, if you are planning to display critical incidents, add a module to the Incident application menu.
3. Perform the appropriate action for your version of the UI:
   - **UI16**: Point to the application menu you want to add the module to and click the edit application (pencil) icon.
   - **UI15**: Right-click the application menu in the application navigator and select Edit Application Menu.
4. Select the Link Type tab and select the type of link you want for the module.
For example, you can create a module that opens a map page directly, or one that links through a URL.

5. Complete the form, as appropriate.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Enter a name for the module in the application navigator.</td>
</tr>
<tr>
<td>Order</td>
<td>Enter a number to define the sequence this condition should be evaluated if more than one matching condition exists. The order is evaluated from the lowest value to the highest value.</td>
</tr>
<tr>
<td>Application menu</td>
<td>Select the application menu where you want this module to appear. By default, this field displays the application menu that you opened to create the module.</td>
</tr>
<tr>
<td>Hint</td>
<td>Enter a brief description to display when a user points to the module name in the application navigator.</td>
</tr>
<tr>
<td>Active</td>
<td>Select the check box to activate this module. Only active modules appear in the application menu.</td>
</tr>
<tr>
<td>Image</td>
<td>Select an icon to display with this module in the application navigator. If this field is blank, a default icon is used.</td>
</tr>
<tr>
<td>Link type</td>
<td>Select the desired link type from the list. This selection changes the available fields in the form.</td>
</tr>
<tr>
<td>Map page</td>
<td>Select the pre-configured map page to use for this module. For example, Critical Incidents.</td>
</tr>
<tr>
<td>Roles</td>
<td>Select the roles that are permitted to access this module. If this field is blank, all roles can access the module.</td>
</tr>
<tr>
<td>Arguments</td>
<td>Define the URL for this module in the format map_page.do?sysparm_name=&lt;map page name&gt;. This field is available when the link type is URL (from Arguments).</td>
</tr>
</tbody>
</table>

Note: If the map page title has a space in it, replace the space with %20 for the correct syntax. For example, a map page called Critical Incidents becomes Critical%20Incidents%20 in a URL.
6. Click Submit.

Create an advanced Map Page

Use advanced configuration to set up Map Pages without scripting.

Role required: admin

When clicked, lists and forms display for codeless user experience, facilitating upgrades to future releases. Advanced Map Pages do not support mobile. To display Map Pages on mobile devices, use the classic Map Page or the mobile map applet in the Now Mobile app instead.

1. Navigate to System Map Page > Map Pages.
2. Click New.
3. On the Map Page form, select the Use advanced configuration check box. The script hides and an M2M record appears.

Note: Double-click the record to use the M2M record.
4. In the **Name** field, enter a unique name for your Map Page.
5. Click the menu icon
   (and select **Save**.)
Click the Create Map Data Item related link, and complete the form.

**Configure map data items**

Add map data items to render data on your Map Page using lists and forms.

Role required: admin

Create a container for your map data items first, then configure and select the data items for your Map Page.

1. Navigate to System Map Page > Map Data Items.
2. Click New.
3. On the form, fill in the fields.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name for the map data item.</td>
</tr>
<tr>
<td>Table</td>
<td>Table for the condition. For example, select the Choice (sys_choice) table.</td>
</tr>
<tr>
<td>Condition type</td>
<td>Condition using declarative or scripted conditions.</td>
</tr>
<tr>
<td>Conditions</td>
<td>Declarative conditions for your map data item.</td>
</tr>
<tr>
<td>Application</td>
<td>Optional application scope for the map marker, if other than Global.</td>
</tr>
</tbody>
</table>

4. Click Submit.

**Map Data Item form**

Select the options in the table to successfully create a map data item. Use this configuration with the examples in Add a map filter and Configure a map filter data mapping to successfully create a map filter.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter Incident state.</td>
</tr>
<tr>
<td>Table</td>
<td>Select Choice (sys_choice).</td>
</tr>
<tr>
<td>Condition type</td>
<td>Select Declarative.</td>
</tr>
<tr>
<td>Conditions</td>
<td>Input the following into the fields: Element is state and Table is task.</td>
</tr>
<tr>
<td>Application</td>
<td>Skip this field.</td>
</tr>
</tbody>
</table>

Create map markers for your map.
Create a map marker

Add a map marker icon and define the click behavior to differentiate between data on your Map Page using lists and forms.

Set up a map data item before you accomplish this task.

Role required: admin

1. Navigate to System Map Page > Map Coordinate Definitions.
2. Click New.
3. On the form, fill in the fields.

Map Coordinate Definition form

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name for your map coordinate definition.</td>
</tr>
<tr>
<td>Type</td>
<td>Type of map coordinate definition. Select Field, which uses lists and forms, or Script.</td>
</tr>
<tr>
<td>Table</td>
<td>Table for the condition. For example, incident (incident).</td>
</tr>
<tr>
<td>Latitude field</td>
<td>Latitude field to define map coordinates. Select Location, then Latitude.</td>
</tr>
<tr>
<td>Longitude field</td>
<td>Longitude field to define map coordinates. Select Location, then Longitude.</td>
</tr>
<tr>
<td>Application</td>
<td>Optional application scope for your map coordinate definition, if other than Global.</td>
</tr>
</tbody>
</table>

4. Click Submit.
5. Navigate to System Map Page > Map Markers.
6. Click New.
7. On the form, fill in the fields.

Map Page Marker form

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name for your map marker.</td>
</tr>
<tr>
<td>Data item</td>
<td>Data item for your map marker. Select the map data item that you previously configured.</td>
</tr>
<tr>
<td>Coordinate definition</td>
<td>Coordinate definitions for your map marker. Select the map coordinate definition that you previously configured.</td>
</tr>
<tr>
<td>Map Marker Icons</td>
<td>M2M map marker icons record. Set up map marker icons, or create new ones.</td>
</tr>
</tbody>
</table>

Note: Complete all the steps to set up map marker icons.
8. Click the menu icon and select Save.

Set up map marker icons and map marker click actions to finish configuring map markers.

*Set up map marker icons*
Select a relative or absolute URL for a map marker icon to display a data item on the Map Page, and determine the map marker priority on the Map Page.

Role required: admin

1. Navigate to **System Map Page > Map Marker Icons**.
2. Click **New**.
3. On the form, fill in the fields.

### Map Marker Icon form

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name for your map marker icon.</td>
</tr>
<tr>
<td>Level</td>
<td>Marker priority on your Map Page. When multiple markers share coordinates, the lowest level marker is displayed on your Map Page.</td>
</tr>
<tr>
<td>Application</td>
<td>Optional application scope for your map marker icon, if other than Global.</td>
</tr>
<tr>
<td>Single icon URL</td>
<td>Icon for a single data item from a map coordinate on your Map Page. Select a relative or absolute link.</td>
</tr>
<tr>
<td>Co-located icon URL</td>
<td>Icon for multiple data items from a map coordinate on your Map Page. Select a relative or absolute link.</td>
</tr>
<tr>
<td>Scripted condition</td>
<td>Optional scripting for map markers.</td>
</tr>
</tbody>
</table>

4. Click **Submit**.
5. Navigate to **System Map Page > Map Markers**.
6. Select your map page marker.
7. In the **Map Marker Icons** field, double-click the record and click the search icon.
8. Select your map marker icon, then click the check mark icon

9. Click the menu icon
and select Save.

Continue to the next task to define map marker click actions.

Define map marker click actions
Define the click actions for your Map Page marker. Click actions enable you to define what happens when you click a map marker on your Map Page.

Role required: admin
Select a dialog box that displays form details, or script your own click actions.

1. Navigate to System Map Page > Map Marker Click Actions.
2. Click New.
3. On the form, fill in the fields.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name for the map marker click action.</td>
</tr>
<tr>
<td>Action type</td>
<td>Action type for the click action. Select Display dialog form or Script.</td>
</tr>
<tr>
<td>Title</td>
<td>Title for the map marker click action. The title is displayed on the dialog form on your Map Page.</td>
</tr>
<tr>
<td>Application</td>
<td>Optional application scope for your map marker click action, if other than Global.</td>
</tr>
<tr>
<td>Form View</td>
<td>Form view used for the dialog box UI on your Map Page.</td>
</tr>
</tbody>
</table>

4. Click Submit.
5. Navigate to System Map Page > Map Markers.
7. In the Map Marker Click Actions field, double-click the record and click the search icon

8. Select your map marker click action, then click the check mark icon

9. Click the menu icon
and select Save.

Continue to the next task to complete your map marker setup.
Select map markers
Choose a Map Page where you want to apply your map marker.

Role required: admin

1. Navigate to System Map Page > Map Pages.
2. Select your Map Page.
3. In the Map Page Markers field, double-click the record and click the search icon.
4. Select your map marker, then click the check mark icon.
5. Click the menu icon and select Save.

You've set up a map marker. Click Try it on the Map Pages form to ensure that your map marker is set up correctly. After that, create a map filter to show the map markers that you want to see on your Map Page.

Note: If data is not available, map markers don't show.

Add a map filter
Add a map filter to display filtered map markers. This filter enables you to see only the map markers for the data that you want.

A map data item should be configured before accomplishing this task. The example map data item can work with the example map filter tables below to successfully set up a map filter.

Role required: admin

Map filters can be configured using lists and forms, or scripting. Create a container for your map filters first, configure filter items, and then choose a Map Page for your filter.

1. Navigate to System Map Page > Map Filters.
2. Click New.
3. In the Name field, enter a name for the map filter.
4. In the Application field, define the application scope, if other than Global.
5. Click the menu icon and select Save.
6. In the Map filter item field, double-click the record and click the search icon.
7. To create a Map Page filter item, click New.
8. On the form, fill in the fields.
Map Page Filter Item form

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name for your Map Page filter item.</td>
</tr>
<tr>
<td>Label</td>
<td>Title for your Map Page filter item that's displayed in the map filter in your Map Page.</td>
</tr>
<tr>
<td>UI Type</td>
<td>UI type for your Map Page filter item. Select Single selection, Multiple selection, or Date picker. When you select Date picker, the data item fields hide and the default value script appears.</td>
</tr>
<tr>
<td>Data type</td>
<td>Data type for your Map Page filter item. Select Data item or Scripted for the data type. A data item enables you to configure or select data items using lists and forms.</td>
</tr>
<tr>
<td>Application</td>
<td>Application scope for your Map Page filter item, if other than Global.</td>
</tr>
<tr>
<td>Note: This field is optional.</td>
<td></td>
</tr>
<tr>
<td>Data item</td>
<td>Data item for your Map Page filter item. Select the data item that you previously configured.</td>
</tr>
<tr>
<td>Data item table</td>
<td>Data item table for your Map Page filter item. Note: This field is automatically populated when a data item is selected.</td>
</tr>
<tr>
<td>Data item value field</td>
<td>Data item value field for your Map Page filter item. Choose how data is used in a table.</td>
</tr>
<tr>
<td>Default value script</td>
<td>Scripting field for your Map Page filter item.</td>
</tr>
</tbody>
</table>

9. Click Submit.
10. When you return to the Map Page Filter form, click the check mark icon (✔). The name of the Map Page filter item that you created is displayed in the field.
11. Click the menu icon (≡) and select Save.

Map Page Filter Item form

Select the options in the table to successfully create your Map Page filter item. This setup works with the map data item example.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter Incident.</td>
</tr>
</tbody>
</table>
### Map Filter Data Mapping form

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map page</td>
<td>Map Page where your map filter is applied.</td>
</tr>
<tr>
<td>Data item</td>
<td>Data item for your map filter data mapping. Select the data item that you previously configured.</td>
</tr>
<tr>
<td>Application</td>
<td>Optional application scope for your map filter data mapping.</td>
</tr>
</tbody>
</table>

Continue to the next task to configure a map filter data mapping.

**Configure a map filter data mapping**

Choose a Map Page for your map filter, and determine how it functions on the Map Page.

Role required: admin

1. Navigate to **System Map Page > Map Filters**.
2. Select your map filter.
3. On the Map Page Filter record, select your map filter item.
4. In the Map Filter Data Mappings related list, click **New**.
5. On the form, fill in the fields.
Field | Description
--- | ---
Filter item | Filter item for your map filter data mapping. Select the filter item that you previously configured.

Note: This field is automatically populated with the filter item.

Table | Table for your map filter data mapping.

Note: This field is automatically populated when a data item is selected.

Field | Data is retrieved from this field in the table that you selected.

6. **Click Submit.**

**Map Filter Data Mapping form**

Select the options in the table to successfully create your map filter data mapping. This setup works with the *map data item example.*

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map page</td>
<td>Select the Map Page that you created.</td>
</tr>
<tr>
<td>Data item</td>
<td>Select <strong>Incident</strong> state.</td>
</tr>
</tbody>
</table>

Note: This data item is the map data item you created in the map data item example.

| Application | Skip this field. |
| Filter item | Skip this field. |

Note: This field is automatically populated when a data item is selected.

| Table | Skip this field. |

Note: This field is automatically populated with the Choice (sys_choice) selection.
Continue to the next task to select your map filter, and complete the map filter setup.

Select map filters
Select your map filter to complete the Map Page filter setup. This setup applies the map filter to your Map Page.

Role required: admin
1. Navigate to System Map Page > Map Pages.
2. Select the Map Page that you want to apply your map filter to.
3. Select the Use advanced configuration check box.
4. In the Filter field, click the search icon and select the map filter that you created.
5. Click the menu icon and select Save.

You’ve set up your map filter. Continue to the next task to see that you have successfully created it.

Check your map filter
Check to see that your map filter was successfully created in your Map Page.

Role required: admin
1. Navigate to System Map Page > Map Pages.
2. Select your Map Page.
3. Click Try It.
4. In your Map Page, click Filter.
   Your map filter appears.
Set map application scope

Enable map application scope to specify which application can modify your Map Page configuration.

Role required: admin

1. In the banner, click the gear icon.
2. From the System Settings list, select Developer.
3. From the Application list, select the application.
4. Toggle Show application picker in header.
   An application picker appears in the header, enabling you to choose applications.

Create a smartphone map page module

You can create a custom smartphone module that links directly to a map page.

Role required: admin

1. Obtain the sys_id of the map page.
   The sys_id is required when you create the module.
2. Navigate to System Mobile UI > Navigator Apps.
3. Open the application menu where you want the new module to appear.
4. In the Modules related list, click New.
5. Complete the form, as appropriate.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a name for the module.</td>
</tr>
</tbody>
</table>
### Field Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Order</strong></td>
<td>Enter a number to specify the order of the module within the application menu. For example, an entry of 100 would place this module before one with an Order entry of 200.</td>
</tr>
<tr>
<td><strong>Application menu</strong></td>
<td>Select the application menu where you want this module to appear. By default, this field displays the application menu that you opened to create the module.</td>
</tr>
<tr>
<td><strong>Table</strong></td>
<td>Do not select a table.</td>
</tr>
<tr>
<td><strong>Updated</strong></td>
<td>Displays the date and time when the module record is updated.</td>
</tr>
<tr>
<td><strong>Roles</strong></td>
<td>Select the roles that are permitted to access this module. If this field is blank, all roles can access the module.</td>
</tr>
<tr>
<td><strong>Active</strong></td>
<td>Select the check box to activate this module. Only active modules appear in the application menu.</td>
</tr>
<tr>
<td><strong>Filter</strong></td>
<td>Do not add a filter condition.</td>
</tr>
<tr>
<td><strong>Path</strong></td>
<td>Enter map/ followed by the sys_id of the map page. For example: map/c86c5feac0a80a6600706f0102968196</td>
</tr>
</tbody>
</table>

6. Click **Submit**.

### Scripting for map pages

The Script field on the Map Page form allows the use of attributes or custom code to define map characteristics, such as marker appearance, display information, and more.

### Scripting map item attributes

The following attributes are available.

**Note:** To create an item on the map, use the `map.addItem(glideRecord)` method. Pass a valid GlideRecord to `addItem()`.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Name used for identification.</td>
</tr>
<tr>
<td>latitude</td>
<td>If you define an address, latitude is not necessary.</td>
</tr>
<tr>
<td>longitude</td>
<td>If you define an address, longitude is not necessary.</td>
</tr>
<tr>
<td>icon</td>
<td>URL of the icon to display for the marker. If a custom icon is not specified, the default Google marker is used.</td>
</tr>
<tr>
<td>icon_width</td>
<td>Width of the icon. The default is 32.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>icon_height</td>
<td>Height of the icon. The default is 32.</td>
</tr>
<tr>
<td>table_name</td>
<td>Table whose records display when the marker icon is clicked. Used with the sys_id attribute.</td>
</tr>
<tr>
<td>sys_id</td>
<td>Sys_id of the record that displays when the marker icon is clicked. Used with the table_name attribute.</td>
</tr>
<tr>
<td>view</td>
<td>View of the form displayed in the dialog box when the marker icon is clicked.</td>
</tr>
<tr>
<td>html</td>
<td>Arbitrary HTML code for the pop-up window. If used, this value overrides the dialog box.</td>
</tr>
<tr>
<td>marker_label</td>
<td>Optional marker icon label text.</td>
</tr>
<tr>
<td>label_offset_left</td>
<td>Optional attribute that is used with marker_label to define the horizontal position of the marker label. The default is 0.</td>
</tr>
<tr>
<td>label_offset_top</td>
<td>Optional attribute that is used with marker_label to define the vertical position of the marker label. The default is 0.</td>
</tr>
</tbody>
</table>

**Scripting custom map page behavior for smartphone**

If you plan to access the map page from a smartphone, you may want to set custom smartphone interface behavior using the isMobile variable. You can use the isMobile variable to set custom behavior for the smartphone view of the map. For example, you might set different values for the icon_width and icon_height attributes when isMobile is true.

**Basic map page script**

This script displays all active, critical incident locations.

```javascript
//setup new GlideRecord query on the incident table
var now_GR = new GlideRecord("incident");
//add condition for priority 1
now_GR.addQuery('priority', '1');
//add condition for active incidents
now_GR.addActiveQuery();
//execute the query
now_GR.query();

//loop through the list of incidents returned by the query
while (now_GR.next()) {

    //create a new map item to display - linked to the current incident record
    var item = map.addItem(now_GR);
    //add the latitude value from the incident's location
    item.latitude = now_GR.location.latitude;
    //add the longitude value from the incident's location
    item.longitude = now_GR.location.longitude;
    //link to the icon image
```
isMobile map page script

This script displays all active, critical incident locations with custom settings for smartphone users.

```javascript
//setup new GlideRecord query on the incident table
var now_GR = new GlideRecord("incident");
//add condition for priority 1
now_GR.addQuery('priority', '1');
//add condition for active incidents
now_GR.addActiveQuery();
//execute the query
now_GR.query();

//loop through the list of incidents returned by the query
while (now_GR.next()) {

    //create a new map item to display - linked to the current incident record
    var item = map.addItem(now_GR);
    //add the latitude value from the incident's location
    item.latitude = now_GR.location.latitude;
    //add the longitude value from the incident's location
    item.longitude = now_GR.location.longitude;
    //link to the icon image
    item.icon = "http://maps.google.com/mapfiles/kml/pal3/icon51.png";
    //set the icon size (use smaller icons for smartphone users)
    if (isMobile) {
        item.icon_width = "12";
        item.icon_height = "12";
    }
    else {
        item.icon_width = "16";
        item.icon_height = "16";
    }
}
```

Advanced map page script

This script displays the number of open incidents by location. It varies the size of the icon based on the number of open incidents for the location. Using the html parameter, it also displays the location name and number of incidents, as well as a link to the list of related incidents.

```javascript
//get the instances url so we can link back to it
var uri = gs.getProperty("glide.servlet.uri");
//create an aggregate query on the incident table
var count = new GlideAggregate('incident');
//set condition for active incidents
count.addQuery('active', 'true');
//set aggregate field to location to get count by location
count.addField('COUNT', 'location');
//execute the query
count.query();
```
```javascript
//loop through the results
while (count.next()) {

    //get the current record's location
    var loc = count.location;
    //get the count of incidents for this location
    var locCount = count.getAggregate('COUNT', 'location');
    //only display location is there are active incidents
    if (locCount > 0) {
        //create new new map item for this location
        var item = map.addItem(count);
        //set lat/long from the location record
        item.latitude = loc.latitude;
        item.longitude = loc.longitude;
        //build the link to the list of incidents for the location
        var link = 'href=' + uri + 'incident_list.do?sysparm_query=active%3Dtrue^location%3D' + loc;
        //build the html value to be displayed when you click the map icon
        item.html='<a ' + link + '>'+ loc.getDisplayValue() + ' (' + locCount + ')</a>';
        //link to the icon image
        item.icon = "http://maps.google.com/mapfiles/kml/pal3/icon51.png";
        //set the size of the icon based on the number of active incidents
        if (locCount < 5) {
            item.icon_width = "12";
            item.icon_height = "12";
        } else if (locCount < 15) {
            item.icon_width = "16";
            item.icon_height = "16";
        } else {
            item.icon_width = "32";
            item.icon_height = "32";
        }
    }
}
```

**Map page marker label script**

Marker labels allow you to add dynamic text to markers. This example displays the active incident count at each location.
```javascript
//get the instances url so we can link back to it
var uri = gs.getProperty("glide.servlet.uri");

//create an aggregate query on the incident table
var count = new GlideAggregate('incident');

//set condition for active incidents
count.addQuery('active', 'true');

//set aggregate field to location to get count by location
count.addAggregate('COUNT', 'location');

//execute the query
count.query();

//loop through the results
while (count.next()) {

    //get the current record's location
    var loc = count.location;
    //get the count of incidents for this location
    var locCount = count.getAggregate('COUNT', 'location');
    //only display location is there are active incidents
    if (locCount > 0) {
        //create new new map item for this location
        var item = map.addItem(count);
        //set lat/long from the location record
        item.latitude = loc.latitude;
        item.longitude = loc.longitude;

        //create a marker label with the count
        item.marker_label = locCount;
        //define label offset for proper position
        item.label_offset_left = -4;
        item.label_offset_top = -20;

        //option to define table and record for label hyperlink
        //setting table and sys_id will override the use of html parameter
        //item.table = 'cmn_location';
        //item.sys_id = loc;

        //build the link to the list of incidents for the location
        var link = 'href=' + uri + 'incident_list.do?sysparm_query=active%3Dtrue^location%3D' + loc;
        //build the html value to be displayed when you click the map icon
    }
}
```
Customizing instance appearance

An administrator can change global CSS or system properties to alter the look and feel of the default instance interface. Functionality is not affected.

For example, organizations often use multiple instances to separate development, testing, and production activities. To help users avoid accidentally changing the wrong instance, administrators can configure each with a visually distinct theme. Several approaches are available for defining an instance theme.

CSS Properties

Navigate to System Properties > CSS.

The following properties are available through CSS Properties.

Note: Colors are specified using predefined color names, RGB decimals, or RGB hexadecimals.

- Banner text color
- Banner and list caption background color
- Font used in forms and lists (this is a global font setting)
- Button styles (background color, border color, border width, text color)
- Field status indicator colors (including the indicators for Changed, Mandatory Populated, Mandatory Unpopulated, and Read-only)
- List cell vertical alignment
- Navigator menu styles (text font size, background color, text color)
- Header font name and size
- List and form caption color override
- Global text search background color (both for catalog results and knowledge base results)

UI properties

Navigate to System Properties > UI Properties.

The following properties are available through UI Properties.

- Icons used in the activity formatter
- Background colors for Additional Comments and Work Notes
- Button placement on forms
- Icons used in the Task Activity formatter
- Background colors for Incident Additional Comments and Work Notes

## CSS class support

In UI16, CSS properties and how they affect the platform UI change depending on the release.

### CSS class support for Paris

<table>
<thead>
<tr>
<th>CSS class</th>
<th>Description</th>
<th>How to configure</th>
<th>Affected area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$navpage-header-bg</td>
<td>Header background color</td>
<td>Navigate to <a href="#">System Properties &gt; Basic Configuration UI16 &gt; Header background color</a></td>
<td><img src="https://www.servicenow.com" alt="ServiceNow" /></td>
</tr>
<tr>
<td>$navpage-header-color</td>
<td>Color for header text and the global search icon</td>
<td>Navigate to <a href="#">System Properties &gt; Basic Configuration UI16 &gt; Banner text color</a></td>
<td><img src="https://www.servicenow.com" alt="ServiceNow" /></td>
</tr>
<tr>
<td>$navpage-header-button-color</td>
<td>Color for logged in user name text, and the global search Connect, Help, and settings icons</td>
<td>Add the CSS property to the CSS field of a theme. For more information, see <a href="#">Create or customize a theme</a></td>
<td><img src="https://www.servicenow.com" alt="ServiceNow" /></td>
</tr>
<tr>
<td>$navpage-header-divider-color</td>
<td>Header divider color</td>
<td>Navigate to <a href="#">System Properties &gt; Basic Configuration UI16 &gt; Header divider stripe color</a></td>
<td><img src="https://www.servicenow.com" alt="ServiceNow" /></td>
</tr>
<tr>
<td>$navpage-button-color</td>
<td>Color for the following icons in the sidebars</td>
<td>Add the CSS property to the CSS field of a theme. For more information, see <a href="#">Create or customize a theme</a></td>
<td><img src="https://www.servicenow.com" alt="ServiceNow" /></td>
</tr>
</tbody>
</table>
  - Expand/collapse
  - Create a conversation (in the Connect sidebar)
  - Open Connect workspace

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<table>
<thead>
<tr>
<th>CSS class</th>
<th>Description</th>
<th>How to configure</th>
<th>Affected area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$navpage-button-color-hover</td>
<td>Color for the following icons when a user points to the control: • Global search • Help • Settings • Clear text icon in the navigation filter</td>
<td>Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
<tr>
<td>$search-text-color</td>
<td>Color of the search text, both in the navigation filter and the global search fields</td>
<td>Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
<tr>
<td>$navpage-nav-border</td>
<td>Border color for the navigation filter and the conversation filter</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Border color for UI16</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
<tr>
<td>$nav-highlight-main</td>
<td>Highlights the module after the user has clicked it. In the Connect workspace, highlights the selected conversation.</td>
<td>Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
<tr>
<td>CSS class</td>
<td>Description</td>
<td>How to configure</td>
<td>Affected area</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>$subnav-background-color</td>
<td>Background for expanded navigation items</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Navigation background expanded items</td>
<td></td>
</tr>
<tr>
<td>$navpage-nav-bg</td>
<td>Header and footer for navigator and sidebars.</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Navigation header/footer</td>
<td></td>
</tr>
<tr>
<td>$navpage-nav-bg-sub</td>
<td>Background for navigator and sidebars</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Background for navigators and sidebars</td>
<td></td>
</tr>
<tr>
<td>CSS class</td>
<td>Description</td>
<td>How to configure</td>
<td>Affected area</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>$navpage-nav-color-sub</td>
<td>Text color for modules in the main navigation</td>
<td>Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
<tr>
<td>$navpage-nav-mod-text-hover</td>
<td>Text color when hovering over items in the main navigation</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>$nav-hr-color</td>
<td>Navigator separator color</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Navigation separator color</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
<tr>
<td>$nav-highlight-bar-active</td>
<td>Line under the active tab in the application navigator. This color is also used as part of the theme preview on the Themes tab under system settings.</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Navigation selected tab divider bar color</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
<tr>
<td>CSS class</td>
<td>Description</td>
<td>How to configure</td>
<td>Affected area</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>$nav-highlight-bar-inactive</td>
<td>Line under the inactive tabs in the application navigator</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Navigation unselected tab divider bar color</td>
<td></td>
</tr>
<tr>
<td>$navpage-nav-selected-bg</td>
<td>Navigation selected tab background color</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Navigation selected tab background color</td>
<td></td>
</tr>
<tr>
<td>$navpage-nav-selected-color</td>
<td>Currently selected Navigation tab icon color</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Currently selected Navigation tab color for UI16</td>
<td></td>
</tr>
<tr>
<td>$navpage-nav-unselected-color</td>
<td>Unselected navigation tab icon and favorite icons color</td>
<td>Navigate to System Properties &gt; Basic Configuration UI16 &gt; Unselected navigation tab icon and favorite icons color</td>
<td></td>
</tr>
<tr>
<td>CSS class</td>
<td>Description</td>
<td>How to configure</td>
<td>Affected area</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>$connect-latest-message</td>
<td>Color of the currently selected message in Connect</td>
<td>Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.</td>
<td></td>
</tr>
<tr>
<td>$nav-timeago-header-color</td>
<td>Timestamp header backgrounds in History tab</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>$navpage-nav-app-text</td>
<td>Core content text color for items such as applications and the empty state text for the Connect sidebar.</td>
<td>Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.</td>
<td></td>
</tr>
</tbody>
</table>
Configure logo, colors, and system defaults for UI16

You can use the Basic Configuration UI16 module to brand your instance with your company logo and colors and set basic system defaults. This place is the best starting point if you are setting up your instance for the first time or if you have recently enabled UI16.

To prepare for completing basic configuration, gather the following information:

- Obtain the company banner image to use in the header. The image can be high resolution, but when it displays it is scaled based on the aspect ratio. It scales to a maximum of 20px high.
- Get the brand color hex or RGB numbers of your company, typically from your marketing department. Use them to decide how to configure the UI background colors.

Role required: admin

Each color selection option provides a color picker to select a color. The text box beside the color picker lets you enter the value of the color as any of the following CSS formats:

- Name: predefined color names, such as red, green, or blue
- RGB decimal: RGB (102, 153, 204)
- RGB hex: #223344

Refer to [HTML Color Names (W3CSchools)](https://www.w3schools.com/color/) for information about HTML color names.

1. Navigate to System Properties > Basic Configuration UI16.
2. Complete the configuration by changing any of the following settings:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>glide.product.description</td>
<td>Change the text that appears next to your logo.</td>
</tr>
<tr>
<td>Label</td>
<td>Property</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Browser tab title</td>
<td>glide.product.name</td>
</tr>
<tr>
<td>System timezone for all users unless overridden in the user's record</td>
<td>glide.sys.default.tz</td>
</tr>
<tr>
<td>Banner image for UI16</td>
<td>glide.product.image.light</td>
</tr>
<tr>
<td>Date format</td>
<td>glide.sys.date_format</td>
</tr>
<tr>
<td>Time format</td>
<td>glide.sys.time_format</td>
</tr>
<tr>
<td>Header background color</td>
<td>css.$navpage-header-bg</td>
</tr>
<tr>
<td>Banner text color</td>
<td>css.$navpage-header-color</td>
</tr>
<tr>
<td>Header divider stripe color</td>
<td>css.$navpage-header-divider-color</td>
</tr>
<tr>
<td>Label</td>
<td>Property</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Navigation header/footer</td>
<td>css.$navpage-nav-bg</td>
</tr>
<tr>
<td>Navigation background expanded items</td>
<td>css.$subnav-background-color</td>
</tr>
<tr>
<td>Module text color for UI16</td>
<td>css.$navpage-nav-color-sub</td>
</tr>
<tr>
<td>Navigation selected tab background color</td>
<td>css.$navpage-nav-selected-bg</td>
</tr>
<tr>
<td>Label</td>
<td>Property</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Navigation selected tab divider bar color</td>
<td>css.nav-highlight-bar-active</td>
</tr>
<tr>
<td>Navigation unselected tab divider bar color</td>
<td>css.nav-highlight-bar-inactive</td>
</tr>
<tr>
<td>Navigation separator color</td>
<td>css.nav-hr-color</td>
</tr>
<tr>
<td>Label</td>
<td>Property</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Background for navigator and sidebars</td>
<td>css.$navpage-nav-bg-sub</td>
</tr>
<tr>
<td>Currently selected Navigation tab icon color for UI16</td>
<td>css.$navpage-nav-selected-color</td>
</tr>
<tr>
<td>Unselected navigation tab icon and favorite icons color</td>
<td>css.$navpage-nav-unselected-color</td>
</tr>
</tbody>
</table>
For most of the settings, as you make changes, the page refreshes with a preview of the change. Only you see these changes. Some settings require you to log out and log back in again to see the change.

3. Click Save at the top or bottom of the page.

After you save the configuration changes, all users who select the System theme in their UI personalization options see the new configuration colors.

**La Jolla and cobalt theme comparison**

The La Jolla theme is the new brand theme for ServiceNow. When you upgrade to Madrid, your theme is automatically upgraded to the La Jolla theme. Any customizations you have made to the system theme will not be upgraded. Use the styles in the list below to upgrade or revert any styles to the new or old theme.

Make changes to any of these styles by navigating to System Properties > Basic Configuration UI16.

**La Jolla and Cobalt theme styles**

<table>
<thead>
<tr>
<th>Property</th>
<th>La Jolla style</th>
<th>Cobalt style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Header background color</td>
<td>#ffffff</td>
<td>#303a46</td>
</tr>
<tr>
<td>css.$navpage-header-bg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Header divider stripe color</td>
<td>#5a7f71</td>
<td>#455464</td>
</tr>
<tr>
<td>css.$navpage-header-divider-color</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navigation header/footer</td>
<td>#293e40</td>
<td>#303A46</td>
</tr>
<tr>
<td>css.$navpage-nav-bg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Configure logo, colors, and system defaults for UI15

You can use the Basic Configuration module to brand your instance with your company logo and colors and set basic system defaults. This place is the best starting point if you are setting up your instance for the first time.

To prepare for completing basic configuration, gather the following information.
- Obtain the company banner image to use in the header. The image can be high resolution, but when it displays it is scaled based on the aspect ratio. It scales to a maximum of 50px high.
- Decide whether to change the banner and list header background color, and the banner text color. If you plan to do so, obtain the brand color hex or RGB numbers of your company. Typically, this information comes from your marketing department.

Role required: admin

This procedure applies to configuring UI15.

1. Navigate to **System Properties > Basic Configuration**
2. Complete the configuration by changing any of the following settings.

### Basic system configuration properties

<table>
<thead>
<tr>
<th>Label</th>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page header caption</td>
<td>glide.product.description</td>
<td>Change the text that appears next to your logo.</td>
</tr>
<tr>
<td>Banner and list caption background color</td>
<td>css.base.color</td>
<td>Click the color picker and select the color to use. You can also enter the name, RGB decimal, or RGB hex number of the color. Refer to <a href="https://www.w3schools.com/html/html_color_names.asp">HTML Color Names (W3CSchools)</a> for information about HTML color names.</td>
</tr>
<tr>
<td>Browser tab title</td>
<td>glide.product.name</td>
<td>Change the text that appears on the browser tab</td>
</tr>
<tr>
<td>Banner image</td>
<td>glide.product.image</td>
<td>Click + next to the image and upload your logo.</td>
</tr>
<tr>
<td>System timezone for all users unless overridden in the user’s record</td>
<td>glide.sys.default.tz</td>
<td>Select the timezone in the choice list. Click Configure available time zones to select the time zones that your users can select from in user preferences.</td>
</tr>
<tr>
<td>Date format</td>
<td>glide.sys.date_format</td>
<td>Select the date format from the choice lists.</td>
</tr>
<tr>
<td>Time format</td>
<td>glide.sys.time_format</td>
<td>Select the time format from the choice lists.</td>
</tr>
<tr>
<td>Banner text color</td>
<td>css.banner.description.color</td>
<td>Click the color picker and select the color to use. You can also enter the name, RGB decimal, or RGB hex number of the color.</td>
</tr>
</tbody>
</table>

As you make changes, the page refreshes with a preview of the change. Only you see these changes.

3. Click **Save** at the top or bottom of the page.

After you save the configuration changes, all users who select the **System** theme in their UI personalization options see the new configuration colors.

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Select a theme

You can switch between different themes for the user interface.
Themes are user-specific. Each user can select a different theme and the selection is stored as a user preference.

Select a theme by performing the appropriate action for your version of the UI.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UI16</td>
<td>Click the gear icon (⚙️) in the banner frame to access the System Settings window. Select the Theme tab, and then select the theme.</td>
</tr>
<tr>
<td>UI15</td>
<td>Click the gear icon (⚙️) in the banner frame to access the system menu. Then select a theme from the Theme picker.</td>
</tr>
</tbody>
</table>

Customize menu categories

Use menu categories to apply CSS styles to application labels.
Role required: admin

1. Navigate to System Definition > Menu Categories.
2. Fill in the fields on the form, as appropriate.

<table>
<thead>
<tr>
<th>Description</th>
<th>Applications in this category have a light blue background. Style: border-color: #a7cded; background-color: #e3f3ff;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>Applications in this category have a light gray background. border: 1px solid #96bcdc; background-color: #FBFBFB;</td>
</tr>
<tr>
<td>Custom Applications</td>
<td>Applications in this category have a blue background. border-color: blue; background-color: rgb(102, 153, 204); color: white</td>
</tr>
<tr>
<td>Maint</td>
<td>Applications in this category have a blue background. Style: border-color: blue; background-color: rgb(102, 153, 204); color: white</td>
</tr>
<tr>
<td>SocialIT</td>
<td>Applications in this category have a blue background. border-color: blue; background-color: rgb(102, 153, 204); color: white</td>
</tr>
</tbody>
</table>
3. Optional: To add an application to a category, add it in the related list of applications at the bottom of the category record, or specify the category on the application record.

**Change survey question header colors**

All the lists and forms draw the color of their headers from the base color, which allows theming from the CSS properties.

One notable exception is the survey, which has its own CSS. It is possible to change the CSS by adding a property.

1. Enter `sys_properties.form` into the navigation filter and press the Enter key.
   A new Property form displays.
2. Name the new property `css.list.row.survey.background.color`.
3. Enter the hexadecimal value of the desired color into the **Value** field.
4. Click **Submit**.
   The survey should now use the desired color.

**CSS theme support**

Themes give the user interface a specific look and feel by using different color combinations.

System administrators can create themes or customize the existing themes for an instance. To see existing themes, navigate to **System UI > Themes**.

**Activating CSS theme support**

There are different plugins that activate CSS themes support.

Activate one of the following plugins to use themes, based on the version of the UI you use.

- **UI16**: CSS Theme support — UI15 is activated automatically with UI16
- **UI15**: CSS Theme support — UI14 is activated automatically with UI15

See [Activate a plugin](#).

**Enable the theme picker (UI15)**

The theme picker adds a field to the system menu that allows the user to quickly switch between CSS themes during the current browser session.

Role required: admin

You can enable the theme picker by activating the `ui_theme_changer` UI macro.

1. Navigate to **System UI > UI Macros**.
2. Locate the `ui_theme_changer` UI macro.
3. Set the **Active** field to `true`.

**Configure a company theme**

You can configure a default CSS theme for a particular company in UI15. The theme appears for all users associated with the company unless they select a different theme.

Role required: `personalize_form`

Specify a company theme on the **company record**.
Note: In UI16, the basic configuration is used instead of the theme selected in the company record.

1. Navigate to System Properties > My Company.
2. Configure the form and add the Theme field.
3. In the Theme field, select a theme.
4. Click Update.

Users in this company will see the selected theme the next time they log in, unless they have selected a different theme.

Create or customize a theme

You can create themes or customize existing themes.

Role required: admin

1. Navigate to System UI > Themes.
2. To create a new theme, click New. To customize an existing theme, click the theme name.
3. Enter a name for the theme in the Name field.
4. Add any of the default CSS styles in the CSS field.

Sometimes the default style is not the only style definition for an object. In such cases, you can use the CSS important rule format to override any other style definitions with the default definition. For example, this definition overrides the text color in the main navigation:

```css
$navpage-nav-color-sub: #fff !important.
```

5. Select the Active check box.
6. Select one of the following from the Device choice list to identify the user interface version for the theme.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browser</td>
<td>Identifies a Legacy: UI11 theme.</td>
</tr>
<tr>
<td>Doctype</td>
<td>Identifies a UI15 theme.</td>
</tr>
<tr>
<td>Concouse</td>
<td>Identifies a UI16 theme.</td>
</tr>
</tbody>
</table>

7. Click Submit.

Refresh the page to see the new theme in the theme picker. The theme picker displays only themes that are compatible with the current version of the UI.

Default CSS styles

You can use CSS styles to control the appearance of elements in a theme.

Your version of the UI determines which CSS styles you can use.

Default CSS styles for UI16

```css
$search-text-color: #ffffff
$navpage-header-bg: #293e40
$navpage-header-color: #ffffff
$navpage-header-divider-color: #5A7F71
$navpage-header-button-color: #ffffff
$nav-highlight-main: #576667
$subnav-background-color: #213234
$navpage-nav-bg: #293e40
```
Default CSS styles for UI15

```css
base.color: rgb(102, 153, 204)
base.font-family: arial

$color-darkest: #343d47
$color-darker: #485563
$color-dark: #81878e
$color-light: #bdc0c4
$color-lighter: #e6e8ea
$color-lightest: #ffffff

$color-positive: ${$color-green}
$color-warning: ${$color-orange}
$color-negative: ${$color-red}
$color-info: ${$color-blue}

$color-text: ${$color-darkest}

$color-accent: ${$color-blue}
$color-accent-light: ${$color-blue-lighter}

$color-primary: ${$color-accent}

# Banner branding styles
banner.background.attachment: scroll
banner.background.color: #FFF
banner.background.image:url("../images/s.gifx")
banner.background.position: center bottom
banner.background.repeat: repeat-x

# UI15 with Bootstrap
$navbar-default-bg: #f8f8f8
$navbar-default-color: #777777
$brand-warning: #df8a13
$brand-primary: #428bca
$brand-info: #5bc0de
$jumbotron-bg-color: #428bca
$panel-bg-color: #ffffff
```
Create a company profile

To customize the ServiceNow instance for your company, you can enter information such as contact phone numbers, street address, and additional notes. You can also customize the company logo and banner text your end users see at the top of each page.

Role required: admin

Much of the company information that you enter is reference information that administrators can view. All users see the company logo and banner text. To see all company information, verify that you are in the My Company view.
1. Navigate to System Properties > My Company.
2. To change the banner text, update the Banner text field.
3. Select the Primary check box to indicate if this company is the primary company. If needed, configure the form to add the Primary check box. Designate only one company in your system as the primary company.
4. To upload your company logo, complete one of the following steps for your version of the UI.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UI16</td>
<td>Click Click to add or Update beside UI16 Banner Image.</td>
</tr>
<tr>
<td>UI15</td>
<td>Click Click to add or Update below the Banner image field.</td>
</tr>
</tbody>
</table>

If you leave the banner image blank for either UI16 or UI15, the system uses the image used in System Properties > Basic Configuration > Banner image (glide.product.image) as the default.
5. Click Choose file and select the file, and then click OK.
   To use an image URL instead of a file on your hard drive, enter the URL in the file upload window.
6. Complete the form with remaining company information.
7. Click Update.
Banner logo link

Properties are available to control the URL and target frame used when clicking the banner logo.

- **glide.banner.image.url**: URL used when clicking the banner image
- **glide.banner.image.url_target**: Target frame used when clicking the banner image
  - `gstf_main` for the main frame
  - `_top` to replace the current browser window
  - `_blank` for a new window/tab

Customize the banner logo

Use the **glide.product.image** and **glide.product.description** properties to change the banner logo and description.

Role required: admin

To update the banner image in the **System Properties > System** page, you must first upload the image.

**Note**: Setting a banner image in the company profile overrides the image selected in **System Properties > System**.

1. To upload the image, complete the following steps.
   a) Navigate to **System UI > Images** and click **New**.
   b) Enter a **Name** for your image.
      Valid names must end in `.gif`, `.png`, `.jpg`, or `.bmp`.
   c) Click the **Click to add** link in the **Image** field, and select and upload the image.
   d) Click **Update**.

2. To set the uploaded image to the banner image, complete the following steps.
   a) Navigate to **System Properties > System**.
   b) In the **Banner image** field, enter the file name of the uploaded image.
   c) Click **Save**.

**Note**: The system limits banner images to 50px.

Customize the favicon

Use the **glide.product.icon** property to change the icon that appears in bookmarks and the browser address bar.

Before you can update the favicon, you must upload the image into the database.

Role required: admin

1. To upload the image, complete the following steps.
   a) Navigate to **System UI > Images** and click **New**.
b) Enter a **Name** for your image.
   Valid names must end in `.gif`, `.png`, `.jpg`, `.ico`, or `.bmp`.

c) Click the **Click to add** link in the **Image** field, then select and upload the image.
d) Click **Update**.

2. To set the uploaded image to the favicon, complete the following steps.
   a) Navigate to **System Properties > System**.
   b) In the **icon image displayed in the bookmarks and browser address bar** field, enter the file name of the uploaded image.
   c) Click **Save**.

The favicon appears in the bookmarks and browser address bar for the platform or the Content Management System (CMS). For more information on how to change the favicon for Service Portal, see *Create a portal*.

**Examples of how to modify the banner**

There are various ways that you can modify the banner on your instances.

**Label multiple instances differently**

- On all instances, leave `glide.product.description` <blank>
- On PROD instance, set `glide.product.name` to `<My Company>`
- On DEV instance, set `glide.product.name` to `<My Company - DEV>`

**Control the window title**

Since the window title is composed of `glide.product.name` and `glide.product.description`, the following gives you complete control over the banner and the window title.

- `glide.product.name` set to `<Window Title that you want>`
- `glide.product.name.style` set to `<display: none>`
- `glide.product.description` set to `<blank>`

The company record **Banner Image** and **Banner Text** are used to set the banner image and text since the company banner text is not used in the window title.

**Use HTML in the banner text**

- `glide.product.name` set to `<My Company>`
- `glide.product.name.style` set to `<display: none>`
- `glide.product.description` set to `<Some text <a href="some_url">Click here</a>>`
Position banner text over the banner image

- `glide.product.name` set to `<My Company>`
- `glide.product.name.style` set to `<display: none>`
- `glide.product.image` set to `<your company logo.gif>`
- `glide.product.description` set to `<Some text for the description>`
- `glide.product.description.style` set to `<position:absolute; top:5px; left:100px>` (position values may vary based on specified needs)

Apply a background image to the banner

Often corporate guidelines require more in-depth branding of the ServiceNow interface. Using the tiling technique, you can modify your logo image to have a transparent background, so that you can apply another image to the banner beneath the logo.

Upload an image to the image manager and then create a new property named `css.banner.background.image`, so that you can call the image. The value should look like this.

- `css.banner.background.image` value `url(./images/MasterBG.jpg)`

Write CSS rules that apply this change

```css
/** BACKGROUND - These properties allow you use to add a background tile to the header of the instance ***************************/
TD.bannerLeft,TD.bannerCenter,TD.bannerRight, TR#banner_row{background-color: ${banner.background.color};
background-image: ${banner.background.image};
background-position: ${banner.background.position};
background-repeat: ${banner.background.repeat};}
```

Note: The banner image and banner text associated with the primary company or specific companies may be used instead of the `glide.product.image` and `glide.product.description` properties to get the same effect.

Modify the banner

The banner is displayed at the top of the page and is rendered using certain system properties.

- `glide.product.image`
- `<div>glide.product.name</div>`
- `<div>glide.product.description</div>`

The DIV that contains the `glide.product.name` property is only shown if the property contains a value, otherwise, it is not used when rendering the banner. Also, the property `glide.banner.image.title` controls the tooltip that appears when the cursor is over the banner.

Note: The My Company record overrides the properties.
Banner

Window title

These properties are used to set the window title as follows:

`glide.product.name` `glide.product.description`

If `glide.product.name` is blank, then the ServiceNow name is used as the product name for the window title.

My Company

The banner text and banner image defined for the Company that a user is assigned to may be used to override the `glide.product.image` and `glide.product.description`. The banner text, if specified, is used instead of the `glide.product.description` property. The banner image, if specified, is used instead of the `glide.product.image` property.

Style the banner in UI15

The `glide.product.description` property and the company banner text field may contain HTML if necessary to allow links, color, and so on, to be shown in the banner.

Role required: admin

Use the `glide.product.name.style` property to set CSS properties for the DIV used to display the product name in the banner. Often, this style is set to `display: none` so that the product name is not displayed, but is still used as part of the window title.

Use the `glide.product.description.style` property to set CSS properties for the DIV used to display the product description in the banner, or company banner text.

You can also use CSS properties to change the banner background and text color by completing the following steps.

1. Navigate to System Properties > CSS.
2. In the Banner and list caption background color field, enter the color you want to apply to the banner.
3. In the Banner text color field, enter the color you want to apply to the banner text.
4. Click Save.

Comparing field values

Field comparison allows users to evaluate equality between fields on the same table or on related tables by using operators in the condition builder.
Also, you can compare date type fields to determine whether the values are within a certain range of each other. For example, you can compare the planned start date of a task to the actual start date. You can use field comparisons in a list view and to generate reports.

The primary function of field comparison is evaluating whether two fields on a record or related record have identical values. For example, you can create a filter to display all incidents whose Caller field references the same user record as the Closed by field.

Available operators

Field comparison provides several filter operators for comparing field values.

- (is same) if two field values are the same, evaluates to true.
- (is different) if two field values are not the same, evaluates to true.
- (is less than) if two date values are within a user-defined range of each other, evaluates to true.
- (is more than) if two date values are not within a user-defined range of each other, evaluates to true.

Comparing choice list values

Field comparison compares the dictionary Value field of a choice list, not the Label value. For example, a high priority incident has a priority value of 1, not 1 - High. To find the Value of a choice, right-click the field label and select Configure Dictionary. The Choices related list shows the Value for each choice.

Comparing empty fields

By default, most filter operations do not return empty fields in their result set. To include records with empty fields in a result set, add a filter condition for the left operand with an operator of (is empty). For more information, see Filtering on empty fields.

Using operators and operands

When comparing fields, the two fields being compared are called the left operand and right operand. The type of field selected in the left operand, and the operator selected, determine which right operands are available. When using the (is same) or (is different) operators, the right operand choices include only fields of the same field type, such as String or Integer, as the left operand.

For example, a filter on the Task (task) table with a left operand of (Opened by) and an operator of (is same), only allows you to choose user reference fields, such as the (Closed by) field, in the right operand.

The (is more than) and (is less than) operators are only available with date type fields.

This example filter returns records where the user who opened the record also closed the record.
Example filter

Comparable fields

Field comparison supports the comparison of several fields. The fields that are comparable include the following types:

- String, choice, integer, and boolean fields: Return true if both values match.
- Reference fields: Return true if both reference fields refer to the same record.
- Date and time fields: Can match date values based on hour, day, week, month, quarter, or year. Also, you can evaluate whether two dates fall within a certain range of each other.

Note: Field comparison does not support journal, keyword, script, duration, list, or HTML fields.

Comparing dates

Date comparison allows you to evaluate equality between two components of the date, such as the hour of the day or the date within a month. Also, you can evaluate if two dates fall within a certain range of each other.

Date comparisons are based on the active user's time zone. For example, as a user in the PST time zone, a filter of (Created) (is same) (Day) as (Closed) evaluates true for an incident created at 6 AM PST and closed at 3:00 PM PST as both times are within the same day. However, a user in the GMT time zone would not see this same incident record in response to the example filter; in GMT those times do not fall on the same date.

You can Evaluate equality between date values and you can evaluate unequal dates within a range.

Evaluate unequal dates within a range

You can compare unequal date field values by evaluating whether two dates fall within a certain range of each other. For example, you can create a filter of (Created on) (is more than) (3) (Months) (before) Closed to display all records that were created at least three months before they were closed. The numerical value specified, such as the value 3 in the example, must be an integer of no more than two digits. For evaluations of differences larger than 99 units, select a less granular unit of time, such as Months instead of Days.
Unequal dates field comparison

Choice field date comparison choices

<table>
<thead>
<tr>
<th>Choice field</th>
<th>Date Comparison Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator</td>
<td>is more than, is less than</td>
</tr>
<tr>
<td>Unit of time</td>
<td>Hours, Days, Weeks, Months, Quarters, Years</td>
</tr>
<tr>
<td>Relative position of dates</td>
<td>before, after, before or after</td>
</tr>
</tbody>
</table>

Evaluate equality between date values

Date comparison evaluates a match for one of several date increments.

You can specify granularity to the hour, day, week, month, quarter, or year. For example, the filter (Created on) (is same) (Week) as (Closed) returns records that were closed in the same week that they were opened. When you run this type of filter, be sure to specify the year in an additional filter condition of (Created) (is same) (Year) as (Closed) to eliminate records that were created a year before they were closed.
Date field comparison

1. In the condition builder, create a new condition.
2. Select a date field from the left operand choice list.
3. Select (is same) or (is different) from the operator choice list.
   An additional choice list appears.
4. Select the granularity from the date range choice list.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hour</td>
<td>Filters on the hour of the day.</td>
</tr>
<tr>
<td>Day</td>
<td>Filters on the day of the month, not the date. For example, a Day value of the 1 of August matches with a Day value of the 1 of September.</td>
</tr>
<tr>
<td>Week</td>
<td>Filters on the week of the year. ServiceNow defines a week as Sunday through Saturday for the purposes of Field Comparison.</td>
</tr>
<tr>
<td>Month</td>
<td>Filters on the month of the year. For example, any date within December returns the 12 month of the year.</td>
</tr>
<tr>
<td>Quarter</td>
<td>Filters on the quarter of the year.</td>
</tr>
<tr>
<td>Year</td>
<td>Filters on the year.</td>
</tr>
</tbody>
</table>

5. Select a different date field from the right operand choice list.
6. Click Run.

Add help to a field label on a form

You can create field-level help in forms by placing help icons in individual fields and converting the field labels to links to external or internal URLs.

Role required: personalize_dictionary

You can link to any type of file, document, or wiki, and open it in a separate browser window. The following is an example of a form with field label help enabled.
Field label help enabled

1. Open the form.
2. Right-click the label for the field and select **Configure Label**.
   The Field Label form appears. The fields in the top portion of the form are pre-populated. The **Help** field is not currently used.
3. Complete the form.

<table>
<thead>
<tr>
<th>Field</th>
<th>Input value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hint</td>
<td>Type text to use as a tooltip that appears when a user places the cursor on the field label.</td>
</tr>
<tr>
<td>URL</td>
<td>Enter the URL of the target file to open when the field label or icon is clicked. This can be a complete URL to a file outside the instance, or a relative URL to a target on the instance.</td>
</tr>
<tr>
<td>URL target</td>
<td>Not used. The help file opens in a new tab regardless of the URL target value.</td>
</tr>
</tbody>
</table>

4. Click Update.
Homepage administration

A homepage is a ServiceNow interface that consists of navigational elements, functional controls, and system information. Responsive and non-responsive dashboards provide a similar interface with additional functionality.

When a user logs in to an instance, the default homepage defined for their role appears unless the user has switched to a different homepage. Administrators can customize several settings for homepages, including settings that control read or write access for any homepage and how homepages render.

Dashboards encapsulate homepage functionality. If dashboards are enabled, you can set dashboards as your Home.

Note: Web Content Accessibility Guidelines (WCAG) 2.0/Section 508 features do not work with homepages. These features only work with dashboards. To convert your homepages, see Create a dashboard version of a homepage.

Administrators can also perform the following actions for homepages.

- Create new global homepages for all users or specific homepages for users with a specified role.
- Specify an alternate login landing page that appears instead of a homepage.
- Configure the homepage splash page, which is a lightweight page that loads before a homepage loads.

Note: If you are using responsive dashboards, you can convert your homepage to a dashboard. Advantages include new sharing functionality and easier layout management. See Create a dashboard version of a homepage. Navigate to System Definition > Plugins to activate the Responsive Dashboards plugin.

Restrict content additions to a homepage

By default, anyone with a role can add content to a homepage.

If the user does not have permission to edit the homepage, the edits are applied to a homepage specific to the user. You can restrict who can add content to homepages by modifying the following property under the Homepage Admin > Properties module.

Note: The option Add to homepage does not take into account the property cms.glide.add_content. This means that users can add reports to any homepage they can view. The result is that users create new homepages with the added information when they modify a homepage that they don't own.
Add roles for adding content to home pages

Secure a homepage

Homepages have two types of roles: read and write. Read roles limit who can view the page. Write roles limit who can make edits to the page, such as adding and moving widgets or deleting the homepage.

Role required: admin

- **Note:** If no write roles are specified on a homepage, then any user with one of the specified read roles may access this page and delete it.

- **Note:** The option Add to homepage does not take into account the property `cms.glide.add_content`. This means that users can add reports to any homepage they can view. The result is that users create new homepages with the added information when they modify a homepage that they don't own.

1. Navigate to **Homepage Admin > Pages**.
2. Select the homepage you want to secure.
3. Click the edit icons next to **Write roles** or **Read roles**.
4. Move the roles you want to restrict homepage access to from the **Available** column to the **Selected** column.
5. Click **Done**.
6. Click **Update**.

Homepage user preferences

You can set your homepage user preferences.

After users have selected a homepage to view, their homepage preference is stored in **User Administration > User Preferences** in a preference named **homepage**. The value of the preference is the sys_id of the homepage the user sees. You can access a list of homepages by navigating to **Homepage Admin > Pages**.

Users must have at least one role to view homepages.

Add a homepage to an update set and application

You must manually add homepages and content pages to update sets prior to distribution.
Role required: admin

After inclusion, the update set always uses the current version of the page and does not require additional action. Applications automatically include any homepages and content pages that are created within or associated to an application.

1. Navigate to Homepage Admin > Pages.
2. Right-click a homepage record.
   The page is added to the current update set.

**Add existing reports to a homepage**

Add reports to homepages to share them and make them easily accessible.

1. Navigate to a homepage.
2. Click Add content.
3. Select Reports in the left column.
4. Select the table the report is based on in the middle column.
5. Select the report in the right column.
6. Click Add here where you want to place the report on homepage.
7. To add more reports, repeat steps 3 through 6.
8. Click the close icon (❌) in the top right corner when you finish adding reports.

**Arrange objects on a homepage**

Arrange widgets on custom homepages to customize your experience. You can always restore the homepages to the arrangement your system administrator created.

- Moving widgets – Click, hold and drag near the top of a widget to move it another area. Objects in the top or bottom areas display at 100% of the available width. Widgets in the right, left, or center areas display at 50% of the available width. If widgets are added to all these areas, they display at 33% of the available width.
- Removing widgets – Click the icon to remove a widget.

**URL widget variable height workaround**

URL widget can be used to display a different web page or website as part of a homepage.

URL widgets are set with a fixed height, so you might have to scroll to see the entire web page in the widget. URL widget widths are set by the positioning of the widget on a particular homepage. You cannot modify URL widget height, but you can set up an iFrame in a UI page to manage the height.

1. First, create a UI page. The UI page name must start with render_gadget_ (for example, render_gadget_iFrameSNC). Add the following to the HTML field, replacing the src with the

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URL that should appear in the iFrame. The height you specify must be a static value and you must use CSS style tags.

```html
<iframe id="myframe" src="http://www.service-now.com" scrolling="yes" style="height:450px; width:100%"></iframe>
```

2. Next, navigate to **System UI > Widgets** and create or modify a widget to use for selecting your UI page from the **Add content pop-up window** on a homepage. The widget script must reference your UI page. The widget **Name** must be the name of the category in the **Add content** pop-up window. For **Renderer type**, select **JavaScript**. The following script can be added to the **Script** field to create a new widget.

```javascript
function sections() {
  return { 'ServiceNow' : { 'type' : 'iFrameSNC' } };
}

function render() {
  var scope = gs.getCurrentScopeName();
  var type = renderer.getPreference('type');
  return renderer.getRenderedPage(scope + type);
}

function getEditLink() {
  var scope = gs.getCurrentScope();
  var type = renderer.getPreference('type');
  return "sys_ui_page.do?sysparm_query=name=render_gadget_" + scope + type;
}
```

3. When the widget is saved, go to any homepage and add the new content.

**Count gauge colors**

In a count gauge, the count item color is based on the upper and lower limit values on the gauge panel.

The following colors are used:

- **Red**: If the count result is greater than or equal to the upper limit.
- **Orange**: If the count result is between the upper and lower limit.
- **Green**: If the count result is less than or equal to the lower limit.

You cannot customize these colors.

The upper and lower limit fields are in the Gauge (sys_gauge) table. You can configure the Gauge form to add these fields.

**Ensure domain separation on a gauge**

To ensure domain separation on a gauge when the MSP Extensions plugin is not installed, a domain field must be added to the table for gauges and gauge counts. This domain field must then be set as a reference field.

Requires role: security_admin

By default, the Domain Support plugin separates data on certain tables by domain. It does not separate gauges by domain unless the MSP Extensions plugin is installed. The gauge displays data only from the user’s domain, but the user is able to see the entire gauge.
Follow these steps to ensure domain separation on gauges if the MSP Extensions plugin is not installed.

1. Navigate to **System UI > Gauges** and select a gauge to separate by domain.
2. **Configure the form layout** and add a new field named *sys_domain*.
3. Configure the dictionary on the *sys_domain* field and fill in the **Reference** field with the domain for this gauge. If left blank, the gauge is global.
4. Select a gauge count record under the gauge related lists.
5. Repeat steps 2 and 3.

*Domain* fields appear on gauges and gauge counts, and the field references a table. After a domain field exists on a form, all records within the table will have the domain field enabled. By default, these records are global.

**Set a default view for a gauge**

Use a system property to change the default view for a gauge.

Role required: admin

The default property view value for a gauge on upgraded instances is **Portal**. For new installs or zBoot instances, the default property value is blank.

1. Enter *sys_properties.list* in the Navigation filter.
2. Search for the property **glide.ui.gauge.view**.
3. In the Value field, type the name of the gauge view you want as the default.

**Top Searches homepage**

The Top Searches homepage displays the most popular searches over the past hour, day, week, or month. The homepage includes widgets for specific tables and across the entire instance.

- Users with the **itil** role can view the homepage by default. To control access to the page, administrators can **secure the homepage**.
- Users can add any of the top searches widgets to their homepages. Administrators can control who has access to top searches widgets.
- Users can select the time period for which to view top searches and perform searches directly from the widget.

**Use a top search widget**

Top searches widgets display the top 10 searches over the past hour, day, week, or month for the specified table or across the entire instance (**All**).

Take either of the following actions to use a top searches widget.

- Click the desired time period for which to see top searches (default is **Day**). You can change the time period at any time, and your most recent selection is loaded the next time you view the homepage.
- Click any item on the list to search for it. The **Top Searches - All** widget performs a global search and a table-specific widget performs a search of the table or application. For example, knowledge searches return knowledge base search results.
Add a top search on a homepage

You can add a top searches widget to a homepage.

1. On a homepage, click Add content.
2. Select Text Search from the left panel and Top Searches from the middle panel.
3. Select the desired top search widget from the right panel.
4. On the bottom of the window, click Add here in the appropriate layout position, and then close the window.
5. Select the time period for which you want to see the top searches (default is Day). The widget displays the top 10 searches for the selected time period.

Control access to a top search widget

You can control who has access to top searches widgets by restricting who can add content to homepages or by applying roles to the widget.

Role required: admin

1. Navigate to System UI > Widgets.
2. Select Text Search.
3. Click the edit user roles icon and select the required access rights, then click Done.
4. Click Update.

Define a table for a top search

You can define the tables for which top searches widgets are available.

Role required: admin

1. Navigate to System Properties > Text Search.
2. Enter the tables for which you want top searches widgets in the Comma-separated list of table names which will have home page top searches widgets available for them field (the glide.ts.widget.top_search_tables property).

   The default tables are Knowledge, Problem, Incident, Change Request, Catalog Item, and Live Message (kb_knowledge,problem,incident,change_request,sc_cat_item,live_message).

   Note: Adding a parent table includes all searches on tables that extend the parent table. For example, if you add Task, then all Incident, Problem, and other task tables are included.

3. Click Save.

View user preference for time period

Each user’s time period selection is stored with a user preference.

- top_searches.period: stores the user’s selection for the Top Searches - All widget.
- **top_searches.period.<table name>**: stores the user's selection for the Top Searches - <Table> widget. For example, **top_searches.period.kb_knowledge** stores the user's preference for Top Searches - Knowledge.

1. To view user preferences, navigate to User Administration > User Preferences.
2. Find the top searches preferences.
3. Make the necessary changes to the user preferences and save the record.

### Update a top search statistic

Top search statistics are compiled on an hourly basis by the TS Search Summary scheduled job.

Role required: admin

Use the following procedure to manually refresh the list.

1. Navigate to System Scheduler > Scheduled Jobs > Scheduled Jobs.
2. Open TS Search Summary.
3. Change the date and time in the **Next action** field to run the scheduled job at the specified time.
   For example, if it is currently 9:48 AM and you want to run it immediately, set the date to today and the time to 10:00.

   **Note:** This scheduled job is designed to collect hourly data. For optimal data accuracy, do not run this job more frequently.

4. Click **Update**.

### Custom homepage widgets

There are a number of widgets provided out-of-box to be added to a homepage, but administrators can also create their own widgets.

To create a widget, an administrator must first create a UI page to control its functionality. UI pages are coded in either HTML or Jelly script, and will power the functionality of the widget.

Creating a UI page is outside the scope of this article. However, once the UI page exists, it will be used to render the widget. It is very easy to create a trivial UI page named "my_ui_page" with a single line of text, add it to a homepage, and see how it renders.

After the UI page is scripted, create a widget that renders the UI page and executes its script.

### Create a widget that displays a ServiceNow UI page

You can create ServiceNow UI page that displays a web page, then make the UI page into a widget that can be added to dashboards and homepages.

Role required: admin

A UI page is a ServiceNow page that is not a list or a form. Certain UI pages, such as external site widgets or gadgets, do not display properly when placed in a dashboard.
1. Create or find a ServiceNow UI page that you want to display as a widget. Note the name of this UI page, to use in Step 4.

For example, this HTML shows the ServiceNow landing page in an iframe.

```html
<iframe id="myframe" src="http://www.service-now.com" scrolling="yes" style="height:100%; width:100%"></iframe>
```

2. Navigate to System UI > Widgets and click New.

Widgets records are widget category records, not records for individual widgets. When adding a widget to the dashboard, first select the category and then the widget. The javascript you specify in step 4 contains the list of widgets to include in that category.

3. Fill in the following fields.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of this widget category. The user selects this category when adding its widgets to a dashboard.</td>
</tr>
<tr>
<td>Renderer Type</td>
<td>Select Javascript.</td>
</tr>
<tr>
<td>Active</td>
<td>Clear to make the widget unavailable to add to dashboards.</td>
</tr>
<tr>
<td>Roles</td>
<td>Select roles that can see this category when adding widgets to dashboards. If no roles are selected, all roles can see the category.</td>
</tr>
</tbody>
</table>

4. Add the following javascript in the Script field, making replacements as specified. The return statement contains the widgets that are listed in this widget category.

```javascript
function sections() {
    return {
        'widget_name': { 'uiPageName': 'UI_page_name'},
        'widget_name2': { 'uiPageName': 'UI_page_name'}
    };
}

function render() {
    var uiPageName = renderer.getPreferences().get("uiPageName");
    return renderer.getRenderedPage(uiPageName);
}

function getEditLink() {
    var uiPageName = renderer.getPreference('uiPageName');
    return 'sys_ui_page.do?sysparm_query=' + encodeURIComponent('name=' + uiPageName);
}
```

5. Click Submit.
To learn how to make a UI page without using a framework page template, see the *Making a UI page without using the framework page template* blog posting by a developer in the ServiceNow Community.

**Create a new personal homepage**

Users with at least one role can create new personal homepages that are visible to themselves.

You can create a new personal homepage with no content on it, or you can create a new homepage that uses the content of an existing page. Either way, the personal homepage is only visible to you by default unless the administrator makes your homepage global. Note that dashboards provide an easier interface for creating, organizing and sharing content. For more information, see *Working with responsive dashboards*.

**Note:** Web Content Accessibility Guidelines (WCAG) 2.0/Section 508 features do not work with homepages. These features only work with dashboards. To convert your homepages, see *Create a dashboard version of a homepage*.

1. Navigate to **Self-Service > Homepage** to open your current homepage.
2. Click the new page icon

   ![Image](https://via.placeholder.com/15)

   Your new homepage appears with a single dropzone.
3. *Add content* as needed.

**Create a personal homepage based on an existing homepage**

Users with at least one role can create personal homepages based on existing homepages that are visible to themselves.

**Note:** Web Content Accessibility Guidelines (WCAG) 2.0/Section 508 features do not work with homepages. These features only work with dashboards. To convert your homepages, see *Create a dashboard version of a homepage*.

1. Navigate to any existing homepage that you have access to.
2. **Change the layout** of the homepage or add new content.

   The system automatically creates a homepage with the title My Homepage, indicating that the homepage is a personalized one. Any changes you make are applied to the personalized homepage, not the global version.

**Create a global homepage or a homepage for specific users**

You can create and edit a global homepage that is accessible to all users, or homepages that are accessible to users with specific roles.

**Role required:** admin

1. Navigate to the **Homepage Admin > Pages**.
2. Click **New**.

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3. Complete the form.

### Portal page fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Enter the title of the homepage that appears at the top.</td>
</tr>
<tr>
<td>Selectable</td>
<td>Select this option to make the homepage appear in the <strong>Switch to page</strong> choice list for users. If you specify a user or a role, only the specified user or the users with the specified role can see the page in the choice list.</td>
</tr>
<tr>
<td>View</td>
<td>Enter a unique value that you can use when referencing a global homepage in a URL or module. The View value must be unique. Otherwise, if the View is used by multiple homepages, the Edit Homepage link may not redirect to the current homepage record. Specify a view to be able to edit the homepage for all users who can access it.</td>
</tr>
<tr>
<td>User</td>
<td>If you want the homepage to be a personal homepage for a specific user, select it here. Clear this field to keep the homepage global or if you want to specify the roles that are required to access the homepage.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>If this field is populated, the homepage cannot be global.</td>
</tr>
<tr>
<td>Order</td>
<td>Enter a value that specifies where in the choice list of homepages that this page appears. Lower values move the page up the choice list.</td>
</tr>
<tr>
<td>Write roles</td>
<td>Specify the roles you want users to have to edit this homepage. Write roles limit who can make edits to the page, such as adding and moving widgets or deleting the homepage. For more information, see <a href="#">Secure a homepage</a>.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>Users who only have Read access create new versions of a homepage when they edit the homepage.</td>
</tr>
</tbody>
</table>
## Field Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read roles</td>
<td>Specify the roles you want users to have to view this homepage. Read roles limit who can view the page. The <strong>User</strong> field takes precedence over this field. If you specify a user in the <strong>User</strong> field, only that user can view the homepage, regardless of what roles you add here and regardless of what role that user has.</td>
</tr>
</tbody>
</table>

**Note:** Users who only have Read access create new versions of a homepage when they edit the homepage.

**Note:** If no write roles are specified on a homepage, then any user with one of the specified read roles may access this page and delete it. For more information, see Secure a homepage.

4. Right-click the header and select Save.
5. Click the Edit Homepage related link to see the homepage.
6. Add content as needed.

**Note:** Click Edit Homepage to make changes to a global homepage that take effect for all users who can access the homepage. If you click View Homepage and make changes, a personal homepage is automatically created for you and those changes take effect only on that personal homepage. To see the Edit Homepage link, you must enter a value in the View field.
**Portal Page form for the asset overview homepage**

**Related links**

| **Edit Homepage** | **Edit the homepage as a global homepage. Any changes you make when editing the homepage are visible to all users who can access it.** |
| **View Homepage** | **View the homepage as a user would. Any changes you make when viewing the homepage automatically create a personalized version of the homepage.** |
Note: You can also add the homepage as a module link in the application navigator.

The new homepage is available in the **Switch to Page** choice list for the users you specified or for all non-ESS users if the homepage is global.

### Create a dashboard version of a homepage

To take advantage of responsive dashboard functionality, you can migrate existing homepages to dashboards.

Users with any role can copy their own homepage to a dashboard. Users with the admin role can create dashboard versions of any homepage.

Advantages of dashboards include:

- **Responsive design** — The widgets on a dashboard are optimized for the screen you are using: desktop, tablet, or mobile phone.
- **Drag-and-drop widgets** — You can add dashboard widgets precisely where you want them and rearrange the dashboard with easy to use tools.
- **Shareability** — You can share dashboards easily with users, roles, and groups.

When you create a dashboard version of a homepage, the content is added to the new dashboard, but these converted dashboards do not retain the permissions that were associated with the old homepage. To apply permissions to the dashboard, specify the permissions again. Users who you share a dashboard may or may not be able to edit the dashboard or share it with others. The ability to edit or share a dashboard is based on the user’s role and the permissions granted to them.

**Note:**

You can convert any home page that you can access through `home.do`. It is not possible to convert manually coded UI pages that utilize the homepage layout system, but are not accessible through `home.do`.

Homepages with layouts that include scripts or style sheets might not work or might not look as you expect them to after conversion. This is because Jelly is not evaluated during conversion. Jelly, a tool for turning XML into executable code, is used in many homepage scripts.

When you convert a homepage to a dashboard, the dashboard is independent of the homepage. Changes you make to the dashboard do not migrate to the source homepage. In addition, changes that you make to the homepage after conversion do not migrate to the dashboard.

1. Enable responsive dashboards. For more information, see [Responsive dashboard properties](#).
2. Navigate to **Self-Service > Homepage**.
3. From the list, select the homepage you want to copy.
4. Click the Homepage settings icon

and choose **Create Dashboard Version**.
5. Select Create new dashboard or Add to existing dashboard and click Create.

The Add to existing dashboard list contains only the dashboards you own. If you select this option, the homepage is added as a tab to the existing dashboard.

When successful, the dashboard version opens as a new dashboard or as a tab on the selected dashboard.

**Note:** The layout of the dashboard version is similar to the homepage layout but may not be precisely the same.

**Note:** Homepages with dashboard versions show a button with the text Open Dashboard Version. This button takes the user to the most recently created dashboard version of the homepage.

- Navigate to Self-Service > Dashboards to view all of your dashboards. You can view all dashboards that you have the rights to view, dashboards owned by you, and dashboards shared with you. Use the Search box to search for dashboards by name.
- You can share the dashboard version of your homepage with other users. See Share a responsive dashboard.
Customize your homepage content

Users with at least one role can see a customized homepage when logging in.

Note: If no write roles are specified on a homepage, then any user with one of the specified read roles may access this page and delete it. See Secure a homepage.

Note: Web Content Accessibility Guidelines (WCAG) 2.0/Section 508 features do not work with homepages. These features only work with dashboards. To convert your homepages, see Create a dashboard version of a homepage.

The content on the homepage comes from various sources, including:

- Graphs and charts generated from a report
- Application modules
- A service catalog category
- The scrolling news widget (the News knowledge category)

Note: Web Content Accessibility Guidelines (WCAG) 2.0/Section 508 features do not work with homepages. These features only work with dashboards. To convert your homepages, see Create a dashboard version of a homepage.

System Administration homepage

The System Administration homepage shows administrative tasks as catalog categories that provide administrators with quick access to all the items they need to configure core features, such as homepages, user administration, and email notifications.
Sys admin homepage

Administrators can customize the System Administration homepage and **add a homepage to an update set and application.**

View and return to a homepage

When you log in to an instance or click the company logo, your homepage appears.
Users who customize their homepages see the customized homepage. Users who have not customized their homepages see the homepage for their role, such as admin or itil. If their role has no homepage, a blank page appears.

After logging in, navigate to **Self-Service > Homepage** to return to the last homepage you viewed.

**Note:** Users see the homepage with the lowest Order value of the pages they have roles to see when they log in. For more information, see *Create a new personal homepage*.

**View your homepage**

The homepage that you can see when you log on ServiceNow is controlled by a number of factors.

The homepage you see, depends on the following:

- If you personalized your homepage, the personalized homepage appears.
- If you did not personalize your homepage, the homepage for your role, such as admin or itil, appears. The homepage with the lowest Order value of the pages they have roles to see appears.
- If your role has no homepage, a blank page appears.

Log in to ServiceNow to access your homepage. The number of records displayed in a list report on your homepage is limited to the number of records displayed in your lists. For example, if you display 100 records in your lists, a maximum of 100 records appears in your list report.

**Refresh the homepage**

Homepage users can specify a refresh time of 5, 15, 30, or 60 minutes, or no refresh. It is not possible to configure individual widgets to refresh automatically.

Click the cog wheel icon

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to choose a refresh interval. The default is Off (no refresh).

Click the refresh icon ( ) at any time.

Modify the number of records displayed in a list report

List reports added to a homepage display the same number of records as you have configured for other lists.

For example, if you display 100 records in lists, a maximum of 100 records appears in list reports. For instructions on changing this number, see Configure and use list functions.

Customize a homepage

You can customize the default homepages that appear for each user.

Role required: admin

- Administrators can customize the default homepages that appear for each user by navigating to Homepage Admin > Pages and selecting the homepage.
- Users who have roles can customize the homepages that are specified for their roles by navigating to Self-Service > Homepage.

1. Navigate to Homepage Admin > Pages.
2. Select the homepage to customize.

3. Click Edit Homepage.
   The homepage opens just as it does when you view it, but it is in edit mode.

   **Note:** Click Edit Homepage to make changes to a global homepage that take effect for all users who can access the homepage. If you click View Homepage and make changes, a personal homepage is automatically created for you and those changes take effect only on that personal homepage. To see the Edit Homepage link, you must enter a value in the View field.

4. Add items to the homepage.
   a) Click Add Content.
      A window opens that lets you select from the homepage items that you can add. Some items pertain to specific features and applications, such as CMS content blocks and the Work Management dispatch map. So the list of items varies depending on what is active on your system.

      **Warning:** Each widget on your homepage runs individually. For example, a homepage with 10 reports runs each report every time it refreshes. If your homepage consistently loads slowly, try removing widgets to determine why.

   b) Select an item to add.
      - **Reports:** Reports to the homepage.
      - **Gadgets:** Items like a knowledge search field and sticky notes.
      - **Knowledge Base:** Knowledge base categories.
      - **Labels:** Labels that you use to organize records.
      - **System Applications:** Applications and modules.
      - **World Clocks:** Any available World Clock.

      **Note:** The world clock widget is for demo purposes only.

      - **Gauges:** All available dashboard gauges. Gauges are defined in System UI > Gauges.

      **Note:** Gauges are not supported. Add reports to the homepage instead. For more information, see Add existing reports to a homepage.

      - **Catalog Categories:** Active service catalog categories. The homepage uses the desktop icon of the category as the homepage icon.
      - **Catalogs:** Service catalogs, including all their active categories (starting with the Eureka release).
      - **Diagnostics:** Information you can use for monitoring and troubleshooting your instance, like database connections and JVM garbage collection.
      - **Live Feed:** Your company feed.
      - **Text Search:** Lists of top searches in your instance.
      - **Filters:** System definition filters.

5. Reposition elements on your homepage by dragging and dropping them to a new location.
   The change you make to the homepage is saved automatically.
6. To remove a homepage item, click the (X) on the right side of the header of the item.

![Image of homepage with a close icon](image)

### Homepage items

You can add different types of objects or widgets to homepages using the **Add content** button. In the pop-up window, you select the homepage item you want to add. Some items pertain to specific features and applications. The available items vary depending on what is active on your system.

**Warning:** Each report on your homepage runs individually. For example, a homepage with 10 reports runs each report every time it refreshes. Keep this in mind when adding content to your homepage. If your homepage consistently loads slowly, try removing reports to determine why.

You can reposition items on a homepage by clicking the item header and dragging it to the new location. To remove a homepage item, click the close icon (X) on the right side of the item header.

#### Homepage items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reports</td>
<td>Add reports to the homepage. For more information, see <em>Add existing reports to a homepage</em>.</td>
</tr>
<tr>
<td>Gadgets</td>
<td>Items such as sticky notes.</td>
</tr>
<tr>
<td>Knowledge Base</td>
<td>Knowledge base categories.</td>
</tr>
<tr>
<td>Labels</td>
<td>Labels that you use to organize records.</td>
</tr>
<tr>
<td>System Applications</td>
<td>Applications and modules.</td>
</tr>
<tr>
<td>World Clocks</td>
<td>Any available world clock.</td>
</tr>
</tbody>
</table>

**Note:** The world clock widget is for demo purposes only.
Gauges are defined in System UI > Gauges.

**Note:** Gauges are not supported. Add reports to the homepage instead. For more information, see Add existing reports to a homepage.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauges</td>
<td>Gauges are defined in System UI &gt; Gauges.</td>
</tr>
<tr>
<td>Catalog Categories</td>
<td>Active service catalog categories. The homepage uses the category’s desktop icon as the homepage icon.</td>
</tr>
<tr>
<td>Catalogs</td>
<td>Service catalogs, including all of their active categories.</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>Information you can use for monitoring and troubleshooting the instance, like database connections and JVM garbage collection.</td>
</tr>
<tr>
<td>Live Feed</td>
<td>Your company feed.</td>
</tr>
<tr>
<td>Text Search</td>
<td>Lists of top searches in the instance.</td>
</tr>
<tr>
<td>Filters</td>
<td>System definition filters.</td>
</tr>
</tbody>
</table>

For more information on adding content to homepages, see Add existing reports to a homepage.

**Edit widget appearance**

You can edit how an object on a homepage, also called a widget, looks.

1. Move the pointer to the upper right corner of the widget to show the editing controls.
2. Click the edit widget icon on the right side of the item header.
3. Select one or more options to control the appearance of the widget, such as to show a border, set title alignment and size, and set the report height.
4. Optional: Use the Interactivity options to make the widget a subscriber or publisher.
5. Click Done.

**Change the homepage layout**

You can change the layout of widgets on the homepage.

1. From a homepage, click the Change Layout button.
2. Select the layout you want to use.
   - Administrators can create or modify layouts by navigating to Homepage Admin > Layouts.
3. Click Change.
Delete a custom homepage

Deleting a customized page restores the default homepage for that user.

⚠️ **Warning:** If a user with the admin role clicks **Delete page**, it deletes the homepage from the instance, which affects all users. This action cannot be reverted.

1. Navigate to the custom homepage to delete.
2. Click the homepage settings icon ( ).
3. Click Delete page.
4. Click OK to confirm the deletion.

Homepage and content page layouts

Layouts are UI elements that define how blocks of content can be added to a page.

Layouts are used for homepages and content pages. Layouts provide the following functionality.

- Administrators can define custom layouts for homepages or content pages.
- Users who are allowed to modify their homepage can select a layout for their homepage.
- Users who are allowed to add content to their homepages can choose where in the layout to add content.

Most successful web sites use a fairly limited number of layouts to define the structure of a much larger number of pages. For example, a web site may have several dozen pages, but only two or three layouts.

Layout concepts

Layouts define the overall structure of the page by arranging where dropzones appear on the page.

The dropzone is where content blocks, which make up the content of the page, can be added. The name “dropzone” comes from the fact that content blocks can be dropped into any of these zones. Most content blocks match the width of the dropzone, so the dropzone controls both the location and sizing of the content block.

Defining a custom layout requires knowledge of Jelly script, but there are a number of out-of-box layouts that can be used. After a layout is chosen, the layout dictates where the dropzones on a page appear.

Content blocks can be added at any dropzone to create the actual content of the site. Every layout divides the page into one or more logical areas. A number of commonly used predefined layouts are available, but you can also define your own custom layouts.

Custom layouts

A homepage layout is a UI macro whose name begins with layout_. You can create a UI macro to define a custom layout.

To view the list of available layouts, navigate to Homepage Admin > Layouts.

- Layouts are XHTML scripts that contains one or more dropzones.
- Dropzones are defined by a TD (table data cell) within the HTML where content can be placed.

Note: Knowledge of Jelly is required to understand the following example.

For example, here is the code for a layout.

```xml
<?xml version="1.0" encoding="utf-8"?>
```
Rules for scripting layouts:

1. A layout must contain at least one table.
2. All dropzones must be TDs within a table.
3. A dropzone has two key attributes:
   a. Its ID starts with "dropzone" (e.g., "dropzone1" or "dropzone3").
   b. It has an attribute of dropzone="true."
4. Dropzone IDs must be unique (e.g., you can't have two dropzones named "dropzone1").

Optional layout features:

- Nested tables are allowed, so it is possible to have a table within a TD within a table.
- There can be TDs that are not dropzones.
- Styles and formatting elements are acceptable.
- Fixed-width TDs (as opposed to variable width) are allowed, although some content, such as graphs, must have a significant minimum width.
- Fixed-height TDs are allowed.

Layout hints and tips:

If cellspacing and cellpadding are set to zero, the drag-and-drop algorithm may have trouble distinguishing one cell from another, since multiple empty cells can potentially occupy the same point in space. It is still possible to place things via the layout control, and they will render properly. However, to use drag-and-drop to move things around, do not drop both cellspacing and padding to zero.

Choose a layout

Certain users can modify the layout of their homepage.

Role required: any role that lets the user change homepage content.

For example, an ESS user cannot change the layout of a homepage, but an ITIL user can change it.

1. On the homepage, click Change Layout.
The dialog box that appears contains a list of available layouts and a short description of each. Select a layout to see a simplified preview of the layout.

2. Select a layout and click **Change**.

**Note:**

1. If the page already has content and the layout changes, the existing content stays in the same dropzones it started in. For example, content in dropzone2 of the old layout appears in dropzone2 of the new layout as well, although the dropzone may be in a significantly different location on the page.

2. If the new layout has fewer or different dropzones than the old layout, there may be orphaned content. For example, if there is content in dropzone5 of the old layout, and the new layout does not have a dropzone5, that content is now orphaned. Any orphaned content is moved to dropzone1.
Add content to a homepage

The Add Content interface allows you to specify into which dropzone you want to place your content.

You can see this in action by clicking the Add content button.
When you select a piece of content, you see a preview of the content in the middle of the dialog. At the bottom of the dialog, you see a model of your current layout with an Add here link in each dropzone.

To add content to a particular dropzone, click Add here in the appropriate dropzone. Your content is automatically added without closing the dialog. You see the homepage change in the background.

Users who can change content on a homepage can search for widgets within a category when adding content to a homepage, and configure the appearance of widgets on homepages.

Homepage caching

Complex, frequently visited homepages can slow down instance performance by consuming system resources. Homepage caching can improve performance by using less resources to load homepages.

When this feature is enabled, individual homepage widgets are cached and can be used by multiple users until the underlying data they depend upon changes, requiring a re-render.

Administrators can configure properties for homepage caching.

Configure homepage cache properties

The render cache is enabled by default with a set of sensible defaults. An administrator can modify the configuration based on the needs of the particular instance.

This behavior is controlled by properties available at Homepage Admin > Properties.

Enable the homepage render cache

Enables or disables the entire cache. If you disable the cache, then nothing is cached and nothing is retrieved from the cache.

Maximum amount of time an entry stays in the cache

By default, the system pulls an entry out of the cache if its underlying data changes. For example, if you have a report of “incidents by priority” that goes in the cache, the system removes it from the cache if the underlying incident data is updated. However, even if the underlying data has not changed, the system automatically expires cache entries older than this age. The default is 60 seconds, meaning that, at most, a cache entry persists for 60 seconds before being expired.

Enable aggressive caching

If aggressive caching is turned on, then the only time entries are removed from the render cache is if they expire. Even if the underlying data changes, the system still returns the previously rendered chart/graph/whatever until it expires from old age.

Setting this to true can significantly improve performance, but it does so at the expense of serving known stale data. Under some circumstances, however, a combination of aggressive caching and a short maximum cache age (see above), may be appropriate.

Homepage caching notes and limitations

Review these notes and limitation when configuring homepage caching.

1. Instances with less than one hundred or so concurrent users should not expect to see a significant benefit to this feature in most real-world scenarios. Homepage visits in these
situations are infrequent enough that most widgets will have aged out of the cache before a second user visits a homepage. If you do not experience performance problems with your homepages, tweaking the behavior of this cache is not recommended.

2. The homepage cache is segmented by company, domain, and roles, so users with different rights and visibility into the system cannot see each other’s data by pulling it out of the cache. This does, however, mean that cache efficiency will be lower for instances that make extensive use of domain separation.

3. In an environment with a cluster of multiple UI nodes (as opposed to a UI node and worker configuration), each node has its own homepage cache. Entries are removed from the homepage cache only when their data changes on the node upon which they are cached. Entries are always removed from the cache when they expire.

Homepage splash page

When the homepage splash page is configured, a lightweight splash page loads before a homepage loads. The result is a more responsive experience for users.

For example, after logging in, users can navigate directly to the information they need without waiting for the homepage to load.

Activate the homepage splash page

Homepage splash pages are automatically activated for new instances. If you are upgrading from a previous version, activate the Homepage Splash Page plugin if it is not already active.
Role required: admin

1. Navigate to System Applications > All Available Applications > All.

2. Find the Homepage Splash Page plugin (com.glideapp.home.splash_page) using the filter criteria and search bar.
   
   You can search for the plugin by its name or ID. If you cannot find a plugin, you may have to request it from ServiceNow personnel. To request a plugin, follow the steps in Request a plugin.

3. Click Install, and then in the Activate Plugin dialog box, click Activate.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the global domain. Otherwise they will receive the following error: Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.

Configure a property for a homepage splash page

The Homepage Splash Page plugin installs the glide.home.page property and modifies the value of the glide.login.home property.

1. Enter sys_properties.list in the navigation filter and press the Enter key.

2. Select the glide.home.page system property.
   
   This property defines which page to load when a user selects a homepage from the banner.

3. Set the Value field to one of the following strings.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>To use the homepage splash page (default)</td>
<td>home_splash.do?sysparm_direct=true</td>
</tr>
<tr>
<td>To use homepages without the splash page</td>
<td>home.do</td>
</tr>
</tbody>
</table>

4. Click Update.
   
   The System Properties list reopens.

5. Select the glide.login.home system property.
   
   This property defines which page to load when a user logs in.

6. Set the Value as follows:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>To use the homepage splash page (default)</td>
<td>home_splash.do?sysparm_direct=true</td>
</tr>
<tr>
<td>To use homepages without the splash page</td>
<td>home.do</td>
</tr>
</tbody>
</table>

   You can also specify a different login landing page, if desired.

7. Click Update.

Service catalog home page configuration

The home page for a service catalog provides the primary front end for ordering items within that catalog. You can configure various elements of the pages within the Service Catalog.

Administrators and catalog administrators can design a home page in any of the following ways.

- Customizing the catalog home page.
- Adding, removing, and arranging categories.
- Enabling content types.
Using catalog properties to provide additional control over behavior and appearance.
Using renderers to define the appearance of categories.

**Note:** End users can access the catalog through the customizable user home page, or with content management pages that use content blocks for categories.

---

### Enable content types

Enable the content types for using in a catalog.

1. Navigate to **Service Catalog > Catalog Administration > Properties**.
2. In the **List of content types (comma-separated) to allow on the catalog homepage (glide.sc.home.filter)** property, enter the content types to use in the service catalog.

   To see a list of content types available, navigate to **System UI > Widgets**.

   The default value is **Service Catalog**, which includes only service catalog categories. For example, to include service catalog categories and **gauges**, set the property to **Service Catalog, Gauges**.

---

### Customize a catalog homepage

Customize a catalog homepage to provide end users with access to catalogs from one homepage.

1. Navigate to **Service Catalog > Catalog**.
2. Click the add content icon (+) at the top of the page to add a category.
3. Select a category in the middle panel of the pop-up window that appears.
Service Catalog add categories pop-up window
4. Click **Add here** in the location where the category appears on the homepage.
5. Optional: Repeat steps 3–4 to add more categories.
6. Close the pop-up window.
7. Optional: To change a category location, drag it to the appropriate place.
8. Optional: To remove a category, click the (X) icon on the top right of the category header.

**Define the mobile layout**

You can configure the Classic Mobile layout for categories within a service catalog.

Role required: admin

By default, service catalog categories appear on mobile devices in the same order as on desktop devices.

1. Navigate to **Service Catalog > Classic Mobile Admin > Classic Mobile Layout** to display a list of service catalogs.
2. Click the lookup icon for the service catalog you want to configure. The mobile layout displays details for the catalog.
3. Click **Edit** to select which categories appear on mobile devices, and in which order.
Service Catalog Classic Mobile layout catalogs

4. Add, remove, or reorder the selected mobile categories, and then click Save.
Configure content types

You can configure content types for the service catalog.

You can use service catalog properties to configure content types, which are also called widgets.

To view service catalog properties, navigate to Service Catalog > Catalog Administration > Properties.

Navigate to System UI > Widgets to see a list of content types available.

Enable content types for the Service Catalog

By default, only service catalog categories are displayed on the service catalog homepage.

To select additional content types, add these types in a comma-separated list in the List of content types (comma-separated) to allow on the catalog homepage property (glide.sc.home.filter).

For example, to include service catalog categories and gauges, set the property to Catalog Categories, Gauges.

Display the expand/collapse icon

By default, the expand / collapse icon is not displayed for categories on the service catalog homepage.

To display this icon on the left of each category, select the Yes check box that appears next to the Toggle whether the expand/collapse icon is rendered for category widgets on the service catalog homepage property (glide.sc.homepage.show.collapse).
Configure search and navigation

You can use service catalog properties to configure search and navigation within the service catalog homepage.

Navigate to Service Catalog > Catalog Administration > Properties to view service catalog properties.

Restrict search access

Each catalog homepage provides a search bar to help locate items not displayed on the homepage. By default, any user who can access the catalog homepage can search using this search bar.
To restrict access to this search function by role, use the List of roles (comma-separated) that can search the service catalog property (glide.sc.can_search).

For example, to only allow logged-in users to access search, set this field to blank. To remove the search function for all users, set this field to None.

**Note:** Search results only show items that the logged-in user can access.

### Hide search results from inactive categories

By default, search results are returned from all categories, including inactive categories.

To avoid returning results from inactive categories, set the Service catalog searches return items in inactive categories property (glide.sc.search.disabled_cats) to No. For example, when designing a new category, you can avoid users seeing search results from this category until you are ready to make it active.

**Note:** Security constraints can also make a category or catalog item inaccessible.

### Restrict search by item type

By default, a search field does not appear when viewing order guides, record producers, and wizard launchers.

To define which catalog item types do not show the search field, list these types in the List of class names for catalog items that do not have the search field displayed (glide.sc.item.cannot_show_search) property.

For example, to enable searching when viewing record producers, remove sc_cat_item_producer from this list.
Request a reset of a password for a service or an application.

Whose password needs to be reset?

Joe Employee

What application password do you need reset?

How would you like to be contacted with your new password?

- More Information
  - Email
  - Telephone
  - SMS

Submit

Service catalog search bar removed
Enable breadcrumb links

By default, breadcrumbs appear without links when using content management pages as service catalog homepages.

To display these breadcrumbs with links, set the **Use links for breadcrumbs rendered in Service Catalog pages accessed via a CMS site** property (glide.sc.use_breadcrumb_links.cms) to **Yes**. This setting provides greater navigational control for end users.

Disable search suggestions

By default, service catalog searches display "Did you mean?" suggestions if a search does not return any results and an alternate spelling or similar recent search does.

To disable these suggestions, set the **Specify whether search suggestions should be enabled** property (glide.sc.search.suggestions) to **No**.
Change the parameter for parallel homepage rendering

The system uses a parallel rendering algorithm to speed up home page rendering.

Role required: admin

In testing, the average performance benefit is between 20% to 50% depending on the page in question. Administrators can set parallel homepage rendering properties for optimal performance on an instance. To change the parameters for parallel homepage rendering, add the following system properties.

1. `glide.ui.homepage.parallel`: enables or disables parallel homepage rendering. The default value is `true`.
2. `glide.ui.homepage.parallelism`: sets the number of threads to use when rendering a homepage. The default value is `2`.

Turn on homepage render time

To see render times on homepage widgets, you can turn on homepage debugging.

Role required: admin

Navigate to **System Diagnostics > Debug Homepage Render**.

For the remainder of your session, load times appear on homepage widgets and debugging messages appear at the bottom of homepages. Use these times to identify items that may slow down homepage rendering.
Troubleshoot a report on a homepage

You can troubleshoot reports that may be impacting homepage performance by identifying which reports are on the problem homepage, determining which reports are running slowly, and correcting problems in slow reports.

Role required: admin

1. Navigate to Homepage Admin > Pages.
   Opening the homepage record instead of the homepage saves time and system resources.
2. Open the problem homepage record.
3. In the Portal related list, note item names in the Summary field.
   These items may not all be reports.
4. Enter sys_report.list in the navigation filter to open a list of all reports.
5. Search for a report title that matches an item on the homepage that you noted down from the Summary field.
6. Open the report and run it.
7. If the report runs slowly, look for and correct the following common reporting mistakes.
   - Returning too many results
   - Grouping by fields such as duration or name
   - Reporting on a user-created table that uses many joins on other tables
8. If the report runs slowly and correcting common mistakes does not help, examine the type of report and what data it reports. Look for ways to optimize or replace the report.
9. Repeat these steps for each item on the homepage.

Domain separation in Homepage Administration

This is an overview of domain separation in Homepage Administration. Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can then control several aspects of this separation, including which users can see and access data.

Support level: Basic*

- There is business logic to ensure data goes into the proper domain for the application’s service provider use cases.
- In the application, the user interface, cache keys, reporting, rollups, aggregations, and so on, all consider domain at run time.
- The owner of the instance needs to be able to set up the application to function normally across multiple tenants.

Use case: As a service provider when I use chat to respond to a tenant-customer’s message, the client must be able to see my response.
Index

Numerics
508 compliance keyboard accessibility 369
508 compliance screen reader 373

A
accessibility
color and style 371
first field focus 367
high contrast 366
screen reader 373
accessibility features
search method tips 373
set up 365
accessible tooltips 367
activity formatter
activity filter configuration 70
activity filter in UI16 and UI15 70
activity stream
mentions 187
application menu
creating 47
modules, creating 48
application menus
adding to a category 46
application menus or modules
disabling 45
enabling 45
application navigator
navigation filter 44
UI15 30
UI15 favorites 31
UI16 16, 19
UI16 favorites 20
UI16 navigation history 23, 24
attachments
Document Viewer 94, 95
Attachments
remove 90
rename 90
uploading 90, 91
avatar 222

B
banner frame
UI15 31
UI16 24
basic configuration 408, 414
bookmarks
creating 59
customizing 60
deleting 61
opening 61
brand instance 408, 414
breadcrumbs 121
Breadcrumbs 123, 124, 125, 126, 132, 135, 137, 138, 140, 140, 141, 141, 142

C
Catalog
configure navigation 468
configure search 468
home page
managing 462
homepage
managing 463, 463, 465, 467
change password module
create 57
checklists
enable 96
Company Profile
create 420, 422, 422, 423, 424, 425
Condition builder
date/time fields 193
empty fields, filtering 193
format 192
Condition builders
operators 196
configure keyboard shortcuts 353
content-sensitive help
help context types 241
context-sensitive help
creating custom contexts 239
introduction to 235
Core Configuration
overview 225
create homepages
for specific users 440
global 440
new personal 440
personal based on existing 440
create views 358
CSS styles
default 418
CSS theme
selecting 416
theme picker, enabling 417
CSS theme support
activating 417
custom filter URL
URL module 56
customize homepages
add items 452
change 453
custom homepage 454
delete 454
edit widget appearance 453
homepage 447, 448, 449
homepage layout 453
list report 450
modify 450
number of records 450
refresh 449
system administration 447
view 448

D
database
  audio files 322
Database
  storing images 323, 323, 324
default search
  dictionary attribute 116
delete views 358
Document viewer
  view attachments 95
Document Viewer 94
Document Viewer disable 95
Dot-walking 171
Dot-walking examples 172

E
edge
  UI15 31
edit guided tour 285
editing form
  edit multiple records in a list using 151
editing forms
  canceling changes 86
  inserting records 85
embedded help
  add 260
  add from copy 258
  create internationalized 256
  create localized 256
  internationalization 255
  localization 255
  planning 249
  system properties 247
embedded help roles 252, 254
embedded lists 71
encoded queries
  operators 196
Encoded Query Strings
  generate through filter 147

F
favorite 19
field label
  form 429
  help 429
field status indicators
  UI15 69
field values
  comparing 425
  dates, evaluating 428
fields on a form 69
filters
  operators 196
Filters
  delete 138
  edit 138
  related list condition 128
  save 138
  use 138
form context menu 67
form fields 69
form pane tabs 87
forms
  , apply a template 86
  , editing 84
  canceling changes 86
  checklists
    activating 98
    creating new 98
    deleting 99
    enable 96
  configuring related list fields 80
  editing 85, 86
  field status indicators 69
  form headers by version 64
  form headers, UI15 66
  form headers, UI16 64
  form pane tabs 87
  inserting records 85
  personalizing 88

G
gauges
  domain separation 435
glide.ui16.live_forms.enabled 224
grid mode 165
grouped list
  list v3 118
grouped lists
  options 117
gtd 275
guided tour
  add 277
guided tour designer 275
guided tour triggers 274
guided tour view 287
guided tours 269

H
help
  overview help slides
    creating 303
    example 306
  system user guide
    creating entry points for display 321
    creating help documents 316
  help system
    introduction to 235
homepage
  adding 437
  controlling access 437
  customizing 450
  defining tables for 437
  Top Searches 436, 436, 437, 437, 437, 437, 438
  update top search statistics 438
  using 436
  viewing 449
  viewing user preferences for time period 437
homepage administration
  add to an update set and application 433
  restrict content additions 432
  secure a homepage 433
  user preferences 433
homepage caching
  configure properties 460
  notes and limitations 460
homepage gauges 436
homepage splash page
  activate plugin 461
  configure 462
homepage widgets 438
homepages
  customize 447, 447, 448, 449, 450, 452, 453, 453, 454
  render time 472
  troubleshooting 474
  widgets 434
Hompages
  gauges 435
  widgets 434, 434

I
image file extension 327
Interface
  using 59

K
keyboard accessibility 369
keyboard shortcut administration 38
keyboard shortcuts
  configure 353
  enable 38
  preferences 38

L
layout
  add content 458
  choose 456
  concepts 455
  custom 455
  defining 455
list editor
  edit multiple records in a list using 150
  use 148
  list v2 156
list v3
  grid mode 165
  group by 118
  split mode 165, 167
lists
  editing 148
  field status indicator 106
  personalizing 152, 154
  search 113
  search by column 114
  sort 105
  switch views 107
lists, embedded 71
logging in 44

M
manage favorite 19
map pages
  create 380
  create modules 395
  scripting 396
mentions
  activity stream 187
  menu categories
    adding application menus to 46
  menu category
    defining 36
  menu lists
    modifying 45
  module link type 51

N
Navigation Actions
  adding sites 233
  users 234
Navigation Stack 228
new records
  create 150
operators
  Condition builders 196
  encoded queries 196
  filters 196
overview help pages
  creating
    example 306
parallel homepage rendering 472
personal lists 152
queries 55
R
related list condition 128
related lists
  adding fields 80
  configure the edit option 74
  configure when a related list loads 73
  create a default filter 74
  create default filter 82
  create defined 75
  example of defined 77, 79
  incidents by same caller 77
  select related records 72
Response time indicator 225, 227

S
search
  lists
    wildcards 115
    wildcards
      list search 115
section 508 compliance features
  enable accessibility 366
  use skip links 370
shortcuts
  keyboard 37
slushbuckets
  add or remove items 184
  find available items 184
  items
    setting the number of visible in the available column 187
split mode
  configure title 165
  list v3 165, 167
system properties
  embedded help 247
system settings 24

T
tags
  assigning 213, 215, 216, 216, 217, 218
  editing 213, 218, 218, 218, 219, 219
  using 220
templates
  apply in a form 86
theme
  style options 413
themes
  company default 417
  create 418
  customize 418
Theming an instance 417
tree picker
  examples 170
tree picker attribute
  add 170

U
UI configuration
  favicon 422
UI15
  configure roles to switch to UI16 16
  switch to UI16 15
UI15 compare style 11
UI16
  activating 15
  configure roles to switch to UI16 16
  switch to UI15 15
UI16 compare style 11
URL
  navigating 41, 42
URL module
  custom filter URL 56
  opens in new window 55
useful scripts
  Restrict Form Views by Role 361
user guide
  creating entry points for display 321
  creating help documents 316
  introduction to 313
user interface
  banner frame
    UI16 24
User interface
  application navigator
    navigation filter 44
    UI15 30
    UI15 favorites 31
    UI16 16, 19
    UI16 favorites 20
    UI16 navigation history 23, 24
  banner frame
    UI15 31
  edge
    UI15 31
  navigating applications 44
user preference settings 330
user preferences 327
user presence
  disabling 223
  time intervals 224
using forms
  form headers 64
  UI15 form headers 66
  UI16 form headers 64
using lists
  action check box 109
  column headings 162
  customize number of rows 106
  embedded lists 109
  fields 104
  list title menu 159
  list v2 156
  list v3
    grid mode 165
    split mode 165, 167
Using Lists
  display activity streams 111
  encoded query strings 144, 147

W
  welcome page
    content 363
    elements 363
    login section 363
  welcome page content
    company-specific 365
  welcome screen
    remove 353